

## **Bridge: A Path to Math ....and much more**

The card game bridge is fundamentally grounded in math. From simple addition, subtraction, multiplication and division, to the more complex functions of calculating odds and percentages, this game hones children's math skills as no other.

A study has been conducted by Dr. Christopher Shaw of Illinois to determine the impact learning bridge can have on school children. With three years research available (see appendix), he has convincing data that learning the game of bridge will help children improve their performance in standardized testing. The first year of students he studied showed a 10% to 35% higher rate of improvement in all subjects on the Iowa Test of Basic Skills than their classmates who did not learn bridge.

Bridge's advantages don't stop at simple math skills. In addition to the purely mathematical portion of bridge, children must learn: following rules, sequential reasoning, working with a partner towards a common goal, inferential reasoning, problem solving, social interaction, logic and self-discipline.

Bridge is played with a deck of cards. The deck consists of four suits – two through ace with the ten, jack, queen, king and ace considered as 'honor cards'. Bridge consists of two parts, bidding and play. The play of the game is fairly straightforward. You must follow suit if you can and the high card wins the trick. If there is a trump suit (determined by the bidding) the lowest trump is higher than a card in any another suit. The bidding is more complex with a numerical value (points) assigned to each of four honor cards; Jack, Queen, King and Ace. The bidding is a language you must learn which will convey to partner the number of cards you hold in each suit and the number of points you have in your hand.

In bridge each child has a partner. His or her success depends on how well they communicate information about their cards (their 'hand') to each other. That information is used by following the rules they will learn to reason out the best contract they can play in order to score the highest points. They will be playing against two other people whose role is to try and keep them from obtaining their best score. If a player tries to work solely on the information from their own hand, they will be unsuccessful in the game. If they fail to

learn the complex rules and communicate information to their partner, they will be unsuccessful.

Bridge has a set of laws that has been in existence since the early 1930's and revised repeatedly over the last 80 years that not only give the rules of the game itself but rules concerning the conduct of the players involved and the way they interact with other players. Courtesy and honesty are the basis for many of the rules.

If a child decides they like bridge and would like to continue to develop their skills, vistas of opportunities open up for them. In local play they will meet children of all ages, race, creed and socio-economic conditions at local games and tournaments. In tournament play the children can meet lawyers, doctors, teachers, politicians, leaders of business, owners of companies, philanthropists, foreign visitors and also taxi drivers, cooks, dog walkers and clerks. They may also have opportunities to travel across the country, meeting other children from all over North America and the world.

One of the greatest gifts we can give to this generation of children is the opportunity to learn bridge and all it has to offer.

## Teacher Instructions

1. Handouts are provided for many of the lessons. These should be printed off on three-hole paper before class, one for each student. They are to be placed in the students' notebooks during the lesson. Students, particularly those with learning disabilities, should be encouraged to refer to them when bidding or playing the Example bridge hands or practice hands.
2. Practice sheets are provided for some lessons. One should be printed for each student prior to class and should go in the students' notebooks. They should be gone over after the lesson before the Duplicated Boards are played.
3. For many lessons, four prepared Bridge hands in Duplicate Bridge Boards will be placed on each table of four students. Handset 1 will be exactly the same at each table, in the lowest numbered board at the table. Handset 2, 3, and 4 will be duplicated similarly, so that at each table, students will play the exact same four hands in the same order. Handsets will have to be dealt and duplicated before the lesson according to the attached Hand Records for the lesson. The commentary for the boards should be gone over with the students after the boards have been played. These are suggested actions to be taken with each hand.
4. If there is time after the lesson and the duplicated boards, it is encouraged to allow the students to play extra hands to emphasize the lessons that have recently been taught.
5. All of the lessons are numbered by week and day. The additional sheets (Practice Sheets and Handouts) are numbered starting with the lesson and then numbered by sheet.

Example: WK4 LP1.1

WK4 = Week 4 of the 9 weeks of lessons

LP1 = Lesson Plan 1 (First day of Lessons that week Probably Monday)

.1 = 1<sup>st</sup> Handout of Practice Sheet for the days Lesson

- Lesson Plan Title:** Week 1 Lesson 1 - Math through Games
- Beginning Bridge:** Card Playing, Card Ranks, and Trick Taking
- Concept/Topic:** To learn card play protocol.  
To learn what tricks are and the card ranks.
- Standards Addressed:** Problem Solving 1. Build new mathematical knowledge through problem solving.
- General Goal(s):** To learn a card game involving mathematical and analytical skills.
- Specific Objectives:** To learn that cards have meaning and what that meaning is.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook

**Anticipatory Set (lead-in):**

- Give a brief introductory explanation of the game of Bridge, introducing but not explaining in detail the concepts of trick-taking, partnerships, trump suits, bidding for contracts, and scoring.
- Introduce card play protocol and its important elements – card face and back, shuffling, the dealer and dealing cards out in a clockwise direction, each player’s portion of the cards is called his/her hand, playing one card at a time in clockwise direction starting from the dealer’s left.
- Explain the concepts of “card rank” and “honor card”, and write the thirteen card ranks on the board in ascending order, from the deuce to the ace (the highest card in Bridge).
- Reinforce the concepts of card play protocol by playing a four player version of the card game, “War.” This is a very simple card game, and by the age of six, most students have some familiarity with it.

**Step-by-step Procedures:**

1. Have students set up a notebook for bridge terms.
  - Write on the board the phrase “card play protocol” and list its important elements; card face and back, shuffling, the dealer and dealing cards out in a clockwise direction, each player’s portion of the cards is called his/her hand, playing one card at a time in clockwise direction starting from the dealer’s left.
  - Write the phrase “card rank” and its definition.
  - Write the word “trick” and its definition. Point out that, in Bridge, the whole deck consists of 13 tricks of four cards each.
  - Have the students make a copy of the information on the board in their notebooks.
2. Set up groups of four students to a table. If there are extra students, the extra student can write the scores of each game and replace the student with the lowest score for the next game. Give one of the students in each group a deck of playing cards. Ask him/her to shuffle the cards briefly.
3. Go over the rules for four player war. The student with the deck is the Dealer. He/she will deal all cards face down into four equal piles, one for each player. Each round, starting from the dealer’s left, each student turn one card face up from his/her individual pile. The highest ranking card wins that match. In case of a tie for high card played, the first player to play the card of the highest rank wins. Play continues until all cards are played (13 matches). Each match is a trick. The student with the most number of tricks wins the game. Continue play as time allows.
4. After all four players have played to a trick, all four put their own card in front of them face down. If you have won the trick, you place the card pointing toward you; if you did not win the trick, you lay the card sideways pointing toward your left and right opponents. When all 13 tricks have been played you will have 13 cards laid out in front of you.

**Plan for Independent Practice:** Allow time for each student to play this game.

**Assessment Based on Objectives:** Quiz on the value of cards.

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written copy of card ranks.

**Extensions (For Gifted Students):** Set a time limit for each game.

**Possible Connections to Other Subjects:** Language arts and communication skills.

- Lesson Plan Title:** Week 1 Lesson 2 - Math through Games
- Beginning Bridge:** Suits and Trumps
- Concept/Topic:** To learn what trumps are.
- Standards Addressed:** Problem Solving 1. Build new mathematical knowledge through problem solving.
- General Goal(s):** To learn a card game involving mathematical and analytical skills.
- Specific Objectives:** To learn the concept of trumps and how it applies to card games.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook

**Anticipatory Set (lead-in):**

- Explain to the students that the deck is divided into four suits, Clubs, Diamonds, Hearts, and Spades. Show examples of cards in each suit.
- Explain the concept of trumps and what a trump card is useful for. In some card games, one of the four suits is designated to be the trump suit, a special “wild” suit, where any card in the trump suit beats (outranks) any card of any rank in the other three suits.
- Play partnership war, utilizing the concept of trumps.

**Step-by-step Procedures:**

1. Write the phrase “trump suit” and its definition on the board, and have students write this in their notebook.
2. Set up groups of four students to a table. Explain that the four players are called North, South, East, and West according to the compass direction each is sitting at. Tell them that North and South at each table are partners, and East and West are also partners. Make pairs with the extra students; the extra pairs can write the scores of each game and replace the North-South or East-West pair with the lowest score for the next game.

3. Go over the rules of partnership war. Give one of the students in each group a deck of playing cards. Ask him/her to shuffle the cards briefly. The dealer deals the cards out face down. The dealer then declares one of the four suits as the trump suit for the first round. Each student turns one card face up from his/her individual pile, starting from the dealer's left. If a card in the trump suit is played, it wins the trick. If more than one card in the trump suit is played, the highest ranking trump card wins that trick. If none of the four cards is a trump card, then the highest ranking card wins the trick. The person who wins the trick declares the trump suit for the next round. When all thirteen rounds are played, the pair with the most number of tricks wins the game.
4. After two games, stop the play and announce a change in the rules. The last card is dealt face up. The suit of this last card is the trump suit. Dealer then picks the card up and places it somewhere in his pile of cards, face down. The trump suit remains the same for the whole game. Play four games, allowing each student to be the dealer, in clockwise rotation.
5. After all four players have played to a trick, all four put their own card in front of them face down. If your team has won the trick, you place the card pointing toward you and your partner; if your team lost the trick you lay the card sideways pointing toward your opponents. When all 13 tricks have been played you will have 13 cards laid out in front of you, hopefully with lots of them pointing toward you and your partner, and very few of them pointing toward the opponents.

**Plan for Independent Practice:** Allow time for each student to play this game.

**Assessment Based On Objectives:** Quiz

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written copy of card ranks and the definition of trump.

**Extensions (For Gifted Students):** Set a time limit for each game.

**Possible Connections to Other Subjects:** Language arts and communication skills.

- Lesson Plan Title:** Week 1 Lesson 3 - Math through Games
- Beginning Bridge:** Taking Tricks using Trumps
- Concept/Topic:** To learn what tricks are and how can you win them.
- Standards Addressed:** Communication 1. Organize and consolidate their mathematical thinking through communication.
- General Goal(s):** To learn how to use math to communicate.
- Specific Objectives:** To learn how to take tricks using trumps.  
To learn to keep score using the “Book” method.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook

**Anticipatory Set (lead-in):**

- Review the concept of card rank and how that applies to taking tricks.
- Review the concept of trumps and how that applies to taking tricks.
- Play partnership War with trumps. Change the rules so that the game becomes Whist.

**Step-by-step Procedures:**

1. Review the concept of trumps and the four suits.
2. Set up groups of four students to a table, with the North-South and East-West pairs as partners. Make pairs with the extra students; the extra pairs can write the scores of each game and replace the North-South or East-West pair with the lowest score for the next game. Give one of the students at each table a deck of playing cards. Ask him/her to shuffle the cards briefly, and then deal them out face down in a clockwise direction, starting with the player on his/her left. The last card is dealt face up. The suit of this last card is the trump suit. Dealer then picks the card up and places it in his pile of cards, face down. Play one round of partnership war under these rules. When all thirteen rounds are played, the pair with the most number of tricks wins the game.

3. After students play one game of partnership war, stop the play and announce a change of rules. Cards are dealt as before, with the last card dealt setting the trump suit. But players are allowed to look at their cards before they play. The players are asked to pick up their cards and arrange the cards with the cards of the same suit together, holding them so they can see the cards, but the other players cannot see the card faces. The person to the left of the dealer must lead a card to the first trick. Each player must play a card of the suit led (follow suit), unless he/she has no cards in that suit. If he/she has no cards in the suit led, the player may play any other card he/she wishes, including a trump. Only a card in the suit led or in trumps can win the trick. If more than one trump is played to a trick, the highest trump wins the trick. The winner of the trick leads to the next trick. Each trick taken counts as one point. The pair with the most points wins the game.
4. Have the students play four games under the new rules, rotating the deal clockwise each time so each player gets to be the dealer. Ask the players to keep a running total of their points from the four games.
5. Announce to the students that the game they have been playing is a form of Whist, an ancient English card game that is the ancestor of Bridge, and that very soon they will be playing Bridge as it is played today. Explain that in Whist, a pair must take at least six tricks, called the “Book”, before they can score any points. So a score of 1 means a pair has taken 7 tricks (6 for book, plus 1).

**Plan for Independent Practice:** Allow time for each student to play this game.

**Assessment Based on Objectives:** Quiz

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written copy of card ranks and the written definition of the term trump.

**Extensions (For Gifted Students):** Set a time limit for each game.

**Possible Connections to Other Subjects:** Language arts, communication.

- Lesson Plan Title:** Week 1 Lesson 4 - Math through Games
- Beginning Bridge:** Introduction to Hand Evaluation and Bidding
- Concept/Topic:** To learn what an Auction is in Bridge.  
To learn the purpose of the Auction.  
To learn Hand Evaluation and how to calculate High Card Points.  
To learn the suit ranks and No Trump and what role they play in the auction.
- Standards Addressed:** Number and Operations 2. Understand meanings of operations and how they relate to one another.
- General Goal(s):** To learn a card game involving mathematical and analytical skills.
- Specific Objectives:** To learn the rudiments of hand evaluation in Bridge.  
To learn the concept of an auction in Bridge.  
To understand the meaning of the bids and the Contract in Bridge.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook  
WK1 LP 4.1 Handout - Bridge Bidding Scale (attached)

**Anticipatory Set (lead-in):**

- Explain that in Bridge, the pairs bid in an auction, just as in a car auction, for the right to decide trumps.

**Step-by-step Procedures:**

1. Give each student a copy of the bidding scale. Have them place this in their notebooks.
2. Explain that in Bridge, the pairs bid in an auction by naming the trump suit and how many tricks the pair promises to take. A bid consists of a level and a denomination. The level indicates the number of tricks the partners will take, minus the 6-trick book. You are always assumed to take the majority of the 13 tricks, so the first six tricks – the book – don't count. The denomination is most often the trump suit. If the partnership doesn't have an exceptionally long suit between them, they may decide to play without a trump suit (similar to War). This denomination is called No Trump.

3. Explain the bidding scale, from lowest (One Club) to highest (Seven No Trump). Give a few brief examples of bids. An example of a bid is One Spade, meaning that the partners promise to take seven tricks (book plus one) with Spades declared as the trump suit. Another example, Two No Trump, is a promise to take eight tricks without a trump suit. The highest bidding pair sets the contract, which is a statement of the denomination (trumps or No Trump) and the level (the number of tricks to be taken).
4. Explain that in Bridge bidding, it is necessary to evaluate the strength of your hand in order to predict accurately how many tricks you may take. There are also penalties for bidding too high, which will result in your opponents winning points.
5. Explain that an ace is valued at 4 High Card Points, a king is valued at 3 High Card Points, a queen is valued at 2 High Card Points, and a jack is valued at 1 High Card Point. Since there are four aces, four kings, four queens and four jacks in a deck of cards, there are a total of 40 High Card Points in the deck. (*Write these values on the board.*)
6. Point out that an average hand is worth about 10 High Card Points, or one quarter of the total. An above average hand should normally take more tricks than a below average hand. And a partnership that holds more than half of the High Card Points in the deck usually takes the majority of the tricks.
7. Have the students copy the Honor cards and their High Card Point values into their notebooks.
8. Give one of the students at each table a deck of playing cards. Ask him/her to shuffle the cards briefly. The dealer deals the cards out face up. Ask each student to add up his/her High Card Points. Have the North-South partnership and the East-West partnership at each table calculate their combined points, and predict how many tricks they could take. Then place the hands face down, have each player shuffle his own hand, and play partnership War (without a trump suit). Ask the students how closely their actual result compared to their prediction based on high card points. Repeat this process once more.
9. Ask one of the students at each table to shuffle and deal the deck of cards face up. Now ask the North-South partnership and the East-West partnership at each table to each pick a trump suit, based on their combined length (number of cards) in each suit they hold. If the partnership does not have a combined suit of eight cards or more, they should select No Trump as their playing denomination. Have the North-South partnership and the East-West partnership at each table now calculate their combined High Card points, and then select a bid to describe their most likely bid taking contract, naming both the denomination (suit or No Trump) and the level.

10. Repeat this process several times as time permits. Emphasize that trick taking depends both on high card strength and trump length.

**Plan for Independent Practice:** Allow time for each student to play this game.

**Assessment Based on Objectives:** Quiz

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written copy of definitions and the bidding scale.

**Extensions (For Gifted Students):** Set a time limit for each game.

**Possible Connections to Other Subjects:** Communications skills

## WK1 LP 4.1 Handout - Bridge Bidding Scale

7 NT	7 ♠	7 ♥	7 ♦	7 ♣
6 NT	6 ♠	6 ♥	6 ♦	6 ♣
5 NT	5 ♠	5 ♥	5 ♦	5 ♣
4 NT	4 ♠	4 ♥	4 ♦	4 ♣
3 NT	3 ♠	3 ♥	3 ♦	3 ♣
2 NT	2 ♠	2 ♥	2 ♦	2 ♣
1 NT	1 ♠	1 ♥	1 ♦	1 ♣

**Week 1 Lesson 4 Quiz (15 points)**

Write answers in space provided. If the question asks for a complete sentence, make sure you write in correct sentence format. If you need more room for your answers, write on the back of your paper. Make sure you number the question on the back.

1. In cards, what is a suit? Write a complete sentence. (2 pts)
  
2. What is a trump suit? Write a complete sentence. (2 pts)
  
3. In bridge, what is a trick? Write a complete sentence. (2 pts)
  
4. What wins a trick? Write a complete sentence. (2 pts)
  
5. What is the highest trump card? (1 pt)
  
6. What are the values of the face cards? (4 pts)
  
7. How do you count numbered cards? Write in complete sentence. (2 pts)

**Lesson Plan Title:** Week 1 Lesson 5 - Math through Games

**Beginning Bridge:** Weekly Review and Quiz – Week 1

**Concept / Topic:** To review what has been taught in the first week.

**Standards Addressed:** Problem Solving 1. Build new mathematical knowledge through problem solving.

**General Goal(s):** To use math to solve problems.

**Specific Objectives:** To use cards games and values to induce math curiosity.

**Required Materials:** Decks of cards  
Paper  
Pencil

**Anticipatory Set (lead-in):**

- Review week 1 Lessons.
  - Card Playing, Card Ranks, and Trick Taking
  - Suits and Trumps
  - Taking Tricks with Trumps
  - Introduction to Hand Evaluation and Bidding

**Step-by-step Procedures:**

1. Give review quiz.
2. Go over the quiz, reviewing the week's work as you do this.
3. Allow students to form partnerships and play hands of Whist as time permits.

**Plan for Independent Practice:** Allow time for each student to play this game.

**Assessment Based on Objectives:** Review quiz

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebook.

**Extensions (For Gifted Students):** Have students use the computer to look up the history of bridge and write 5 facts to share with the class.

**Possible Connections to Other Subjects:** communications skills, L.A.



- Lesson Plan Title:** Week 2 Lesson 1 - Math through Games
- Beginning Bridge:** Keeping Score and the Auction
- Concept/Topic:** To learn basic scoring at Bridge.
- Standards Addressed:** Number and Operations 3. Compute fluently and make responsible estimates.
- General Goal(s):** To teach practical applications of Math through Bridge.
- Specific Objectives:** To teach how to keep score at Bridge.  
To introduce the concept of Vulnerability and its significance.  
To define Game Values in Bridge and how they are achieved.  
To define the term “Slam” as it applies to Bridge.
- Required Materials:** Paper  
Pencil  
Notebook  
WK2 LP 1.1 Handout - Bridge Scoring Sheet

**Anticipatory Set (lead-in):**

- Review Week 1 definitions.
- Students will learn basic scoring mechanics. Concepts of Vulnerability, Part Scores, Game Scores, Game and Slam bonuses will be introduced.

**Step-by-step Procedures:**

1. Tell students the following: In the early days of Bridge, matches were often played such that the pair that was first to win two games was the winner of the match. A pair could make a game either by bidding and making a game contract, or bidding and making enough part scores to total up to 100 points (or more). If a pair had not won a game, they were considered “Not Vulnerable.” If they had already won a game, they were “Vulnerable.” If a pair was Vulnerable, bonuses and penalties were larger than if Not Vulnerable. In modern tournaments, we don’t score the same way, but we do retain the concepts of Vulnerable for bigger bonuses and penalties than Not Vulnerable.

2. Tell students the bonus for making a game is either 300 points if Not Vulnerable and 500 points if Vulnerable. But the opponents will get points if you bid too much and don't make your contract. By looking at the scoring chart handout we can see that No Trumps and the major suits pay a lot better than the minors. We also see that in No Trump we don't have to contract for nearly as many tricks before we reach the game bonus levels. Because of this our bidding systems are geared toward trying to play every hand either in No Trumps or one of the major suits. Playing a contract in a minor suit is only done as a last resort.
3. Tell students that if a pair bids a contract at the Six Level (promises to take 12 tricks) or Seven Level (promises to take all 13 tricks), there are also bonuses. Contracts at the Six Level and Seven Level are called Slams.
4. Hand out the scoring chart for bridge. Have students place it in their notebooks. Review the scoring chart.
5. Have the students take out their notebooks. Review definitions.
6. Write phrase 'Not Vulnerable' and its definition on the board. Have students add it to their notebooks.
7. Write phrase 'Vulnerable' and its definition on the board. Have students add it to their notebooks.
8. Write phrase 'Game Bid' and its definition on the board. Have students add it to notebooks.
9. Write phrase 'Part Score Bid' and its definition on the board. Have students add it to their notebooks.
10. Write phrase 'Slam' and its definition on the board. Have students add it to their notebooks.

**Plan for Independent Practice:** Allow time for each student to shuffle a deck and practice counting high card points.

**Assessment Based on Objectives:**

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Have students help others by talking out loud.

**Possible Connections to Other Subjects:** Reasoning skills

## WK2 LP 1.1 Handout - Bridge Scoring Sheet

### Trick Values

No trick points are scored until declaring side has won at least six tricks (the Book).  
After the Book is made, then points are awarded as follows:

20 points	Each trick with Clubs as Trumps
20 points	Each trick with Diamonds as Trumps
30 points	Each trick with Hearts as Trumps
30 points	Each trick with Spades as Trumps
40 Points	First trick with No Trump as Denomination
30 points	Each trick after the first trick with No Trumps as Denomination

### Game Contracts

To make a Game at Bridge, and receive the game score bonus, you must win 100 trick points. To bid a Game, you must bid and make:

5 Clubs	(20 x 5 tricks = 100) plus 6 tricks for Book = 11 Tricks
5 Diamonds	(20 x 5 tricks = 100) plus 6 tricks for Book = 11 Tricks
4 Hearts	(30 x 4 tricks = 120) plus 6 tricks for Book = 10 Tricks
4 Spades	(30 x 4 tricks = 120) plus 6 tricks for Book = 10 Tricks
3 No Trump	(40 x 1 trick plus 30 x 2 tricks = 100) plus 6 tricks for Book = 9 Tricks
Game Bonus	
Not Vulnerable	= 300 bonus points
Vulnerable	= 500 bonus points

### Slam Contracts

Small Slam (Declarer takes 12 tricks)

Not Vulnerable	= 500 bonus points
Vulnerable	= 750 bonus points

Grand Slam (Declarer takes all 13 tricks)

Not Vulnerable	= 1000 bonus points
Vulnerable	= 1500 bonus points

- Lesson Plan Title:** Week 2 Lesson 2 - Math through Games
- Beginning Bridge:** Play of the Hand
- Concept/Topic:** To use math skills to get to a contract.
- Standards Addressed:** Reasoning and Proof 3. Develop and evaluate mathematical arguments and proofs.
- General Goal(s):** To understand math in the real world.
- Specific Objectives:** To use math communication skills to arrive at a contract in bridge.
- Required Materials:** Paper  
Pencil  
Notebook

**Anticipatory Set (lead-in):**

- Review Week 2 - Lesson 1
- Explain the mechanics of the Auction and Play of the Hand.

**Step-by-step Procedures:**

1. We have an auction prior to the play of the hand during which we determine a contract. A contract is a declaration of how many tricks you will take and what suit will be trumps. Each player has a right to bid during the auction, describing their interest in becoming declarer of the hand. Each player can bid or Pass.
2. Each player must get the chance to bid or Pass at least once. After a bid and three consecutive Passes (no one wants to bid higher), the auction is over. The final bid names the trump suit or No Trump. The first person, on the side that wins the auction, to name the trump suit or No Trump becomes the Declarer and the winner of the auction.
3. The winner of the auction becomes Declarer and the Left Hand Opponent (LHO) of the Declarer makes the opening lead. The winner of trick 1 leads to trick 2 and the winner of trick 2 leads to trick 3, and so on.

4. One major difference between bridge and many other card games involves the partner of the declarer. In bridge, the hand held by the partner of Declarer is called the dummy and is put on the table with cards face up immediately following the opening lead by LHO. Declarer has the responsibility of playing cards from his/her hand and from the dummy. Play always proceeds clockwise. Declarer calls for a card from dummy after LHO leads to trick one, Right Hand Opponent (RHO) then plays and Declarer plays last from her hand. If the card from dummy is the highest card played to trick 1 then Declarer next calls for a card from dummy as the lead to trick 2.
5. Players are required to follow suit whenever possible. When you run out of the suit that is led you can play any card you like, usually selecting a card that you think will be worthless later on, or a trump.
6. After all four players have played to a trick, all four put their own card in front of them face down. If your team has won the trick, you place the card pointing toward you and your partner; if your team lost the trick you lay the card sideways pointing toward your opponents. When all 13 tricks have been played you will have 13 cards laid out in front of you, hopefully with lots of them pointing toward you and your partner, and very few of them pointing toward the opponents.
7. Review the bidding ladder that is in the student's notebook.
8. Give out four Example handsets. Direct students to play Handset 1, with North as Declarer in a contract of 2 Spades. East will make the opening lead, South will place his/her hand on the table face up, with the hand sorted into suits and the trump suit (spades) on his/her right side. Coach students at each table as required.
9. Direct Students to play Handsets, 2, 3, and 4, with (in order) East, South and West as Declarer in the contracts indicated in the attached hand records.
10. If time permits, students may shuffle one of the decks and play additional hands.

**Plan for Independent Practice:** Allow time for each student to shuffle a deck and practice picking a trump suit and level, and playing the game.

**Assessment Based on Objectives:**

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written copy of the bidding ladder. When the student is Declarer, his/her partner may perform any needed physical manipulation of the cards (such as playing the cards from dummy or shuffling the deck, and collecting the completed tricks).

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** L.A., communication skills

- Lesson Plan Title:** Week 2 Lesson 3 - Math through Games
- Beginning Bridge:** Opening Bids – Part 1
- Concept/Topic:** To learn to use math to determine Opening Bids at Bridge.
- Standards Addressed:** Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
- General Goal(s):** To use math and analysis skills to determine an Opening Bid.
- Specific Objectives:** To learn the basic objectives of bidding.  
To learn the two goals in bidding.  
To learn how to evaluate the Bridge Hand for an Opening Bid considering High Card Points and Distribution.  
To learn the three bidding priorities and how to apply them.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook  
Hand Records 2.3.1, 2.3.2, 2.3.3, and 2.3.4 (attached)  
4 Prepared Handsets in Duplicate Bridge Boards for each table of 4 student players. Handsets will have to be dealt and duplicated in advance according to the attached Hand Records 2.3.1, 2.3.2, 2.3.3, and 2.3.4

**Anticipatory Set (lead-in):**

- Review Week 2 - Lesson 2.
- Students will be introduced to the basic objectives of bidding, how to evaluate a bridge hand, and how to select an opening bid based on application of three priorities.

**Step-by-step Procedures:**

1. Explain the following to students: Bidding is a language for communication with Partner at the Bridge table. Just as there are many languages spoken all over the world, there are many different bidding systems used by Bridge players. We are going to learn one of the most common and simplest bidding systems during this course.

2. There are two goals in bidding, determining the answer to two questions: “How high?” and “Where?” “How high?” is a question of part score, game or slam. We do not get anything more for bidding and making three spades than we would for bidding two and making three. Bidding two spades and making four is nice, but we miss out on our game bonus. If we bid four and don’t make it, the opponents get penalty points.
3. The “Where?” question is usually the partnership’s longest combined holding in a suit. If we hold a combined eight plus cards in the suit, that leaves the opponents five or fewer. We would prefer to have that suit be a major, as it is easier to make a 10 trick game in a major than an 11 trick game in a minor. It is often better to play in No Trump than a minor suit for the same reason.
4. Two primary ways to take tricks are with high cards and with trumps. When you play contracts in No Trump, you lose one of those ways to take tricks. That often makes it harder to make No Trump contracts than contracts in a suit. Thus our first goal in bidding is finding an eight card fit in a major suit – the “golden fit.”
5. The first step in bidding is to count up your high card points (aces, kings, queens, and jacks). If your HCPs add up to 12 or more points, you should consider opening the bidding.
6. The second step is to determine if you have a balanced or unbalanced hand. Balanced hands are those with no particularly long suit and no particularly short suits. Unbalanced hands (also called distributional hands) are usually better played in suit contracts. Distributional hands contain a long suit or even two long suits, and since there are only 13 cards in your hand, the other suit or suits get shorter, giving you more and more trumping power. Semi-balanced hands are ones that have at least 2 cards in every suit, but has two or more suits that have only 2 cards.
7. Balanced hands are 4-3-3-3, 4-4-3-2, or 5-3-3-2 shape. Semi-balanced hands are 5-4-2-2, 6-3-2-2 or even 7-2-2-2. Unbalanced hands have singletons (1 card in the suit) or voids (no cards) in them.
8. Unless you have 22+ HCP, there are three options that describe about 90-95% of the opening bids you will ever have. (We will cover opening bids in big hands of 22 or more HCP in a later lesson.)

9. The following three bidding priorities should be considered in the order they are listed. The three priorities are:
  - a. **Open 1♥ or 1♠ with 12 or more HCP and five or more cards in that suit.** If you have two five card suits, open the highest ranking suit, “High Five”.
  - b. **Open 1 No Trump with 15-17 HCP and a balanced hand.** A balanced hand contains no singletons and no voids. The point range must be exact.
  - c. **Open 1 of your longer minor when you don’t have a five card major or don’t have the balanced 15-17 HCP for 1NT.** Sometimes that means opening your longer minor suit, even if it is only three cards long. With equal length minors, bid higher of 4+ card suits or lower of 3 card suits. Once in a great while, you have a hand with no five card major, and two three card minors. Open 1♣ with these hands. You can remember this easily as there are four points on a diamond symbol and three cloves on a club symbol.
10. Have the students take out their notebooks.
11. Write the two goals of bidding on the board. Have students add this to their notebooks.
12. Write the three priorities goals of bidding on the board. Have students add it to their notebooks.
13. Write term ‘Balanced Hand’ and its definition on the board. Have students add it to their notebooks.
14. Write term ‘Unbalanced Hand’ and its definition on the board. Have students add it to their notebooks.
15. Write term ‘Semi-Balanced Hand’ and its definition on the board. Have students add it to their notebooks.

**Plan for Independent Practice:** Students can deal hands and attempt to determine opening bids for each hand by applying lesson principles.

**Assessment Based on Objectives:**

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written Notebooks, written materials and any applicable Handout sheets.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** Communication skills

## Hand Records 2.3.1-4 Pg. 1

*Hand Record prep: Objective is for students to practice the mechanics of play of the hand, who leads, what dummy does, etc. North, East, South, and West will in turn be declarer in a contract. For Board 1, North is declarer in 2S. Board 2 - East is in 3D. Board 3 - South is in 4H. Board 4 - West is in 1NT. Prepare suitable example hand diagrams, one to a page. Plug in below.*

*Teacher directions: Prepare four duplicate boards with North, South, East, West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class.*

*Hand 2.3.1: North is in 2♠*

**Board 1**

North Deals  
None Vul

	♠ K Q 9 7 3					
	♥ 9 8					
	♦ A Q 4					
	♣ Q 7 4					
♠ A J 6 2	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: 0 auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W     E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>	N	W     E	S	♠ 10	
N						
W     E						
S						
♥ Q 6 4 3		♥ A J 5 2				
♦ 10 5		♦ 9 7 3 2				
♣ A 9 5		♣ K 8 6 2				
	♠ 8 5 4					
	♥ K 10 7					
	♦ K J 8 6					
	♣ J 10 3					

West	North	East	South
	1 ♠	Pass	2 ♠
Pass	Pass	Pass	

Opening Lead: ♣2 (Fourth from your longest and strongest suit that does not contain an Ace)

## Hand Records 2.3.1-4 Pg. 2

*Hand 2.3.2: East is in 3♦*

**Board 2**  
East Deals  
N-S Vul

♠ J 10 5			
♥ A 7 6 4			
♦ 9 2			
♣ Q 7 5 2			
♠ A Q 7 4	N	♠ K 6 3	
♥ 9 8 3	W	♥ K 5 2	
♦ A J 8 7 4	E	♦ K Q 5 3	
♣ 8	S	♣ K 9 4	
		♠ 9 8 2	
		♥ Q J 10	
		♦ 10 6	
		♣ A J 10 6 3	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		1 ♦	Pass
1 ♠	Pass	1 NT	Pass
3 ♦	Pass	Pass	Pass

Opening Lead: ♥Q (Top of Touching Honors)

## Hand Records 2.3.1-4 Pg. 3

*Hand 2.3.3: South is in 4♥*

<b>Board 3</b>												
South Deals	♠ K 10 2											
E-W Vul	♥ K Q 9 7											
	♦ 8 7 4 2											
	♣ K 3											
♠ J 9 8 5	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ A Q 6 4 3	
	N											
W		E										
	S											
♥ 10 6		♥ 8 3										
♦ A 6 3		♦ Q 9 5										
♣ J 7 4 2		♣ 9 6 5										
	♠ 7											
	♥ A J 5 4 2											
	♦ K J 10											
	♣ A Q 10 8											
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>									
			1 ♥									
Pass	3 ♥	Pass	4 ♥									
Pass	Pass	Pass										

Opening Lead: ♠5 (Fourth from your Longest and Strongest Suit)

## Hand Records 2.3.1-4 Pg. 4

*Hand 2.3.4: West is in INT*

<b>Board 4</b>												
West Deals	♠ Q J 10 8											
Both Vul	♥ J 6											
	♦ A 8 4											
	♣ K 9 8 2											
♠ A 5 2	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ K 7 4	
	N											
W		E										
	S											
♥ K 9 2		♥ Q 5 4 3										
♦ K Q 9 2		♦ J 5 3										
♣ A 10 6		♣ Q 5 3										
	♠ 9 6 3											
	♥ A 10 8 7											
	♦ 10 7 6											
	♣ J 7 4											
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>									
1 NT	Pass	Pass	Pass									

Opening Lead: ♠Q (Top of Sequence)

- Lesson Plan Title:** Week 2 Lesson 4 - Math through Games
- Beginning Bridge:** Opening Bids – Part 2
- Concept/Topic:** To learn how to use math to determine opening bids at Bridge.
- Standards Addressed:** Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
- General Goal(s):** To use math and analysis skills to determine an Opening Bid.
- Specific Objectives:** To learn the basic objectives of bidding.  
To learn the two goals in bidding.  
To learn to evaluate the Bridge Hand for an Opening Bid considering High Card Points and Distribution.  
To learn the three bidding priorities and how to apply them.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook  
WK2 LP 4.1 Practice Sheet - Opening Bids

**Anticipatory Set (lead-in):**

- Review previous lesson.
- Today is for practice at Opening Bids.

**Step-by-step Procedures:**

1. Hand out WK2 LP 4.1 Practice Sheet - Opening Bids. Review with Students. Assess each hand for the three priorities using the provided checklist accompanying each hand.

**Plan for Independent Practice:** Students can deal hands and attempt to determine opening bids for each hand by applying lesson principles.

**Assessment Based on Objectives:** Notebook check

**Adaptations (For Students with Learning Disabilities):** Allow students to use their written Notebooks, written materials and any applicable Handout sheets.

**Extensions (For Gifted Students):** Student may deal out random hands and attempt to apply the hand evaluation technique and three priorities to determine opening bids for each hand.

**Possible Connections to Other Subjects:** Communication skills

## WK2 LP 4.1 Practice Sheet - Opening Bids

### Pg. 1

#### 1. Open 1 No Trump with 15-17 HCP and a balanced hand. You can open 1NT on semi-balanced hands too.

♠ KJ53    ♥ A53    ♦ KJ6    ♣ A32

HCP? 16    Balanced?    B Y    SB       UB       5-Card Major Y/N? N  
 Longer Minor?       Equal 4-Card Minor?       Equal 3-Card Minor? Y

Open 1 NT

♠ J532    ♥ 753    ♦ AKJ6    ♣ AQ

HCP? 15    Balanced?    B Y    SB       UB       5-Card Major Y/N? N  
 Longer Minor Y/N? Y    Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1 NT

♠ KJ53    ♥ A532    ♦ KJ6    ♣ A3

HCP? 16    Balanced?    B Y    SB       UB       5-Card Major? Y/N? N  
 Longer Minor? Y    Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1 NT

♠ A3    ♥ K53    ♦ KJ6    ♣ KJ532

HCP? 15    Balanced?    B Y    SB       UB       5-Card Major? Y/N? N  
 Longer Minor? Y    Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1 NT

♠ AQ75    ♥ K43    ♦ KJ6    ♣ QJ4

HCP? 16    Balanced?    B Y    SB       UB       5-Card Major Y/N? N  
 Longer Minor?       Equal 4-Card Minor?       Equal 3-Card Minor? Y

Open 1NT

## WK2 LP 4.1 Practice Sheet - Opening Bids

### Pg. 2

#### 2. Open 1♥ or 1♠ with 12+ HCP and five or more cards in that suit.

♠ KQJ532    ♥ A7    ♦ QJ6    ♣ 43

HCP? 13    Balanced?    B      SB   UB      5-Card Major Y/N?   Y    
 Longer Minor?   Y      Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1♠

♠ KQ3    ♥ J7432    ♦ AQJ6    ♣ 4

HCP? 13    Balanced?    B      SB   UB      5-Card Major Y/N?   Y    
 Longer Minor?   Y      Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1♥

♠ QJ8532    ♥ A9    ♦ KJ6    ♣ A3

HCP? 15    Balanced?    B      SB   UB      5-Card Major Y/N?   Y    
 Longer Minor?   Y      Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1♠

♠ KJ532    ♥ AQ764    ♦ QJ6    ♣ void

HCP? 13    Balanced?    B      SB   UB      5-Card Major Y/N?   Y    
 Longer Minor?   Y      Equal 4-Card Minor?       Equal 3-Card Minor?   

Open 1♠ (When 5/5 start by bidding the higher ranking suit, "High Five")

♠ KJ532    ♥ 753    ♦ KJ6    ♣ Q3

HCP? 10    Balanced?    B      SB   UB      5-Card Major Y/N?   Y    
 Longer Minor?   Y      Equal 4-Card Minor?       Equal 3-Card Minor?   

PASS—not enough HCP

## WK2 LP 4.1 Practice Sheet - Opening Bids

### Pg. 3

#### 3. When Option #1 and Option #2 don't work. Open 1 in your longer minor suit.

♠ KJ53   ♥ AJ32   ♦ Q   ♣ KQ97

HCP? 16   Balanced?   B\_\_ SB\_\_ UB\_\_   5-Card Major? Y/N? N  
 Longer Minor? Y   Equal 4-Card Minor?\_\_   Equal 3-Card Minor?\_\_

Open 1♣ *Don't Open INT with this hand - it's unbalanced!*

♠ KJ5   ♥ AJ3   ♦ A84   ♣ 9765

HCP? 13   Balanced?   B\_\_ SB\_\_ UB\_\_   5-Card Major? Y/N? N  
 Longer Minor? Y   Equal 4-Card Minor?\_\_   Equal 3-Card Minor?\_\_

Open 1♣

♠ AJ   ♥ AT4   ♦ QT72   ♣ K987

HCP? 14   Balanced?   B\_\_ SB\_\_ UB\_\_   5-Card Major? Y/N? N  
 Longer Minor?\_\_   Equal 4-Card Minor? Y   Equal 3-Card Minor?\_\_

Open 1♦ (4-4 in the minors—open 1♦)

♠ KJ2   ♥ AJ32   ♦ AJ5   ♣ 732

HCP? 14   Balanced?   B\_\_ SB\_\_ UB\_\_   5-Card Major Y/N? N  
 Longer Minor?\_\_   Equal 4-Card Minor?\_\_   Equal 3-Card Minor? Y

Open 1♣ (3/3 in the minors—open 1♣)

♠ void   ♥ KJ9   ♦ AT   ♣ KQ976432

HCP? 13   Balanced?   B\_\_ SB\_\_ UB\_\_   5-Card Major Y/N? N  
 Longer Minor? Y   Equal 4-Card Minor?\_\_   Equal 3-Card Minor?\_\_

Open 1♣

- Lesson Plan Title:** Week 2 Lesson 5 - Math through Games
- Beginning Bridge:** Weekly Review and Quiz - Week 2
- Concept/Topic:** To teach math through Bridge.
- Standards Addressed:** Communication 4. Use the language of mathematics to express mathematical ideas precisely.
- General Goal(s):** To use Math skills in card games.
- Specific Objectives:** To use math skills to get to a bridge contract.
- Required Materials:** Deck of cards  
Paper  
Pencil  
Notebook

**Anticipatory Set (lead-in):**

- Review previous lessons
  - Keeping Score and The Auction
  - Play of the Hand
  - Opening Bids - Part 1
  - Opening Bids - Part 2

**Step-by-step Procedures:**

1. Give review quiz.
2. Hand out cards.
3. Students Shuffle, Deal, and Play hands.

**Plan for Independent Practice:** Allow time for each student to play bridge after they finish the quiz.

**Assessment Based On Objectives:** Quiz.

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebook.

**Extensions (For Gifted Students):** Students will use a computer to play bridge hands when they finish their quiz.

**Possible Connections to Other Subjects:** communications skills

**Week 2 Lesson 5 Quiz (30 points)**

1. Define fit (1 pt)
2. Define no trump (1 pt)
3. Define book (1 pt)
4. Define contract (1 pt)
5. Define distribution points ( 1pt)
6. Define declarer (1 pt)
7. Define dummy (1 pt)
8. Define high card points (1 pt)
9. Define trick (1 pt)
10. Define game bid (1 pt)

Evaluate the following Bridge hands. Write Y for Yes and N for no in the attributes list below each hand. Indicate whether you would PASS or Open the hand. If you open the hand, write down your Opening Bid in the space provided. (2 pts each)

1. ♠ KQJ532 ♥ 7 ♦ QJ5 ♣ K43

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_\_ BID \_\_\_\_\_

OPENING BID? \_\_\_\_\_

2. ♠ 874 ♥ AKQ96 ♦ QJ5 ♣ 64

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_\_ BID \_\_\_\_\_

OPENING BID? \_\_\_\_\_

3. ♠ KJT4 ♥ QJ5 ♦ A73 ♣ A43

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_\_ BID \_\_\_\_\_

OPENING BID? \_\_\_\_\_

4. ♠ 532 ♥75432 ♦ AKQ ♣ AJ

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_ BID \_\_\_\_

OPENING BID? \_\_\_\_\_

5. ♠ KQJ ♥T9876 ♦ QJ5 ♣ 86

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_ BID \_\_\_\_

OPENING BID? \_\_\_\_\_

6. ♠ KQ ♥987 ♦ AQT4 ♣ AQJ6

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_ BID \_\_\_\_

OPENING BID? \_\_\_\_\_

7. ♠ QJT53 ♥void ♦ AQT95 ♣ KJ5

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_ BID \_\_\_\_

OPENING BID? \_\_\_\_\_

8. ♠ J53 ♥ 4 ♦ AKQJT ♣ A864

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_\_ BID \_\_\_\_\_

OPENING BID? \_\_\_\_\_

9. ♠ QJT9 ♥ AQJ9 ♦ K4 ♣ 432

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_\_ BID \_\_\_\_\_

OPENING BID? \_\_\_\_\_

10. ♠ 3 ♥ AQ63 ♦ J974 ♣ AQ43

HCP? \_\_\_\_\_ Balanced? B\_\_ SB\_\_ UB\_\_ 5-Card Major? Y/N? \_\_\_\_\_

**If no five card major:**

Longer Minor? \_\_\_\_\_ Equal 4-Card Minor? \_\_\_\_\_ Equal 3-Card Minor? \_\_\_\_\_

PASS or Bid? PASS \_\_\_\_\_ BID \_\_\_\_\_

OPENING BID? \_\_\_\_\_

**Answer Sheet - for Teacher.**

1. 12 HCP, 1♠
2. 12 HCP, 1♥
3. 15 HCP, 1NT
4. 14 HCP, 1♥ (who said it had to be a good suit!)
5. 9 HCP, Pass
6. 18 HCP, 1♦ (too many HCP for 1 NT, when 4/4 in the minors open 1♦)
7. 13 HCP, 1♠
8. 15 HCP, 1♦
9. 13 HCP, 1♣
10. 13 HCP, 1♦

<b>Lesson Plan Title:</b>	Week 3 Lesson 1 - Math through Games
<b>Beginning Bridge:</b>	Forcing Principles in Bidding
<b>Concept/Topic:</b>	To use math and analytical skills to bid to a contract.
<b>Standards Addressed:</b>	Communication 4. Use the language of mathematics to express mathematical ideas precisely.
<b>General Goal(s):</b>	To teach math through bridge.
<b>Specific Objectives:</b>	To learn what Limited and Unlimited bids are. To learn what Forcing and Non-forcing bids are.
<b>Required Materials:</b>	Paper Pencil Notebook WK3 LP 1.1 Practice Sheet - Forcing Bids WK3 LP 1.2 Handout - Forcing Principles

**Anticipatory Set (lead-in):**

- Review Previous Lesson.
- Introduce New Concept - Forcing and Limited Bids

**Step-by-step Procedures:**

1. As we learned in earlier lessons, it takes 25 combined High Card Points or thereabouts to make game in no trump or the majors. To make a game in a minor suit, requiring taking 11 tricks, we'll need more like 28 or 29 HCP. To compete safely at the three level, we'll need around 22 or 23 combined HCP and, to have success at the two level, our combined HCP will have to be about 19 or more.
2. Partner's opening bid may contain as few as 12 HCP or as many as 20 or 21 HCP. Quite a large range! If we have just 6 HCP and we combine that with a strong 20 HCP in partner's hand we can see that it is still possible for us to bid a game and receive the huge bonuses that are awarded for bidding and making game. But if partner has only 12 HCP, our combined total is only 18 HCP, and we would like to stop the bidding at the one level or two level. We need some guidelines on when to stop bidding and when to push on.
3. Bids by Opener and by Responder generally have two important characteristics - they are Limited/Unlimited and Forcing/Non-forcing. I know that looks like four characteristics, but it is really only two - Limited and its opposite Unlimited, and Forcing and its opposite Non-forcing.

4. A LIMITED BID is one that closely defines the high card points (hcp) in your hand; usually within a 3-4 point range. Examples of a limited bid are:
  - No Trump bids
  - Raises and Rebids of your suit
  
5. AN UNLIMITED BID is one that doesn't closely define the upper limit of the hand's strength; usually you will leave a range of 6-12 points. It tells Partner what minimum HCP strength the hand holds, and possibly something about the length in one of your suits, but it doesn't tell Partner if you have unexpected strength or extra suit length in your hand. Examples of an Unlimited bid are:
  - Opening suit bids at the one level
  - Rebids of a new suit at the lowest level.
  
6. A FORCING BID is one that you make when you want to send Partner the following message, "Partner, whatever you do, you must see to it that I get to bid again. I have not finished describing my hand to you." Generally, that means your partner must bid something other than "PASS." Examples of Forcing bids are:
  - A new suit by Responder
  - A Jump Shift by Opener
  - A Reverse by Opener
  - A Strong 2C opening bid
  - Some conventional bids that ask partner questions
  
7. A NON-FORCING BID says the opposite, "Partner, I have pretty much described to you what my hand contains. You may Pass my bid or bid on, depending on what your hand looks like." Examples of Non-forcing bids are:
  - No Trump bids
  - Raises of partner's suit
  - Rebids of your own suit
  - Game bids

8. Some Forcing Principles:

- Limited bids by either Opener or Responder are Non-forcing, and may end the auction.
- A new suit by responder is unlimited and therefore always forcing. Bidding a new suit is Responder's only forcing bid after partner has opened one of a suit. (This is true with the exception of some conventional bids, not covered in this course.)
- All Opening bids in No Trump are Limited bids and therefore are Non-forcing.
- Unlimited bids are usually, but not always, forcing. For example, you open 1♥. Your bid is Unlimited, but Partner is allowed to Pass with less than six points.
- If Opener makes an Unlimited bid and Responder makes a Limited bid as a response, Opener does not have to bid again, but may bid on to further describe his/her hand or improve the contract.
- If Responder has six or more HCP, Responder must bid, if Opener bids one of a suit. Responder treats the Opening bid as if it were forcing.
- Whenever Responder bids a new suit, it is Forcing. The exception to this is when Responder has already Passed initially, and then Partner opens the bidding. When this happens, all of Responder's bids are considered Limited bids, limited to less than 12 HCP, because Responder initially passed. Opener is not obliged to bid again.
- There are three bids that are always Limited/Non-Forcing bids. They can be made by Responder or Opener. They are:
  - NT Bids
  - Raising Partner's suit
  - Rebidding your Own Suit

The single most common reason for bidding mistakes by new players is they do not know which bids are forcing and which bids are non-forcing. Even experts sometimes make mistakes in this area.

9. Review with Students WK3 LP 1.1 Practice Sheet - Forcing and Non-forcing Bids.

**Plan for Independent Practice:** Allow time to play hands.

**Assessment Based on Objectives:** Observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Students can help and explain terms to others that are having problems.

**Possible Connections to Other Subjects:** communication skill, L.A.

## WK3 LP 1.1      Practice Sheet - Forcing Bids

	<u>Opener</u>	<u>Responder</u>	
1.	1♥	???	<p>You hold ♠ A432 ♥ 432 ♦ 432 ♣ 432. You are Responder.</p> <p>Is Opener's bid Limited or Unlimited?</p> <p>Forcing or Non-forcing?</p>
2.	1NT	???	<p>You hold ♠ A432 ♥ Q32 ♦ 432 ♣ 432. You are Responder.</p> <p>Is Opener's bid Forcing or Non-forcing?</p>
3.	1♥	1♠	<p>You are Opener. Is Responder's bid Limited or Unlimited?</p> <p>Forcing or Non-forcing?</p>
4.	1♦	1NT	<p>You are Opener. Is Responder's bid Limited or Unlimited?</p> <p>Forcing or Non-forcing?</p>
5.	1♦ 2♣	1NT ???	<p>You are Responder. Is Opener's bid Limited or Unlimited? Forcing or Non-forcing?</p>
6.	1♥ 2♣	1♠ 2♦	<p>You are Opener. Is Responder's 2♦ bid Limited or Unlimited? Forcing or Non-forcing?</p>
7.	1NT	???	<p>You are Responder. Is Opener's bid Limited or Unlimited?</p> <p>Forcing or Non-forcing?</p>

## WK3 LP 1.2 Handout - Forcing Principles

### Some Forcing Principles

- Limited bids by either Opener or Responder are Non-forcing, and may end the auction.
- A new suit by responder is unlimited and therefore always forcing. Bidding a new suit is Responder's only forcing bid after partner has opened one of a suit. (This is true with the exception of some conventional bids, not covered in this course.)
- All Opening bids in No Trump are Limited bids and therefore are Non-forcing.
- Unlimited bids are usually, but not always, forcing. For example, you open 1♥. Your bid is unlimited, but Partner is allowed to Pass with less than six points.
- If Opener makes an Unlimited bid and Responder makes a Limited bid as a response, Opener does not have to bid again, but may bid on to further describe his/her hand or improve the contract.
- If Responder has six or more HCP, Responder *must* bid if Opener bid One of a suit. Responder treats the Opening bid as if it were forcing.
- Whenever Responder bids a new suit, it is Forcing. The exception to this is when Responder has already Passed initially, and then Partner opens the bidding. When this happens, all of Responder's bids are considered Limited bids, limited to less than 12 HCP, because Responder initially passed. Opener is not obliged to bid again.
- There are three bids that are always Limited/Non-Forcing bids. They can be made by Responder or Opener. They are:
  - NT Bids
  - Raising Partner's suit
  - Rebidding your Own Suit

- Lesson Plan Title:** Week 3 Lesson 2 - Math through Games
- Beginning Bridge:** Responding to Partner's Opening Minor Suit Bid
- Concept/Topic:** To use math and analytical skills to get to a contract.
- Standards Addressed:** Reasoning and Proof 3. Develop and evaluate mathematical arguments and proofs.
- General Goal(s):** To teach math and analytical skills through bridge.
- Specific Objectives:** To learn to evaluate the Bridge Hand for a Response to an Opening Bid by Partner.  
To learn the three basic priorities for Responding to Partner's Opening Bid in a Minor Suit.
- Required Materials:** Paper  
Pencil  
Notebook  
WK3 LP 2.1 Practice Sheet - Responding to Opener's Minor Suit Bid (attached)  
Hand Records 3.2.1, 3.2.2, 3.2.3, and 3.2.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 3.2.1, 3.2.2, 3.2.3, and 3.2.4.

**Anticipatory Set (lead-in):**

- Review Previous Lesson.
- Introduce New Concept- Responding to Partner' Opening Bid of 1♣ or 1♦.

**Step-by-step Procedures:**

1. Partner has opened 1♣ or 1♦. Now what? Guidelines for Responder: (*Write the following guidelines on the board, and have students write in their notebooks*)
  - Evaluate your hand strength.
  - Evaluate your fit.
  - Select the bid (or bids) that best describe your hand.

2. Evaluate your hand strength.
- |                |                       |  |
|----------------|-----------------------|--|
| • SUBMINIMUM   | 0 to 5 HCP            | Generally not worth a bid.   |
| • MINIMUM      | 6 to bad 10 HCP       | Generally worth one bid.   |
| • INVITATIONAL | good 10 to bad 12 HCP | Generally worth 2 bids   |
| • GAME FORCE   | good 12 or more HCP   | You would have opened this hand if partner hadn't already opened the bidding. Bid until you reach game |
3. Evaluate your fit. This is where things get complex. Playing a hand in a minor suit fit is almost always a last resort. Why? Because major suit and No Trump contracts score better, and games in a major or No Trumps require fewer winners than the minors. So when Partner opens 1♣ or 1♦, Responder's priorities are:
- First - Look for a Golden (8 card) fit in a Major.
  - Second - Look to Play in No Trumps.
  - Last - Look for 8 card fit in a Minor. Sometimes playing a hand in a minor suit is the only safe place.
4. Responder must have at least five cards in the trump suit to show support for a minor suit opening. This is because Opener may only have three cards in his/her bid minor.
5. First and foremost, the partnership is looking for an 8 card fit in a major suit. Even when you can support Opener's minor suit, you first respond in a five card or longer major if you can. If you have two five card majors bid spades first; "High Five". If you have no five card major bid a 4 card major. As Responder, you have a responsibility to bid your **four card majors up the line at the one level**. Up the line means that if you have both majors of equal length of at least four cards, you bid hearts first. If Opener has four card support, he will raise you, thereby announcing the 8 card "golden fit." If opener doesn't like our bid, he will rebid his own suit, try another suit, or rebid NT.
6. There is no need for Responder to jump in the bidding with his/her first bid in a new suit. Remember it frequently takes two or more bids to accurately describe a hand. By responding One of a Major suit over Partner's opening 1 level bid, you are promising **4 or more cards in that suit and 6 or more points**. When the auction goes 1♣ - Pass - 1♥, Opener only knows that Responder has at least four hearts and at least six HCP. Responder may have many more hearts than four and many more points than six. So at this point, Responder's bid is both Unlimited and Forcing.

7. As Responder, if you have no fit with Opener's minor suit and no four+ card suit of your own to bid at the one level, you may respond 1NT. The message here is simple: "I've got 6 to 10 HCP and I don't like your suit." Your bid shows a MINIMUM hand, and is both Limited and Non-forcing.
8. With 11-12 HCP you can jump to 2NT, letting partner decide if we have enough points to play the hand at a game level. Your bid is INVITATIONAL, but Limited and Non-forcing. You can jump to 3NT if you have 13-15 HCP to show a GAME GOING hand. All of these NT responses deny a 4 card major in Responder's hand.
9. If you can't bid your suit at the one level because partner's opening bid is a higher ranking suit than yours, you'll need more points and a longer suit to tell partner about it. **Responding at the two level requires at least ten HCP.** If partner opens 1♦ and you don't like diamonds but you've got nice clubs, you'll need at least 4 cards in the suit and at least 10 HCP to be able to bid 2♣. If you don't have enough HCP, bid 1NT – remember the message here is a simple one: I've got 6-9 HCP and I don't like your suit.
10. Review with Students WK3 LP 2.1 Practice Sheet - Responding to Minor Suit Opening Bids.
11. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** If time permits, students may shuffle one of the decks and play additional hands.

**Assessment Based on Objectives:** Observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills and L.A.

## WK3 LP 2.1 Practice Sheet - Responding to Opener's Minor

Partner has opened 1♦. RHO passed. How many points do you have? Do you have a fit with Partner's diamonds? What's your response?

1. ♠ KQJ10 ♥ 7432 ♦ 98 ♣ 743
2. ♠ A74 ♥ A96 ♦ QJ5 ♣ K1043
3. ♠ J104 ♥ QJ5 ♦ 73 ♣ AJ743
4. ♠ AKQ532 ♥ Void ♦ AJ94 ♣ A53
5. ♠ 964 ♥ 9832 ♦ 943 ♣ 874
6. ♠ 108 ♥ Q109865 ♦ 4 ♣ QJ72
7. ♠ QJ72 ♥ 10764 ♦ KJ74 ♣ 4
8. ♠ Q3 ♥ 965 ♦ AK94 ♣ K1052

Partner has opened 1♣. RHO passed. How many points do you have? Do you have a fit with Partner's clubs? What's your response?

9. ♠ KQ65 ♥ A1073 ♦ 762 ♣ J5
10. ♠ Q432 ♥ 5 ♦ KJ942 ♣ 1084
11. ♠ J86543 ♥ KQ ♦ 73 ♣ 643
12. ♠ 9 ♥ Void ♦ KJ93 ♣ QJ1098732

## WK3 LP 2.1 Practice Sheet - Responding to Opener's Minor

### Suggested Answers.

1. 6 HCP, no fit, 1♥ (Bid up the line with 4-4 in the majors. Partner still has room to bid 1♠ if he/she has four.)
2. 14 HCP, no fit, 3NT we have no golden fit, we have game points, Partner may have only 3 diamonds
3. 9 HCP, no fit, 1NT
4. 18 HCP, fit, 1♠ No need to jump, partner will bid again.
5. 0 HCP, no fit, PASS
6. 5 HCP, no fit, 1♥ Extra length in hearts makes up for lack of points
7. 7 HCP, fit, 1♥ Try for the golden fit
8. 12 HCP, fit, 2NT
9. 10 HCP, no fit, 1♥
10. 6 HCP, no fit, 1♦ Partner may bid 1♠
11. 6 HCP, no fit, 1♠
12. 7 HCP, big fit, 5♣ Time to push the opponents out of the auction!!

## Hand Records 3.2.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice opening One of a Minor Suit and Responding to the opening bid. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record below.)*

*Hand 3.2.1: Suggested Contract 2♠ Suggested Declarer N*

#### Board 1

North Deals

None Vul

	♠ A Q J 5											
	♥ K 10 6											
	♦ J 6											
	♣ Q J 10 5											
♠ 10 2	<table border="1" style="border-collapse: collapse; text-align: center; width: 40px; height: 40px;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 9 4 3	
	N											
W		E										
	S											
♥ Q J 7		♥ 5 4 3										
♦ K 9 8 5		♦ A 10 7 4										
♣ K 9 7 6		♣ A 3 2										
	♠ K 8 7 6											
	♥ A 9 8 2											
	♦ Q 3 2											
	♣ 8 4											
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>									
	1 ♣	Pass	1 ♥									
Pass	1 ♠	Pass	2 ♠									
Pass	Pass	Pass										

## Hand Records 3.2.1-4

### Pg. 2

Hand 3.2.2: Suggested Contract 2♦ Suggested Declarer E

**Board 2**

East Deals

N-S Vul

♠ K Q 8 6	♠ A 9 7 5	♠ 2									
♥ J 10 9 5	♥ Q 8 7	♥ K 3 2									
♦ J 7 6	♦ A 2	♦ K Q 10 5 3									
♣ 10 3	♣ K 9 5 4	♣ A Q 8 7									
	<table style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; font-size: 10px;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		
	N										
W		E									
	S										
	♠ J 10 4 3										
	♥ A 6 4										
	♦ 9 8 4										
	♣ J 6 2										

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		1 ♦	Pass
1 ♥	Pass	2 ♣	Pass
2 ♦	Pass	Pass	Pass

Hand 3.2.3: Suggested Contract 2♦ Suggested Declarer S

**Board 3**

South Deals

E-W Vul

♠ K J 5 4	♠ A 9 7 2	♠ Q 8 6 3									
♥ Q 2	♥ J 9 7	♥ A 10 5 4 3									
♦ 9 6 5	♦ 8 7	♦ K J									
♣ K 8 6 5	♣ Q 10 7 2	♣ J 9									
	<table style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; font-size: 10px;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		
	N										
W		E									
	S										
	♠ 10										
	♥ K 8 6										
	♦ A Q 10 4 3 2										
	♣ A 4 3										

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			1 ♦
Pass	1 ♠	Pass	2 ♦
Pass	Pass	Pass	

## Hand Records 3.2.1-4 Pg. 3

*Hand 3.2.4: Suggested Contract 2♣ Suggested Declarer W*

**Board 4**  
West Deals  
Both Vul

	♠ 10 7 3 2					
	♥ A 9 6 2					
	♦ K 7 4 3					
	♣ 10					
♠ A Q 8	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 5px;">N</td></tr> <tr><td style="padding: 5px;">W E</td></tr> <tr><td style="padding: 5px;">S</td></tr> </table>	N	W E	S	♠ J 5 4	
N						
W E						
S						
♥ 10 5 4		♥ K Q 8 7				
♦ Q 9 8		♦ 2				
♣ K Q 7 3		♣ J 9 6 5 2				
	♠ K 9 6					
	♥ J 3					
	♦ A J 10 6 5					
	♣ A 8 4					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
1 ♣	Pass	1 ♥	Pass			
1 NT	Pass	2 ♣	Pass			
Pass	Pass					

- Lesson Plan Title:** Week 3 Lesson 3 - Math through Games
- Beginning Bridge:** Responding to Partner's Opening Major Suit Bid
- Concept/Topic:** To use math and analytical skills to get to a contract.
- Standards Addressed:** Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
- General Goal(s):** To teach math and analytical skills through bridge.
- Specific Objectives:** To learn the basic guidelines for Responding to Partner's Opening Bid in a Major Suit.  
To learn to evaluate the Bridge Hand for a Response to an Opening Bid by Partner.
- Required Materials:** Paper  
Pencil  
Notebook  
WK3 LP3.1 Practice Sheet -Responding to Major Suit Opening Bids  
Hand Records 3.3.1, 3.3.2, 3.3.3, and 3.3.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 3.3.1, 3.3.2, 3.3.3, and 3.3.4.

**Anticipatory Set (lead-in):**

- Review Previous Lesson.
- Introduce New Concept - Responding to Partner's Opening Bid of 1♥ or 1♠.

**Step-by-step Procedures:**

1. As we learned in earlier lessons, it takes 25 combined High Card Points or thereabouts to make game in no trump or the majors. In order to make a game in a minor suit, requiring taking 11 tricks, we'll need more like 28 or 29 HCP. We will talk more about minor suits later.
2. To compete safely at the three level, we'll need around 22 or 23 combined HCP. To have success at the two level, our combined HCP will have to be about 18 or more.

3. Partner's opening bid may contain as few as 12 HCP or as many as 20 or 21 HCP. Quite a large range! If you have just 6 HCP and you combine that with a strong 20 HCP in partner's hand you can see that it is still possible to bid a game and receive the bonuses that are awarded for bidding and making game. But if partner has only 12 HCP, your combined total is only 18 HCP, and you would like to stop the bidding at the one or two level. How do you do that?
4. Guidelines for Responder:
  - Evaluate your hand strength.
  - Evaluate your fit.
  - Select the bid (or bids) that best describe your hand.
5. EVALUATE YOUR HAND STRENGTH. When your Partner opens the bidding, you evaluate your hand strength to determine which of the following types of hand you hold. That tells you what bidding actions to take, as follows:
 

• SUBMINIMUM	0 to 5 HCP	Generally not worth a bid.
• MINIMUM	6 to bad 10 HCP	Generally worth one bid.
• INVITATIONAL	good 10 to bad 12 HCP	Generally worth 2 bids
• GAME FORCE	good 12 or more HCP	You would have opened this hand if partner hadn't already opened the bidding. Bid until you reach game.
6. With six or more HCP, you MUST respond to Partner's opening bid.
7. EVALUATE YOUR FIT. Let's discuss major suit fits. (We will discuss other kinds of hands in future lessons.) When Partner opens 1♥ or 1♠, Partner is saying, "I have at least 12 HCP and a minimum of 5 cards in my bid suit." Partner may have many more points and more than five cards in that major suit. Unfortunately, Partner's opening bid usually only describes the minimums.
8. If you have three cards in support of Opener's chosen suit of hearts or spades, you know the partnership has the magic eight-card trump fit. You know the answer to the question, "What Denomination?" At this point, you need to confirm the fit and, together with Opener, determine how many HCP the partnership has, so you can answer the other question, "How high?"
9. Three bids announce both a specific point range and number of trumps in support of partner. The chart below refers to both hearts and spades:

<u>Opener</u>	<u>Responder</u>	<u>Message</u>
1♥	PASS	PASS is A SUBMINIMUM hand. Responder has fewer than 6 HCP. It doesn't matter if we have a 3 or 4-card fit. Or even no fit.
1♥	2♥	SINGLE RAISE is a LIMITED and NONFORCING bid that shows a minimum hand with 3+ card support and 6 to bad 10 HCP.
1♥	3♥	JUMP RAISE is a LIMITED and NONFORCING bid that shows an invitational hand with 3+ card support and a good 10 to bad 12 HCP.
1♥	4♥	DOUBLE JUMP RAISE is a LIMITED and NONFORCING bid that shows a preemptive hand and 5+ card support with 4 to 8 HCP and shortness somewhere. This bid is a gamble; you're hoping with a 10-card fit and some shortness in a side suit that partner might be able to make game. You're also preempting the opponents from the auction, keeping them from being able to bid their suits at a safe level. (That is why we call this bid a "preempt.")

10. If you have 13+ HCP, you need to take a small detour. First bid a different suit, then jump to game in Partner's suit. Don't worry; partner won't pass your bid. We'll see why in an upcoming lesson. For example:

<u>Partner Opener</u>	<u>You Responder</u>	<u>Message</u>
1♥ Any bid	1♠ 4♥	NEW SUIT then JUMP TO GAME. 1♠ is an UNLIMITED and FORCING bid. The 4♥ rebid shows a GAME FORCE hand with 3+ card support and 12 or more HCP. Opener cannot Pass your 1♠ new suit bid.

11. There is no need for Responder to jump in the bidding with his/her first bid in a new suit. Remember it frequently takes two or more bids to accurately describe a hand. By responding One of a Major suit over Partner's opening 1 level bid, you are promising **4 or more cards in that suit and 6 or more points**. When the auction goes 1♥ - Pass - 1♠, Opener only knows that Responder has at least four spades and at least six HCP. Responder may have many more spades than four and many more points than six. So at this point, Responder's bid is both Unlimited and Forcing.

12. As Responder, if you have no fit with Opener's major suit and no four+ card suit of your own to bid at the one level, you may respond 1NT. The message here is simple: "I've got 6 to 10 HCP and I don't like your suit." Your bid shows a MINIMUM hand, and is both Limited and Non-forcing.
13. With 11-12 HCP you can jump to 2NT, letting partner decide if we have enough points to play the hand at a game level. Your bid is INVITATIONAL, but Limited and Non-forcing. You can jump to 3NT if you have 13-15 HCP to show a GAME GOING hand. All of these NT responses deny a 4 card major in Responder's hand.
14. If you can't bid your suit at the one level because partner's opening bid is a higher ranking suit than yours, you'll need more points and a longer suit to tell partner about it. **Responding at the two level requires at least ten HCP.** If partner opens 1♥ and you don't like hearts but you've got nice clubs, you'll need at least 4 cards in the suit and at least 10 HCP to be able to bid 2♣. (You need **five** hearts to bid 2♥ over a 1♠ opening.) If you don't have enough HCP, bid 1NT – remember the message here is a simple one: I've got 6-9 HCP and I don't like your suit.
15. Review with Students WK3 LP 3.1 Practice Sheet - Responding to Major Suit Opening Bids.
16. Direct students to bid and play Handsets 1-4 at each table. Students should wind up in a major suit partial or game with Dealer as Declarer. Coach students at each table as required.

**Plan for Independent Practice:** If time permits, students may shuffle one of the decks and play additional hands.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

### WK3 LP 3.1 Practice Sheet – Responding to Major Suit Opening Bids

**Partner has opened 1♥. RHO passed. How many points do you have? Do you have a fit with Partner's hearts? What is your response?**

1. ♠ KQJ532 ♥ 7 ♦ QJ5 ♣ 743
2. ♠ KQ ♥ 9876 ♦ AQ10 ♣ 10965
3. ♠ KJ104 ♥ Q5 ♦ A973 ♣ A43
4. ♠ 532 ♥ 75 ♦ J75432 ♣ A5
5. ♠ K932 ♥ 109876 ♦ QJ52 ♣ Void
6. ♠ A74 ♥ AQ96 ♦ QJ53 ♣ 64
7. ♠ 73 ♥ AQJ ♦ AKQ3 ♣ 10832

**Partner has opened 1♠. RHO passed. How many points do you have? Do you have a fit with Partner's spades? What is your response?**

8. ♠ 82 ♥ 7632 ♦ K5 ♣ Q6542
9. ♠ K64 ♥ AJ97 ♦ KJ86 ♣ QJ
10. ♠ J10542 ♥ Void ♦ Q943 ♣ KJ97
11. ♠ K97 ♥ A10875 ♦ A10 ♣ 863
12. ♠ 106 ♥ KJ85 ♦ Q97 ♣ J1086

## WK3 LP 3.1 Practice Sheet – Responding to Major Suit Opening Bids

### Suggested Answers

1. 9 HCP, no fit, 1♠
2. 11 HCP, fit, 3♥
3. 14 HCP, no fit, 1♠
4. 5 HCP, no fit, Pass
5. 6 HCP, fit, 2♥
6. 13 HCP, fit, 2♦
7. 16 HCP, fit, 2♦
8. 5 HCP, no fit, Pass
9. 15 HCP, fit, 2♦
10. 7 HCP, fit, 4♠
11. 11 HCP, fit, 3♠
12. 7 HCP, no fit, 1NT

## Hand Records 3.3.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class.*

*Hand 3.3.1:*

**Board 1**

North Deals

None Vul

♠ A K 9 6 5						
♥ 6 5						
♦ K Q 3						
♣ J 7 4						
♠ J 10 3	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: 0 auto;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>	N	W E	S	♠ 8 7	
N						
W E						
S						
♥ A J 7 3		♥ Q 9 4 2				
♦ 7 4 2		♦ J 10 9 5				
♣ K Q 9		♣ A 10 5				
♠ Q 4 2						
♥ K 10 8						
♦ A 8 6						
♣ 8 6 3 2						
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
	1 ♠	Pass	2 ♠			
Pass	Pass	Pass				

## Hand Records 3.3.1-4 Pg. 2

*Hand 3.3.2:*

**Board 2**  
East Deals  
N-S Vul

	♠ J 9 5 3										
	♥ K 9 8										
	♦ Q J 7 3										
	♣ 10 7										
♠ K Q 10	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; font-size: 12px;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ A 8 6
	N										
W		E									
	S										
♥ J 10 7 5		♥ A Q 4 3 2									
♦ A 8 5		♦ 9									
♣ J 5 2		♣ K Q 9 8									
	♠ 7 4 2										
	♥ 6										
	♦ K 10 6 4 2										
	♣ A 6 4 3										
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>								
		1 ♥	Pass								
3 ♥	Pass	4 ♥	Pass								
Pass	Pass										

*Hand 3.3.3:*

**Board 3**  
South Deals  
E-W Vul

	♠ 10 8 6 4										
	♥ Q 9 5										
	♦ A J 5										
	♣ 9 3 2										
♠ A Q 3 2	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; font-size: 12px;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ K J 9 7
	N										
W		E									
	S										
♥ K 3		♥ 6 4									
♦ 8 6 3 2		♦ 9 7 4									
♣ J 6 5		♣ A Q 8 7									
	♠ 5										
	♥ A J 10 8 7 2										
	♦ K Q 10										
	♣ K 10 4										
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>								
			1 ♥								
Pass	2 ♥	Pass	3 ♥								
Pass	Pass	Pass									

## Hand Records 3.3.1-4 Pg. 3

*Hand 3.3.4:*

**Board 4**  
West Deals  
Both Vul

♠ K Q J 9 6	♠ 10 7 2	♠ A 4 3			
♥ K Q 3	♥ J 10 6 2	♥ 8 7 5			
♦ 6 2	♦ Q 9 4	♦ K 8 7 5			
♣ A K 3	♣ 8 5 2	♣ Q 10 6			
<table style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; border-collapse: collapse;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W   E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>			N	W   E	S
N					
W   E					
S					
	♠ 8 5				
	♥ A 9 4				
	♦ A J 10 3				
	♣ J 9 7 4				
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>		
1 ♠	Pass	2 ♠	Pass		
4 ♠	Pass	Pass	Pass		

## WK 3 LP 3.3 Handout – Opening Bids and Responses Pg. 1

### GUIDELINES FOR OPENER

#### THE OBJECTIVES OF BIDDING

- How High?
- What Denomination?

#### THE THREE OPENING BID PRIORITIES

- Open 1♥ or 1♠ with 12 or more HCP and five or more cards in that suit.
- Open 1 No Trump with 15-17 HCP and a balanced hand.
- Open 1 of your longer minor with 12 or more HCP when you don't have a five card major or don't have the balanced 15-17 HCP for 1NT.

Open your longer minor suit, even if it is only three cards long. With equal length minors, bid the higher of 4+card suits or lower of 3-card suits. With no five-card major, and two three-card minors, open 1♣.

---

Note: Balanced Hands with 20 or more HCP and unbalanced Hands of 22 or more HCP will be covered in later lessons.

## WK 3 LP 3.3 Handout – Opening Bids and Responses Pg. 2

### GUIDELINES FOR RESPONDER:

#### EVALUATE HAND STRENGTH

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>• SUBMINIMUM</li> <li>• MINIMUM</li> <li>• INVITATIONAL</li> <li>• GAME FORCE</li> </ul> | <ul style="list-style-type: none"> <li>0 to 5 HCP</li> <li>6 to bad 10 HCP</li> <li>good 10 to bad 12 HCP</li> <li>good 12 or more HCP</li> </ul> | <ul style="list-style-type: none"> <li>Generally not worth a bid.</li> <li>Generally worth one bid.</li> <li>Generally worth 2 bids</li> <li>You would have opened this hand if partner hadn't already opened the bidding.</li> <li>Bid until you reach game.</li> </ul> |
|---|---|--|

#### EVALUATE FIT

- First - Look for a Golden (8+ card) fit in a Major.
- Second - Look to Play in No Trumps.
- Last - Look for 8+ card fit in a Minor.

#### SELECT A BID THAT DESCRIBES YOUR HAND

- Pass with a SUBMINIMUM Hand
- Raise Opener's Major Suit with 3+ card Support (Golden Fit)
  - Minimum hand Single raise
  - Invitational hand Jump Raise
  - Preemptive hand Jump to Game
  - Game Force Bid a New Suit first, then Raise to Game in Opener's Major
- Bid a 5+ card Suit at the One Level
- Bid your 4 card Major Suits "Up the Line"
- Bid No Trump with a Balanced Hand
  - 1NT 6-10 HCP, no 4+ card major, no support for Opener's Major
  - 2NT 11-12 HCP, no 4+ card major, no support for Opener's Major
  - 3NT 13-15 HCP, no 4+ card major, no support for Opener's Major
- Raise Opener's Minor Suit with 5+ card Support
- Bid a New Suit at the Two Level (with 10+ HCP)

- Lesson Plan Title:** Week 3 Lesson 4 - Math through games
- Beginning Bridge:** Rebids by Opener - Part 1
- Concept/Topic:** To teach math through real world applications.
- Standards Addressed:** Communication 1. Organize and consolidate their mathematical thinking through communication.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To learn the general structure for Rebids by Opener.  
To practice some simple Auctions, involving an Opening bid, A Response by Partner, and a Rebid by Opener
- Required Materials:** Paper  
Pencil  
Notebook  
WK3 LP 4.1 Practice Sheet - Opener's First Rebid (attached)  
Hand Records 3.4.1, 3.4.2, 3.4.3, and 3.4.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 3.4.1, 3.4.2, 3.4.3, and 3.4.4.

**Anticipatory Set (lead-in):**

- Review Previous Lesson.
- Introduce New Concept - Rebids by Opener

**Step-by-step Procedures:**

1. You opened the bidding and partner responded. Now what??? Opener's second bid is frequently the most important and descriptive bid that can be made. Your second bid is a chance to tell partner about your distribution, your points, your interest or disinterest in game, and even more.
2. Every hand that can be opened at the one level in a suit can be categorized as a minimum, a game invitational, or a game forcing hand. With minimum hands the Opener wants to make a minimum rebid; with game invitational hands Opener wants to make a game invitational rebid; and with game forcing hands Opener wants the second bid to be a forcing rebid. So what defines each of these levels?

- MINIMUM hands 12 to bad 15 HCP
- GAME INVITATIONAL hands 15 to bad 18 HCP
- GAME FORCING hands 18 to 21 HCP

3. If Partner (Responder) makes an Unlimited bid (after you've opened the hand) you owe partner one more bid, no matter how weak your opening bid was. For example, if partner bids a new suit either at the one level (showing 6 or more points) or is forced to bid at the 2 level (showing 10 or more points), even with a minimum hand you'll have to bid again. Partner has made a response that is Unlimited, and therefore forcing.
4. If Partner has made a Limited bid, you don't have to bid again with a minimum hand. For example, you are allowed to pass if Responder has raised your suit (a limited bid) or responded 1 NT (a limited bid). Also, if Partner passed initially, before you opened, Partner's bids are Limited to a maximum of about 11 HCP and are Non-forcing.
5. You are also allowed to Pass if partner jumped directly to game or slam and you have no desire to go any further.
6. About 95 percent of the time, when you open the bidding in One of a Suit, either a Minor or a Major, Partner either
  - raises some number of your suit, or
  - bids one of a new suit, or
  - bids two of a new suit, or
  - bids some number of No Trump.

Let's consider each of these cases in turn.

7. When Partner makes a Simple Raise of your suit: Suppose the auction goes 1♠ - Pass - 2♠ - Pass:
  - With a MINIMUM hand you'll pass.
  - With a GAME INVITATIONAL hand, you'll raise the suit one more level.
  - With a GAME FORCING hand, you'll jump right to game.

This is especially true with the major suits. With the minor suits, you may choose to hunt for game in No Trump rather than in the minor suit.

8. When Partner has Jumped in your suit: Suppose the auction goes 1♠ - Pass - 3♠ - Pass:
- With a MINIMUM hand, you'll pass.
  - With a GAME INVITATIONAL hand, you'll bid 4♠.
  - With a GAME FORCING hand, you'll think about slam possibilities (a later lesson), but you will bid again and keep the bidding open at least until game is reached.
9. Review with Students WK3 LP4.1 Practice Sheet - Opener's Rebids.
10. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students to play hands.

**Assessment Based on Objectives:** collect notebooks, observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skill, L.A.,

## Hand Records 3.4.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice opening One of a Major Suit, Responder to Raise or Jump Raise Opener's Major, and Opener to Pick the appropriate Rebid. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record below.)*

*Hand 3.4.1: Suggested Contract 3♥\_\_ Suggested Declarer N\_\_*

**Board 1**

North Deals

None Vul

♠ A 6 3						
♥ A J 10 9 7						
♦ K J 5						
♣ 6 5						
♠ Q J 10 8 4	♠ K 7 2					
♥ 3	♥ 8 6 4					
♦ Q 9 8 6 2	♦ 10 7 3					
♣ A 8	♣ K Q 4 3					
	<table style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>	N	W E	S		
N						
W E						
S						
	♠ 9 5					
	♥ K Q 5 2					
	♦ A 4					
	♣ J 10 9 7 2					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
	1 ♥	Pass	3 ♥			
Pass	Pass	Pass				

## Hand Records 3.4.1-4

### Pg. 2

Hand 3.4.2: Suggested Contract 3♠\_\_ Suggested Declarer \_E\_

**Board 2**  
East Deals  
N-S Vul

	♠ Q 5 2		
	♥ A 10 6 3		
	♦ J 9 6 5		
	♣ 9 5		
♠ A 10 4	♠ K J 8 7 6		
♥ 9 8 7	♥ 4		
♦ 10 8 7 3	♦ K Q 4		
♣ K 3 2	♣ A Q 7 4		
	♠ 9 3		
	♥ K Q J 5 2		
	♦ A 2		
	♣ J 10 8 6		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		1 ♠	Pass
2 ♠	Pass	3 ♠	Pass
Pass	Pass		

Hand 3.4.3: Suggested Contract 2♠\_\_ Suggested Declarer W\_\_

**Board 3**  
South Deals  
E-W Vul

	♠ 9 8 6		
	♥ K 7 4		
	♦ Q 9 5 4		
	♣ A 6 4		
♠ K Q J 7 3	♠ A 10 2		
♥ A 3 2	♥ 9 8 5		
♦ A 2	♦ 7 6 3		
♣ 9 7 3	♣ K 10 5 2		
	♠ 5 4		
	♥ Q J 10 6		
	♦ K J 10 8		
	♣ Q J 8		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			Pass
1 ♠	Pass	2 ♠	Pass
Pass	Pass		

## Hand Records 3.4.1-4 Pg. 3

*Hand 3.4.4: Suggested Contract 4♥\_\_ Suggested Declarer \_S\_*

**Board 4**  
West Deals  
Both Vul

♠ A 9 7 2						
♥ J 8 6 5						
♦ Q J 2						
♣ K 9						
♠ Q J 8 5 3	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>	N	W E	S	♠ K 6	
N						
W E						
S						
♥ 4 3		♥ 10 7				
♦ 7 5 4		♦ K 10 9 8 6				
♣ J 8 4		♣ 10 6 3 2				
		♠ 10 4				
		♥ A K Q 9 2				
		♦ A 3				
		♣ A Q 7 5				

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	Pass	Pass	1 ♥
Pass	3 ♥	Pass	4 ♥
Pass	Pass	Pass	

## WK3 LP 4.3 Handout – Openers Rebid Pg. 1

ALWAYS CATEGORIZE OPENER’S HAND BEFORE REBIDDING!!!

- MINIMUM hands 12 to bad 15 HCP
- GAME INVITATIONAL hands 15 to bad 18 HCP
- GAME FORCING hands 18 to 21 HCP

AS OPENER, WHAT DO YOU REBID WHEN?

1. RESPONDER RAISES YOUR SUIT: 1♠ - Pass - 2♠ - Pass:

MINIMUM	Pass
GAME INVITATIONAL	Raise the suit one more level
GAME FORCING	Jump to game.

With the Minor suits, you may choose to hunt for game in NT rather than in the Minor.

2. RESPONDER JUMP RAISES YOUR SUIT: 1♠ - Pass - 3♠ - Pass:

MINIMUM	Pass
GAME INVITATIONAL	Bid Game in Major, Minor, or NT
GAME FORCING	Bid Again -New Suit, Jump, or NT

3. RESPONDER BIDS A NEW SUIT AT THE ONE LEVEL

MINIMUM:

- a. Raise Responder’s suit one level with four-card support
- b. Rebid your own suit (with 6+ cards in the suit)
- c. Bid a new suit which holds at least four cards.
- d. Bid 1NT lacking support for Responder’s suit or 6+ cards in your own. (If Responder bid at the two level, your minimum bid is 2NT.)

GAME INVITATIONAL:

- a. Jump Raise Responder’s suit to the 3-level with four-card support
- b. Jump Rebid your own 6+ card suit to the 3 level.
- c. Bid a new suit that is at least four cards long.
- d. Bid 2NT showing a balanced hand and 18-19 points. (We’ll cover this more in no trump bidding.)

## **WK3 LP 4.3 Handout – Openers Rebid Pg. 2**

### **GAME FORCING:**

- a. Jump Raise Responder's suit to the 4-level
- b. Jump Rebid your own suit to the 4-level (only with really great trumps where you don't care even if partner is void)
- c. Jump Bid in a new suit (a "Jump Shift").

### **4. RESPONDER BIDS ONE NO TRUMP**

#### **MINIMUM:**

- a. Pass if your hand is balanced (4-3-3-3, 4-4-3-2, or 5-3-3-2 distribution).
- b. Rebid a 6+ card suit.
- c. Bid a new suit if your hand is unbalanced.

#### **GAME INVITATIONAL:**

- a. Raise to 2NT if your hand is balanced.
- b. Rebid a 6+card suit.
- c. Bid a new suit if your hand is unbalanced.

#### **GAME FORCING:**

- a. Raise to 3NT if your hand is balanced.
- b. Jump to Game in your suit with a 6+card suit, or jump shift to a new suit.
- c. Jump Shift to a new 4+card suit if your hand is unbalanced.

### **5. RESPONDER BIDS A NEW SUIT AT THE TWO LEVEL**

#### **MINIMUM:**

- a. Raise Responder's suit one level with 3+ card support if a major and 4+ card support if a minor.
- b. Rebid your own 6+ card suit.
- c. Bid a new suit which holds at least four cards.
- d. Bid 2NT lacking support for partner's suit or 6 cards in your own

## WK3 LP 4.3 Handout – Openers Rebid

### Pg. 3

#### INVITATIONAL:

- a. Jump Raise Responder's suit to game with adequate trump support. (3+ if a Major or 4+ if a Minor)
- b. Jump Rebid your own 6+ card suit to the 3 level.
- c. Bid a new suit which holds at least four cards.
- d. Bid 3NT with a balanced hand lacking support for Responder's suit.

#### GAME FORCING:

- a. Bid a new suit at least four cards long.
- b. Jump Raise Responder's suit to game with adequate trump support. (3+ if a Major or 4+ if a Minor)
- c. Jump Rebid your own 6+card suit to the 3 level.
- d. Bid 3 NT with a balanced hand lacking support for Responder's suit.

### OPENER-RESPONDER CONTRACT MATRIX

		RESPONDER' S HAND		
		MINIMUM	INVITATIONAL	GAME FORCE
OPENER' S HAND	MINIMUM	<b>PARTIAL</b>	<b>PARTIAL OR GAME</b>	<b>GAME</b>
	INVITATIONAL	<b>PARTIAL OR GAME</b>	<b>GAME</b>	<b>GAME</b>
	GAME FORCE	<b>GAME</b>	<b>GAME</b>	<b>GAME OR SLAM</b>

- Lesson Plan Title:** Week 3 Lesson 5 - Math through games
- Beginning Bridge:** Review and Quiz
- Concept/Topic:** To teach math skills to play bridge.
- Standards Addressed:** Problem Solving 2. Solve problems that arise in mathematical and other contexts.
- General Goal(s):** To teach math through games.
- Specific Objectives:** To reinforce the past week's lessons.
- Required Materials:** Notebook  
Cards  
Paper  
Pencil

**Anticipatory Set (lead-in):**

- Review week 3 lessons 1-4
  - Responding to Partner's Opening Major Suit Bid
  - Responding to Partner's Opening Minor Suit Bid
  - Forcing Principles in Bridge Bidding
  - Rebids by Opener - Part 1

**Step-by-step Procedures:**

1. Give review quiz.
2. Give out decks of cards to each table.
3. Allow students to shuffle, deal, and play hands.

**Plan for Independent Practice:** Allow time to play and discuss hands.

**Assessment Based on Objectives:** Quiz 3

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Students will use a computer to play bridge hands when they finish their quiz.

**Possible Connections to Other Subjects:** Communication skills, L.A.

**Week 3 Lesson 5 Review Quiz (16 pts)**

You opened 1♠. Partner responded 2♠. What does Partner's bid mean?(1 pt) What do you rebid with the following hands? (1 pt each)

1. ♠ KQJ103 ♥ A72 ♦ KQ9 ♣ A3
2. ♠ A7432 ♥ A96 ♦ QJ ♣ K103
3. ♠ AKQ53 ♥ Q98 ♦ AJ94 ♣ 105

You opened 1♠. Partner responded 3♠. What does Partner's bid mean?(1 pt) What do you rebid with the following hands?(1 pt each)

4. ♠ AKQ53 ♥ Q98 ♦ AJ94 ♣105
5. ♠ A7432 ♥ A96 ♦ 76 ♣ KJ3
6. ♠ A7432 ♥ AQJ ♦ 76 ♣ KJ3

You opened 1♠. Partner responded 4♠. What does Partner's bid mean?(1 pt) What do you rebid with the following hand?(1 pt)

7. ♠ A7432 ♥ AQJ ♦ 76 ♣ KJ3

You opened 1♥. Partner responded 1♠. What does Partner's bid mean?(1 pt) What do you rebid with the following hands?(1 pt each)

8. ♠ Void ♥ AKJ83 ♦ A9643 ♣ 864
9. ♠ 10842 ♥ AKQJ6 ♦ 102 ♣ QJ
10. ♠ Q94 ♥ KJ1076 ♦ A32 ♣ Q10
11. ♠ Void ♥ KQJ9874 ♦ AK4 ♣ J107
12. ♠ AQ ♥ AQJ1082 ♦ Void ♣ K9743

**Week 3 Lesson 5 Review Quiz (16 pts) Answers**

1. 4♠ Partner has 6-10 points and 3+ card support
2. Pass
3. 3♠
4. 4♠ Partner has 10-12 points and 3+card support
5. Pass
6. 4♠
7. Pass Partner's bid was preemptive.
8. 2♦ Partner has 4+ spades and 6+ points
9. 2♠
10. 1NT
11. 2♥ This is a close choice between 2♥ and 3♥
12. 3♣ This bid forces us to game.

- Lesson Plan Title:** Week 4 Lesson 1 - Math through Games
- Beginning Bridge:** Rebids by Opener - Part 2
- Concept/Topic:** To teach math through games and real world situations.
- Standards Addressed:** Communication 4. Use the language of mathematics to express mathematical ideas precisely.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To learn the general structure for Rebids by Opener.  
To practice some simple Auctions, involving an Opening bid, A Response by Partner, and a Rebid by Opener.
- Required Materials:** Pencil  
Notebook  
WK4 LP 1.1 Practice Sheet - Opener's First Rebid (attached)  
Hand Records 4.1.1, 4.1.2, 4.1.3, and 4.1.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 4.1.1, 4.1.2, 4.1.3, and 4.1.4.

**Anticipatory Set (lead-in):**

- Review Previous Lesson
- Introduce New Concept - More Rebids by Opener

**Step-by-step Procedures:**

1. About 95 percent of the time, when you open the bidding in One of a Suit, Partner either raises your suit, bids one of a new suit, bids two of a new suit, or bids some number of no trump. We saw in the previous lesson how to rebid after Responder raised your suit.
2. When Partner (Responder) has bid a new suit at the One Level:
  - As Opener, with a MINIMUM hand:
    - a. Raise partner's suit one level with 4-card support.
    - b. Rebid your own suit as cheaply as possible. (with 6 cards in the suit)
    - c. Bid 1NT lacking support for Responder's suit or 6 cards in my own. (If Responder bids at the two level, your minimum bid is 2NT.)
    - d. Bid a new suit in which you have at least four cards.

- With a GAME INVITATIONAL hand:
    - a. Raise partner's suit by jumping to the 3 level with 4+ card support.
    - b. Rebid my own suit by jumping to the 3 level. (still need 6 cards in the suit)
    - c. Bid a new suit which holds at least four cards.
    - d. Bid 2NT showing a balanced hand and 18-19 points. (We'll cover this more in no trump bidding.)
  
  - With a GAME FORCING hand:
    - a. Raise partner's suit by jumping to the 4 level.
    - b. Rebid your own suit by jumping to the 4 level. (only with really great trumps where you don't even care if partner is void)
    - c. Make a jump bid in a new suit (a "Jump Shift"). Jump shifting announces a GAME FORCE to partner. The partnership cannot now pass a bid below game.
3. When Partner (Responder) Has Responded 1NT
- With a MINIMUM hand:
    - a. Pass with a balanced hand.
    - b. Rebid your suit with a 6 card suit.
    - c. Bid a new suit with an unbalanced hand where you do not have a 6 card suit and where the new suit is of lower rank than your first bid suit.
  
  - With a GAME INVITATIONAL hand:
    - a. Bid 2NT with a balanced hand
    - b. Jump rebid your suit with a 6 card suit.
    - c. Bid a new suit with an unbalanced hand where you do not have a 6 card suit.
  
  - With a GAME FORCING hand:
    - a. Bid 3NT with a balanced hand.
    - b. Jump shift into a new suit or bid game in your suit with a 6 card major suit.
    - c. Jump shift into a new suit with an unbalanced hand.

4. Responder should take care not to bid a new suit at the two level if there is room to take action at the one level. In other words don't jump to 2♠ after partner opens 1♣. The two over one response presumes that one level response was no longer available, as for example, in 1♥ - 2♣. Remember: the two over one response promises at least 10 HCP and a suit that is at least four cards long, usually five cards.
  
5. When Partner Has Bid a New Suit at the Two Level:
  - With a MINIMUM hand:
    - a. Raise partner's suit one level with 4+ card support if minor and 3+ card support if major.
    - b. Rebid your own suit as cheaply as possible with 6+ cards in the suit.
    - c. Rebid 2NT lacking support for partner's suit with a balanced hand.
    - d. Rebid a new suit which holds at least four cards.
  
  - With an INVITATIONAL hand:
    - a. Raise partner's suit by jumping to game with 4 or more card support.
    - b. Rebid my own suit by jumping to the 3 level. (Still need 6 cards in the suit.)
    - c. Rebid 3NT with basic balance and lacking support for partner's suit.
    - d. Rebid a new suit in which you hold at least four cards.
  
  - With a GAME FORCING hand:
    - a. Rebid a new suit in which you hold at least four cards.
    - b. Raise partner's suit by jumping to game with four or more card support.
    - c. Rebid my own suit by jumping to the 3 level. (Still need 6 cards in the suit.)
    - d. Rebid 3 NT with basic balance and lacking support for partner's suit.
  
6. Review with Students WK4 LP 1.1 Practice Sheet - Responding to Minor Suit Opening Bids.
  
7. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to shuffle a deck and deal, bid and play additional hands if time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

### WK4 LP 1.1 Practice Sheet – Opener’s First Rebid

You opened 1♣. Partner responded 1♥. What does Partner’s bid mean?  
What do you rebid with the following hands?

1. ♠ KQJ ♥ A732 ♦ KQ9 ♣ A93
2. ♠ A743 ♥ A96 ♦ QJ ♣ K103
3. ♠ A73 ♥ Q98 ♦ AQ4 ♣ J1052
4. ♠ A3 ♥ Q98 ♦ AJ9 ♣ K108753
5. ♠ AK3 ♥ AQ96 ♦ 7 ♣ K9763
6. ♠ AQ ♥ KQ96 ♦ 72 ♣ AKQ63

You opened 1♦. Partner responded 1♠. What does Partner’s bid mean?  
What do you rebid with the following hands?

7. ♠ AK53 ♥ Q98 ♦ A1094 ♣ 105
8. ♠ A7 ♥ A962 ♦ KJ76 ♣ 873
9. ♠ AJ102 ♥ AQJ2 ♦ AQ76 ♣ K

You opened 1♦. Partner responded 1NT. What does Partner’s bid mean?  
What do you rebid with the following hand?

10. ♠ A743 ♥ A96 ♦ Q6 ♣ K103
11. ♠ AQ ♥ KQ96 ♦ AQ862 ♣ K3
12. ♠ 93 ♥ AQ9 ♦ AK9875 ♣ J10

## WK4 LP 1.1 Practice Sheet – Opener’s First Rebid Pg. 2

You opened 1♥. Partner responded 2♣. What does Partner’s bid mean?  
What do you rebid with the following hands?

13. ♠ Q1053 ♥ AK1076 ♦ Void ♣ QJ52  
14. ♠ 54 ♥ AKJ1043 ♦ A3 ♣ 1072

You opened 1♥. Partner responded 2♦. What does Partner’s bid mean?  
What do you rebid with the following hands?

15. ♠ 4 ♥ AK753 ♦ Q742 ♣ K73  
16. ♠ K43 ♥ AJ1098 ♦ J4 ♣ A76

You opened 1♠. Partner responded 2♣. What does Partner’s bid mean?  
What do you rebid with the following hands?

17. ♠ AQJ92 ♥ KQ108 ♦ 5 ♣ Q95  
18. ♠ AJ852 ♥ Q5 ♦ KJ85 ♣ K4

You opened 1♠. Partner responded 2♦. What does Partner’s bid mean?  
What do you rebid with the following hands?

19. ♠ AKQ10984 ♥ A6 ♦ 97 ♣ J7  
20. ♠ KJ1087 ♥ A5 ♦ K93 ♣ Q32

You opened 1♠. Partner responded 2♥. What does Partner’s bid mean?  
What do you rebid with the following hands?

21. ♠ A9875 ♥ A109 ♦ A76 ♣ J8  
22. ♠ K108643 ♥ AKQ4 ♦ KJ8 ♣ Void

You opened 1♦. Partner responded 2♣. What does Partner’s bid mean?  
What do you rebid with the following hands?

23. ♠ AK3 ♥ K92 ♦ J9853 ♣ K6  
24. ♠ 7 ♥ Q876 ♦ AKJ64 ♣ K87

## WK4 LP 1.1 Practice Sheet – Opener’s First Rebid

### Suggested Answers.

1. 4♥ Partner has 4+ hearts and 6+ points
2. 1♠
3. 1NT
4. 2♣
5. 3♥
6. 4♥
7. 2♠ Partner has 4+ spades and 6+ points
8. 1NT
9. 4♠
10. Pass Partner has 6-10 points and no 4+ card major and no diamond Support.
11. 3NT
12. 2♦
13. 3♣ Partner has 4+ clubs and 10+ points
14. 2♥
15. 3♦ Partner has 4+ diamonds and 10+ points
16. 2NT
17. 2♥ Partner has 4+ clubs and 10+ points
18. 2♦
19. 4♠ Partner has 4+ diamonds and 10+ points
20. 2NT
21. 3♥ Partner has 5+ hearts and 10+ points
22. 4♥
23. 2NT Partner has 4+ clubs and 10+ points
24. 2♦

## Hand Records 4.1.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice opening One of a Minor Suit, Responder to Raise or Jump Raise Opener's Minor, or Responder to bid One of a Major, or Responder to bid One No Trump. Opener should pick the appropriate Rebid.*

*Hand 4.1.1: Suggested Contract 3♠ \_\_\_ Suggested Declarer N \_\_\_*

#### Board 1

North Deals

None Vul

♠ A Q 9 6			
♥ Q J			
♦ 8 3			
♣ K J 10 8 4			
♠ 10 8 3	♠ J 7		
♥ 10 6 5 3	♥ K 7 2		
♦ K 9 7 5 4	♦ A Q J 10		
♣ Q	♣ 7 6 5 3		
	♠ K 5 4 2		
	♥ A 9 8 4		
	♦ 6 2		
	♣ A 9 2		
West	North	East	South
	1 ♣	Pass	1 ♥
Pass	1 ♠	Pass	3 ♠
Pass	Pass	Pass	

## Hand Records 4.1.1-4

### Pg. 2

Hand 4.1.2: Suggested Contract 2♥\_\_ Suggested Declarer \_E\_

**Board 2**  
East Deals  
N-S Vul

♠ Q 5 2	♠ 10 9 7 3	♠ K 8									
♥ A 8 6 3	♥ K J 5	♥ Q 10 9 7 2									
♦ 8 7	♦ A 9	♦ K 10 5 3									
♣ A K 4 3	♣ J 6 5 2	♣ Q 10									
<table style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>				N		W		E		S	
	N										
W		E									
	S										
	♠ A J 6 4										
	♥ 4										
	♦ Q J 6 4 2										
	♣ 9 8 7										
<i>West</i>	<i>North</i>	<i>East</i>									
		Pass									
1 ♣	Pass	1 ♥									
2 ♥	Pass	Pass									

Hand 4.1.3: Suggested Contract 2♠\_\_ Suggested Declarer W\_\_

**Board 3**  
South Deals  
E-W Vul

	♠ J 3										
	♥ A Q 3 2										
	♦ 10 7										
	♣ J 10 7 6 3										
♠ Q 10 8 7 4 2	♠ A 9 6	♠ A 9 6									
♥ 9 4	♥ 10 6 5	♥ 10 6 5									
♦ A 5 4	♦ Q J 9 6	♦ Q J 9 6									
♣ Q 5	♣ A K 9	♣ A K 9									
<table style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>				N		W		E		S	
	N										
W		E									
	S										
	♠ K 5										
	♥ K J 8 7										
	♦ K 8 3 2										
	♣ 8 4 2										
<i>West</i>	<i>North</i>	<i>East</i>									
		Pass									
Pass	Pass	1 ♦									
1 ♠	Pass	1 NT									
2 ♠	Pass	Pass									

## Hand Records 4.1.1-4 Pg. 3

*Hand 4.1.4: Suggested Contract 4♥\_\_ Suggested Declarer \_S\_*

**Board 4**  
West Deals  
Both Vul

		♠ 10		
		♥ A 5 4 3		
		♦ A K J 6		
		♣ K 6 4 2		
♠ Q 9 6	N	♠ K 8 7 4 2		
♥ 9 8 2	W	♥ Q 7		
♦ Q 8 7 4 2	E	♦ 10 5		
♣ A Q	S	♣ J 10 5 3		
		♠ A J 5 3		
		♥ K J 10 6		
		♦ 9 3		
		♣ 9 8 7		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>	
Pass	1 ♦	Pass	1 ♥	
Pass	3 ♥	Pass	4 ♥	
Pass	Pass	Pass		

- Lesson Plan Title:** Week 4 Lesson 2 - Math through Games
- Beginning Bridge:** Declarer Play - Suit Contracts
- Concept/Topic:** To teach bridge.
- Standards Addressed:** Communication 1. Organize and consolidate their mathematical thinking through communication.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach the CRASH method of planning Declarer Play.  
To teach three main tools for disposing of losers when playing in a suit contract.  
To teach the use of the “finesse” to take more tricks as Declarer.
- Required Materials:** Paper  
Pencil  
Notebook  
Hand Records 4.2.1, 4.2.2, 4.2.3, and 4.2.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 4.2.1, 4.2.2, 4.2.3, and 4.2.4.

**Anticipatory Set (lead-in):**

- Briefly review last week’s lessons.
- Today and tomorrow we are going to learn some techniques for taking the most number of tricks as Declarer.

**Step-by-step Procedures:**

1. Successful Declarers always take a moment or two before playing to trick one. They take time to plan in advance how they are going to play the hand. One technique that helps you do this is called the CRASH technique. This is a series of questions to ask yourself before launching into the actual play.

2. Write on white board the following definition of **CRASH**:

- **C = Count**
- **R = Review**
- **A = Analyze**
- **S = Source**
- **H = How**

3. **COUNT** - The first thing a Declarer playing a suit contract does after seeing Dummy is Count Losers. Subtracting the number of Losers from 13 gives you some idea of how many tricks you can win. Counting losers is a simple process done suit by suit. Losers are normally only counted from the hand with the longer trumps, usually declarer's hand. (If you have an equal number of trumps in your hand and dummy, making the stronger hand the master typically works best.) When counting losers, look at one suit at a time: *(Write this Example on the board.)*

- Declarer: ♦AQ93                      Dummy: ♦K72

Assume declarer is the master hand here. Between the two hands I clearly have three tricks but the fourth diamond in my hand is a loser. Reversing the holding:

- Declarer: ♦K72                      Dummy: ♦AQ93

Now I have no losers. I don't count the extra card in dummy because my loser count is based on the problem cards in my hand alone.

4. Oftentimes it isn't so clear how many potential losers Declarer has. *(Write this Example on the board.):*

- Declarer: ♣J94                      Dummy: ♣KT7

Here I start as a pessimist and presume that my RHO holds the ♣AQ; I'll probably have to lose two tricks. While I might get lucky and find the Queen in LHO's hand, I begin by assuming two losers.

5. **REVIEW** - The second thing a declarer does upon seeing dummy is to Review the auction in his/her mind. Did the opponents bid? (They do sometimes.) What suits? How high? Were they silent throughout? This may tell Declarer a lot about how the remaining points are distributed between LHO and RHO. Keeping the auction in mind may help Declarer develop a plan for taking more tricks.

6. **ANALYZE** - The third step declarer follows is to Analyze the opening lead. Since we haven't covered the rules for making opening leads yet, we can't really make good use of this step. Still, remembering what your LHO led at trick one may tell you something about which suit they hope to take tricks with. It may also alert you to where the opponents are short of cards and hoping to get a trump trick.
  
7. **SOURCE** - The fourth step is for declarer to ask him/herself where the tricks are coming from; what is Declarer's Source of tricks? He/she may, for example, look at the diamond suit and see two sure tricks, but with extra length in the suit, Declarer can also see a potential third or fourth trick after the suit has been established.
  
8. **HOW** - How do I proceed to take my tricks? Good declarers develop a plan to take all the tricks they can. They determine what order they would like to take tricks in. When do I draw trump (leading trumps until the opponents have no more trumps)? When do I leave trump alone because I have other urgent needs? Can I trump some losers (also known as ruffing losers)? Ruffing and trumping are two words that mean the same and is used when declarer has losing cards in a side suit where the other hand has no more of that suit. Declarer can ruff these with trumps in the other hand to try to increase the number of tricks taken. Can I establish a side suit to discard some losers (done by giving up tricks or ruffing tricks until the cards are high where you can now pitch losing tricks in other suits)? When do I give up a trick so that I can take two additional tricks? What cards will I use for transportation back and forth to dummy and my hand? Do I need to take any finesses? As time goes on you'll add many more questions to this list. And over time you'll begin to recognize patterns of card combinations and patterns of hand layouts where you'll gain confidence in playing the hand because you've seen these combinations before and remember better ways to take your tricks!
  
9. For now I'd be happy if you just asked yourself the following "how" questions before launching into play: (*Write these on the board.*)
  - Should I draw trumps as soon as possible?
  - Or do I have another need for those trumps?
  - Or do I need to take care of something else before drawing trump?

10. The decision about drawing trumps is simple: Draw trumps unless there is a reason not to! Some reasons not to pull trumps are:
- You need to ruff a loser first
  - You need trumps for transportation between the hands to deal with other suits.
11. Once you've counted losers, then what? For starters, you know the task ahead. If your count of losers says your contract is making, you make a plan that will preserve those tricks. But often, you have more losers than you can afford. So how do you eliminate losers? Here are the three main tools for eliminating losers:
- **Set up a long suit in dummy** and discard your losers on it. Sometimes the suit is ready to run and doesn't even need setting up.
  - **Trump your losers.** This usually means trumping in the hand with fewer trumps (the "short hand").
  - **Take a finesse** or finesses. See the explanation below. Unless you have touching honors, you must lead toward the card you want to promote.
12. We never have enough high cards, but one simple tool gives us a chance to take extra tricks. This tool is the Finesse. Finesses are about "hope." You "hope" to find a critical missing card in one opponent's hand rather than the other opponent's hand. Finesses involve leading low from one hand toward a high card in the other hand - and hoping. Here's a common one. (*Write this Example on the board.*):

<u>You</u>	<u>Dummy</u>
743	AQ6

- You'd like to take two tricks in the suit. You lead a low card from your hand, and if LHO plays a small card, you stick in the Queen and hope that your LHO has the King. If he does, the Queen wins the trick, and now you'll make two tricks. That is a finesse - you finessed against the King in LHO's hand. If RHO has the king you'll only make one trick in the suit. But at least you gave it a try!
13. Direct students to bid and play only Handset 1 at each table, and write down the contract and number of tricks taken by Declarer. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.). Then review Handset 1 with the class, using the "PLANNING THE PLAY" discussion at the bottom of the hand record as a discussion guide. Repeat this process for the remaining three Handsets.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands as time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A

## Hand Records 4.2.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice the mechanics of play of the hand in a suit contract.*

#### Board 4.2.1

North Deals  
None Vul

♠ 10 7 6 2	♠ K Q 9	♠ A J 5 4			
♥ K Q 9 4	♥ J 10 6 3	♥ A 8 7			
♦ A Q 2	♦ K J 10	♦ 9 8			
♣ K Q	♣ J 10 9	♣ A 5 4 2			
<table style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; text-align: center; border-collapse: collapse;"> <tr><td style="padding: 5px;">N</td></tr> <tr><td style="padding: 5px;">W E</td></tr> <tr><td style="padding: 5px;">S</td></tr> </table>			N	W E	S
N					
W E					
S					
♠ 8 3	♠ 8 3	♠ 8 3			
♥ 5 2	♥ 5 2	♥ 5 2			
♦ 7 6 5 4 3	♦ 7 6 5 4 3	♦ 7 6 5 4 3			
♣ 8 7 6 3	♣ 8 7 6 3	♣ 8 7 6 3			
<i>West</i>	<i>North</i>	<i>East</i>			
	Pass	1 ♣			
1 ♥	Pass	1 ♠			
4 ♠	Pass	Pass			
		Pass			

Opening Lead: 4♦, fourth from your longest and strongest suit

East's 1♣ shows 12+ points and 3+ clubs. West's 1♥ bid shows 4+ hearts and 6+ points. East bids 1♠ showing four spades. West now bids 4♠ showing the values to bid game, and four card spade support.

#### PLANNING THE PLAY:

East needs 10 tricks, but has only 8 top tricks - the ♦A, the ♣A, ♣K and ♣Q, the ♥A, ♥K and ♥Q, and the ♠A. If the ♦Q finesse succeeds, there is the ninth trick, and a diamond ruff in hand gives East 10 tricks. Alas, the diamond finesse loses. But declarer can win the diamond return, lead a spade toward the ♠AJ, and later draw trumps, followed by playing off the top hearts. If hearts split 3-3 or the ♥J and ♥T are doubleton, Dummy's 9 of hearts becomes a winner and the tenth trick! If hearts don't split, declarer can ruff a heart in his hand for the 10th trick. The three methods combined - finesses, setting up a long suit, and ruffing losers, will produce ten winners.

## Hand Records 4.2.1-4

### Pg. 2

**Board 4.2.2**

East Deals

N-S Vul

♠ 6 5 2	♠ K 9 8 7 4	♠ Q
♥ K J 9 6 3	♥ 7 4 2	♥ A Q 8 5
♦ Q 6	♦ 10 8 7	♦ K J 5 2
♣ K 7 3	♣ Q 5	♣ A 10 8 2
	<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center; margin: 5px;">             N W     E S           </div>	
	♠ A J 10 3	
	♥ 10	
	♦ A 9 4 3	
	♣ J 9 6 4	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		1 ♦	Pass
1 ♥	Pass	3 ♥	Pass
4 ♥	Pass	Pass	Pass

Opening Lead: ♠7

After West bids 1♥ East should jump to 3♥ showing 16-18 points in support of hearts. With a fifth heart and 9 points West bids 4♥.

**PLANNING THE PLAY:**

West should have an easy time with this hand, holding five heart winners, two diamond winners and two club winners off the top. The tenth trick can be gotten by ruffing a spade in dummy. West should actually plan to ruff two spades in dummy! West wins the second round of spades by ruffing in dummy, draws two rounds of trumps with the ♥A followed by a heart to the ♥K. Then ruff declarer's last spade with dummy's last trump and then lead towards the ♣K. Declarer will draw the last outstanding trump, and play the ♦Q eventually pitching declarer's third club on the ♦J.

## Hand Records 4.2.1-4 Pg. 3

**Board 4.2.3**

South Deals

E-W Vul

	♠ 7 6					
	♥ K 9 7 6					
	♦ K 6 4 2					
	♣ 10 9 8					
♠ 8 5	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W     E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>	N	W     E	S	♠ A 4 3 2	
N						
W     E						
S						
♥ Q 8 5		♥ 10 3				
♦ 9 8 5		♦ Q J 7				
♣ K J 6 5 3		♣ Q 7 4 2				
	♠ K Q J 10 9					
	♥ A J 4 2					
	♦ A 10 3					
	♣ A					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
			1 ♠			
Pass	1 NT	Pass	3 ♥			
Pass	4 ♥	Pass	Pass			
Pass						

Opening Lead: 5♣, fourth from your longest and strongest

North responds 1NT with 6-10 points and no spade fit. South's jump to 3♥ is a jump shift showing at least five spades, at least four hearts and 18+ points. This bid forces North/South to play game somewhere. North raises to 4♥ with a fit.

**PLANNING THE PLAY:**

North can count nine top winners after driving out the ♠A. Ruffing a losing club in hand will produce ten winners easily. North should plan to win the opening lead, then lead a small heart to the ♥K in dummy. North can now lead a small club from dummy and ruff it in his/her hand. North should now play the ♥A, leaving the opponents with the high trump outstanding, and then play high spades, pitching small diamonds from dummy, until the defense takes their ♠A. Declarer eventually can ruff his/her small diamond in dummy, taking 11 tricks in all.

## Hand Records 4.2.1-4

## Pg. 4

**Board 4.2.4**

West Deals

Both Vul

♠ K 10 5 2		♠ 8 6
♥ A 8		♥ K 9 3
♦ 8 5 2		♦ K Q 7 4 3
♣ A J 6 3		♣ Q 8 2
♠ Q 4 3	<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center;">             N W     E S           </div>	♠ A J 9 7
♥ J 7 4		♥ Q 10 6 5 2
♦ 10 9 6		♦ A J
♣ 10 9 7 4		♣ K 5

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	1 ♣	Pass	1 ♥
Pass	1 ♠	Pass	4 ♠
Pass	Pass	Pass	

Opening Lead: ♦K, top of touching honors

South bids 1♥ showing 4+ hearts and 6+ points. North bids 1♠ showing 4 spades and South bids 4♠ to show enough points for game and a spade fit.

## PLANNING THE PLAY:

North has six top tricks in Aces and Kings. North can try to ruff diamonds and clubs in dummy but has transportation issues. Instead North should try to set up the long hearts in dummy. To do that, North may need to ruff a heart in hand. North should win the opening lead with the ♦A, then lead to the ♥A and play another heart from hand. East will likely win and return another diamond. Declarer ruffs the 3<sup>rd</sup> diamond return, plays a Spade to the ♠K, and a small spade back to dummy's ♠A. Now North plays the ♥Q from dummy and pitches a losing club from his hand. If E-W both follow, the long heart suit is established. If one defender shows out, North will have to lead another heart from dummy and ruff it to establish the long heart winner in dummy.

- Lesson Plan Title:** Week 4 Lesson 3 - Math through Games
- Beginning Bridge:** Reevaluating Your Hand - Part 1
- Concept/Topic:** To teach mathematical and analytical skills through real world applications.
- Standards Addressed:** Reasoning and Proof 3. Develop and evaluate mathematical arguments and proofs.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach how to factor hand shape into evaluation of the bridge hand for more effective bidding.
- Required Materials:** Paper  
Pencil  
Notebook  
WK4 LP 3.1 Practice Sheet - Reevaluating Your Hand (attached)

**Anticipatory Set (lead-in):**

- Briefly review the last two lessons on declarer play.
- Way back in Week 1 we learned to evaluate our hand strength using high card point count – four for an Ace, three for a King, two for a Queen and one for a Jack. Now we go a bit deeper and consider the importance of hand shape.

**Step-by-step Procedures:**

1. In a couple of weeks, we are going to explore slam bidding. Then you will learn that it generally takes about 37 High Card Points for a grand slam. But look at this hand, a hand of just 10 High Card Points. (*Write this Example on the board*):
  - ♠AKQJ1098765432, ♥-, ♦-, ♣-

If you bid 7♠, you will take all 13 tricks.

2. We've seen that the best source for tricks is a long suit. And we know that shortness (singletons and voids) can negate the power of the opponents' high cards. So how do we put all this into our bidding? We give ourselves points for shortness, or points for length (but not both), as follows.

3. **Shortness Points** - You can count points for shortness as follows:

- Doubleton (2 cards) 1 Point
- Singleton (1 card) 2 Points
- Void (no cards) 3 Points

4. You should count your shortness points only when you know you have a fit. After all, shortness in Partner's good suit is more of a liability than something we want to count extra for. And shortness points don't count in No Trump. You can't stop the opponents' long suit with a trump.

5. **Length Points** - Some players prefer to count length points rather than shortness points. Length points work like this:

- Fifth card in a suit 1 Point
- Each card thereafter 1 Point

6. Here is an example. You are sorting your hand and start with; (*Write this Example on the board*):

♠	A Q J 5 3
♥	K 4
♦	K J 5
♣	10 7

You pick up the last card. Wouldn't you rather that last card be the ♠2 than the ♣J? That's length points!

7. You may count either length or shortness points but not both. If you like to bid, use whichever gives you the most points! Even though long suits can be a source of tricks for No Trump bids, most experts don't count length points for an opening bid in No Trump.

8. **Dummy Points** - If you have a fit with partner and your hand is going to be dummy, your shortness is doubly valuable. Your shortness can offset the opponents' high cards, just like it can in Declarer's hand. Trumping in the dummy provides extra tricks. Or if you prefer, trumping in dummy eliminates one of Declarer's losers.
9. This is so important we should look at an example. (*Write this Example on the board*)

♠	K 7 4
♥	10 9 7 6 3
♦	A 7
♣	A 10 8 5
♠	A Q J 5 3 2
♥	K 4
♦	K J 5
♣	10 7

Let's say you (South) are playing in 4♠. You count two heart losers, one in diamonds, and one in clubs. You can ruff several hearts and/or clubs in your hand but that doesn't get rid of a single loser. You were always going to win those 6 spade tricks. Even worse, ruff enough times and the opponents may end up with more trumps than you! But ruffing a diamond in dummy does eliminate your loser in that suit. And it doesn't harm your trump length in your hand. In essence, it gives you a seventh spade winner!

10. Even though this lesson is on bidding, here is an important play reminder.
- Ruffing in the short hand (usually dummy) gets rid of a loser. Ruffing in the long hand does not.
11. So what does all this have to do with counting points? Because ruffs in the dummy provide extra tricks, we count for dummy's shortness. We'll repeat declarer's points for shortness for comparison purposes:

	<u>Declarer</u>	<u>Dummy</u>
• Doubleton (2 cards)	1 point	<b>1 point</b>
• Singleton (1 card)	2 points	<b>3 points</b>
• Void (no cards)	3 points	<b>5 points</b>

12. Remember, we count dummy points only when we have a fit and only when our hand will be on the table as dummy. It doesn't matter who opened the bidding. If you open 1♣ and are supporting partner's Spade suit, your hand will be dummy and you get to count dummy points.
13. Review with Students WK4 LP 3.1 Practice Sheet - Reevaluating the Hand for Shortness and Length Points.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands as time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK4 LP 3.1 Practice Sheet - Reevaluating Your Hand Pg. 1

1. Your Hand is :

♠ A Q J 5 3 2  
♥ K 4  
♦ K J 5  
♣ 10 7

Partner has supported your spades in the auction. How many points (HCP + Distribution) is your hand worth using the Shortness Points method for declarer? Using the Length Points method?

Answer:

Shortness = 14 HCP + 1 for doubleton heart + 1 for doubleton club = 16 Points.

Length = 14 HCP + 1 for fifth spade + 1 for sixth spade = 16 Points

If the auction has gone 1♠ Pass 2♠, what would you bid? 3♠

If the auction has gone 1♠ Pass 3♠, what would you bid? 4♠

2. You Hold:

♠ K 7 4  
♥ 10 9 7 6 3  
♦ A 7  
♣ A 10 8 5

Your Partner opened 1♠ and you raised his/her spades. How many Dummy Points do you have?

Answer - 11 HCP + 1 Dummy shortness point = 12 points. Did you bid 2♠, 3♠, or 4♠?

Answer: 3♠

3. If your hand was instead:

♠ K 7 4  
♥ A 9 7 6 3 2  
♦ 7  
♣ A 10 8 5

How many Dummy points do you have? What would you bid? Answer: 14 Dummy Points. Bid 2♥ and raise to game at your next bid.

## WK4 LP 3.1 Practice Sheet - Reevaluating Your Hand Pg. 2

4. Your Hand is :

♠ A Q 5 3  
♥ 5 4  
♦ A 10 8 7 3 2  
♣ 7

Your Partner opened 1♠. How many Dummy Points do you have?

Answer - 10 HCP + 4 Dummy shortness points = 14 points.

What do you bid??

Answer: 2♦, Partner must bid again, and then you will raise his spades to game.

5. You hold:

♠ 3  
♥ A Q 5 4 2  
♦ A 10 3 2  
♣ 8 7 2

Your Partner opened 1D. You bid 1H. Partner raised you to 2H. How many Dummy points do you have?

Answer = 0. You will be the declarer in hearts, not the dummy.

How many Length points do you have?

Answer: 11

How many Shortness points?

Answer: 12 Should you bid a game? Yes.

6. You hold:

♠ Q 9 6 4 3  
♥ K 2  
♦ Void  
♣ A 9 8 7 5 2

Your partner opened 1S. How many HCP do you have? 9

How many Dummy Shortness points? 15.

Should you bid game? Yes.

- Lesson Plan Title:** Week 4 Lesson 4 - Math through Games
- Beginning Bridge:** Reevaluating Your Hand - Part 2
- Concept/Topic:** To teach mathematical and analytical skills through real world application.
- Standards Addressed:** Communication 1. Organize and consolidate their mathematical thinking through communication.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach factors to consider in evaluation of the bridge hand for more effective bidding.
- Required Materials:** Paper  
Pencil  
Notebook  
WK4 LP 4.1 Practice Sheet - Reevaluating Your Hand 2 (attached)  
WK4 LP 4.3 Handout – Reevaluating Your Hand  
Hand Records 4.4.1, 4.4.2, 4.4.3, and 4.4.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 4.4.1, 4.4.2, 4.4.3, and 4.4.4.

**Anticipatory Set (lead-in):**

- Briefly review the last lesson on shortness and length points.
- Let's continue with more hand evaluation techniques. The better you understand your hand's worth, the more accurate your bidding will become.

**Step-by-step Procedures:**

1. **Not all points are created equal.** Some are better than others. (Thomas Jefferson did not play bridge!) In evaluating your hand – especially for those borderline bids like whether to invite or bid game or whether to accept an invitation – a good understanding of the quality of your points will help. There are several factors to consider.

2. **Honors work best when working together.** Compare these two hands: (*Write the Examples on the board*):

Example A

♠ A 8 5 3  
♥ K 7 3  
♦ Q 6 4  
♣ J 7 4

Example B

♠ A K Q J  
♥ 8 7 3  
♦ 6 5 4  
♣ 7 4 3

Same points, same shape, even the exact same spot cards. Which hand would you rather hold? “B” obviously is worth four tricks. Who knows what “A” will do? Honors together reinforce one another, making each stronger.

3. **Honors without spots are damaged goods.** (*Write the Example on the board*): If dummy holds ♦ KQ2, you have a trick for sure. If the Ace is onside (in LHO’s hand) and you can lead twice toward this holding, you’ll get two tricks. Now take away the ♦2. You get one trick. Period.

Example C

- Declarer: ♦ 743    Dummy: ♦ KQ2

There are many similar cases, such as a singleton Ace or King or doubleton QJ.

4. **Honors are better in long suits.** One purpose of honors is to help promote small cards. Here are two more hands to compare: (*Write the Examples on the board*):

Example D

♠ A 9 7 4 3  
♥ A K 8 7 3  
♦ 6  
♣ 5 2

Example E

♠ 9 7 6 4 3  
♥ 8 7 5 3 2  
♦ A  
♣ A K

Same shape, same high cards and again even the same small cards (spots). Hand “D” has great trick taking potential, while it will take much longer to set up length tricks in Hand “E”. The number one source of extra tricks is long suits. They are so much easier to set up when that is where your high cards are.

5. **Shape affects playing strength.** As you play more, you’ll learn to appreciate the importance of good shape. A 4-3-3-3 hand is the worst you can hold. You only have one long suit (using the term most generously) and no ruffing values. Ruffing values is value attributed to a hand with short suits (voids, singletons, and doubletons) that give potential to use the trumps in hand to trump losers partner might have. It is so bad that I might even deduct a point from a hand with that shape. At the other extreme, hands with two long suits are offensive powerhouses. An old bridge saying is “6-5, come alive.” A hand with a 6-card suit and a 5-card suit can usually find a fit with partner and plays much better than its HCP might otherwise indicate. So bid it aggressively.
6. **Tens and Nines can add strength to your hand.** We don’t give any point count for Tens and Nines but they can easily bolster a long suit. We saw a good example of this two days ago where taking two finesses gave us more tricks in the suit. It only worked because the Jack was bolstered up by the Ten. (*Write this Example on the board.*):
- Declarer: ♦ 743    Dummy: ♦ AJ102
7. **The placement of the rest of the points at the table affects how good your hand is.** If you hold the ♠ AQ10 and your RHO holds the ♠ KJ3, your values are well placed. You can take two finesses against RHO and win three tricks. But this same holding has less potential if LHO holds the ♠ KJ3. Your two finesses will both lose, and you wind up with only one trick!

8. There is so much to think about. You can see that hand evaluation is quite a bit more complicated than we learned in our early lessons. Few if any players get it all at once. Experience is the best teacher. As you play more, these techniques will become second nature.
9. Review with Students WK4 LP 4.1 Practice Sheet - Reevaluating Your Hand.
10. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands as time permits.

**Assessment Based on Objectives:** notebook, observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK4 LP 4.1 Practice Sheet - Reevaluating Your Hand 2

In each of the following examples, which hand is stronger, A or B? Why?

1. Example A      ♠ A853 ♥ K73 ♦ Q64 ♣ J74  
                     Example B      ♠ AKQJ ♥ 873 ♦ 654 ♣ 743
  
2. Example A      ♠ QJ ♥ A7654 ♦ KQ ♣ K985  
                     Example B      ♠ 54 ♥ AQJ76 ♦ KQ98 ♣ K5
  
3. Example A      ♠ 92 ♥ A8765 ♦ 65 ♣ AQ107  
                     Example B      ♠ A2 ♥ 98765 ♦ AQ ♣ 10765
  
4. Example A      Your RHO opened 1♠  
                             ♠ KJ10 ♥ K1082 ♦ 3 ♣ AKQ65  
                     Example B      Your LHO opened 1♠  
                             ♠ KJ10 ♥ K1082 ♦ 3 ♣ AKQ65
  
5. Example A      ♠ A107642 ♥ 3 ♦ KQJ75 ♣ 9  
                     Example B      ♠ A10765 ♥ 32 ♦ KQ7 ♣ J95
  
6. Example A      ♠ KJ652 ♥ KQ53 ♦ AJ5 ♣ 3  
                     Example B      ♠ KJ1092 ♥ KQ109 ♦ AJ10 ♣ 3

## WK4 LP 4.1 Practice Sheet - Reevaluating Your Hand 2

### Suggested Answers:

1. Answer; B Honors are working together
2. Answer; B Honors without spots are damaged goods. The KQ of diamonds will take only one trick. KQ98 could take two tricks.
3. Answer; A Honors work better in long suits
4. Answer; A Placement of points at the table affects how good your hand is. If LHO bid spades, he is likely to hold the spade AQ behind your spade honors; they are probably worthless. But If RHO bid spades, you are likely to win spade tricks (his finesses lose to your honors).
5. Answer; A Shape affects playing strength.
6. Answer; B Tens and Nines add playing strength, and give additional finessing possibilities.

## Hand Records 4.4.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice playing techniques.*

#### Board 4.4.1

North Deals

None Vul

♠ J 10 8 6	♠ K 5 2	♠ A 9 4 3
♥ Q 2	♥ 10 5	♥ 7 4 3
♦ J 10 2	♦ A Q 8 6 4	♦ 9 7 3
♣ K Q 3 2	♣ 7 5 4	♣ J 9 8

N	E
W	S

♠ Q 7	♠ A K J 9 8 6
♥ A K J 9 8 6	♥ K 5
♦ K 5	♣ A 10 6

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	Pass	Pass	1 ♥
Pass	1 NT	Pass	3 ♥
Pass	4 ♥	Pass	Pass
Pass			

Opening Lead: ♣K

South has three losers and one potential loser, the ♥Q. However South can discard one of his club losers on his good diamond suit. To do so he must pull trumps first.

South should win the first club and then cash the ♥AK, intending to then play ♦K and a diamond to the ♦AQ hoping to throw away one of their club losers on the ♦Q.

## Hand Records 4.4.1-4 Pg. 2

**Board 4.4.2**

East Deals

N-S Vul

		♠ 6						
		♥ J 10						
		♦ K 9 8 5 3						
		♣ A Q 10 7 2						
♠ A 10 9 4 2		<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>	N	W E	S		♠ Q J 7 5 3	
N								
W E								
S								
♥ 9 8 7				♥ A 4 2				
♦ J 6				♦ A Q 10				
♣ J 9 8				♣ 4 3				
		♠ K 8						
		♥ K Q 6 5 3						
		♦ 7 4 2						
		♣ K 6 5						

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		1 ♠	Pass
4 ♠	Pass	Pass	Pass

Opening Lead: ♥K

If East is in 4♠, he must have the ♠K on-side as well as the ♦K, so when he wins the ♥A, he should finesse the Spade and then Finesse the diamond for making 4♠.

## Hand Records 4.4.1-4

### Pg. 3

**Board 4.4.3**

South Deals

E-W Vul

♠ K 7 6	♠ J 10 4 2	♠ 5 3
♥ Q J 3	♥ K 10 9 4	♥ A 8 6 2
♦ 10 9 2	♦ 7 5 4	♦ A J 6
♣ 10 8 3 2	♣ A 9	♣ K 7 5 4

  

♠ A Q 9 8	♠ A Q 9 8	♠ A Q 9 8
♥ 7 5	♥ 7 5	♥ 7 5
♦ K Q 8 3	♦ K Q 8 3	♦ K Q 8 3
♣ Q J 6	♣ Q J 6	♣ Q J 6



<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			1 ♦
Pass	1 ♥	Pass	1 ♠
Pass	2 ♠	Pass	Pass
Pass			

Opening Lead: ♣2, the unbid suit

South should finesse the club at trick 1 and win the second club with the ♣A. Declarer should then plan to finesse the spade and when it loses to finish pulling trumps and lead up to the ♦KQ.

## Hand Records 4.4.1-4

### Pg. 4

**Board 4.4.4**

West Deals

Both Vul

♠ K 8			
♥ Q 6 5			
♦ 8 7 4 2			
♣ K 6 5 3			
♠ Q J 7 5 3	<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center;">             N W     E S           </div>	♠ A 10 9 4	
♥ K 4 3 2		♥ 9 8 7	
♦ A Q 10		♦ J 6 5	
♣ A		♣ J 9 8	
		♠ 6 2	
		♥ A J 10	
		♦ K 9 3	
		♣ Q 10 7 4 2	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
1 ♠	Pass	2 ♠	Pass
3 ♠	Pass	Pass	Pass

Opening Lead: ♣3

In 3♠, West needs to plan on finessing for the ♠K. He also needs to finesse for the ♦K and lead towards his ♥K.

When West finesses the diamond he must lead the ♦J so that he can remain in dummy to repeat the finesse.

## WK4 LP 4.3 Handout - Reevaluating Your Hand

### SHORTNESS POINTS

	<u>Declarer</u>	<u>Dummy</u>
• Doubleton (2 cards)	1 point	1 point
• Singleton (1 card)	2 points	3 points
• Void (no cards)	3 points	5 points

### LENGTH POINTS (Declarer only)

- Fifth card in a suit 1 Point
- Each card thereafter 1 Point

### TIPS FOR REEVALUATING YOUR HAND

1. Not all points are created equal.
2. Honors work best when working together.
3. Honors without spots are damaged goods.
4. Honors are better in long suits.
5. Hands with singletons and voids generally take more tricks.
6. Tens and Nines can add strength to your hand.
7. The placement of the rest of the points at the table affects how good your hand is.

- Lesson Plan Title:** Week 4 Lesson 5 - Math through Games
- Beginning Bridge:** Weekly Review and Mid Term Quiz - Week 4
- Concept/Topic:** To use math skills to play bridge.
- Standards Addressed:** Problem Solving 2. Solve problems that arise in mathematical and other contexts.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach how to bid and score in contract bridge.
- Required Materials:** Notebook  
Paper  
Pencil

**Anticipatory Set (lead-in):**

- Review week 4 lessons 1-4
  - Rebids by Opener - Part 2
  - Declarer Play - Suit Contracts
  - Reevaluating Your Hand - 1
  - Reevaluating Your Hand - 2

**Step-by-step Procedures:**

1. Give Week 4 Quiz.
2. Hand out cards.
3. Students Shuffle, Deal, and Play hands.

**Plan for Independent Practice:** Allow students to play hands.

**Assessment Based on Objectives:** Week 4 Lesson 5 Quiz

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to play bridge hands on the computer.

**Possible Connections to Other Subjects:** L.A., communication skills

**Week 4 Lesson 5 Quiz (15 points)**

What would you open? (1 pt each)

1. ♠AQ54 ♥KJ3 ♦AJ5 ♣J74

2. ♠J1084 ♥AQ86 ♦K ♣AQ73

3. ♠K10742 ♥KQ3 ♦A9 ♣Q74

4. ♠K107 ♥86 ♦AK52 ♣AQJ2

5. ♠A54 ♥K3 ♦QJ4 ♣KQ642

6. When can you add points to your hand for your distribution? (2 pt)

7. How many points can you add to your hand as declarer for each of the following?  
(1pt each)

A Singleton \_\_\_\_\_ A Void \_\_\_\_\_ A Doubleton \_\_\_\_\_

8. Explain what a Finesse is and how it works (5 points)

**Week 4 Lesson 5 Quiz (15 points) Answers**

What would you open? (1 pt each)

1. ♠AQ54 ♥KJ3 ♦AJ5 ♣J74           1NT
2. ♠J1084 ♥AQ86 ♦K ♣AQ73       1♣
3. ♠K10742 ♥KQ3 ♦A9 ♣Q74       1♠
4. ♠K107 ♥86 ♦AK52 ♣AQJ2       1NT
5. ♠A54 ♥K3 ♦QJ4 ♣KQ642       1NT

6. When can you add points to your hand for your distribution (2 pt)?

After you have discovered a fit.

7. How many points can you add to your hand as declarer for each of the following? (1pt each)

A Singleton   2   A Void   3   A Doubleton   1  

8. Explain what a Finesse is and how it works (5 points)

A finesse is an attempt to allow a smaller card to win a trick because of the position of the larger cards in the suit. An example would be if Declarer had an A-Q in a suit in dummy and Declarer led from his hand towards dummy. If your opponent played a small card, you would play the Queen hoping that the person to your left had the King and that your Queen could win the trick.

- Lesson Plan Title:** Week 5 Lesson 1 - Math through Games
- Beginning Bridge:** Responding to Partner's Opening 1NT - Stayman
- Concept/Topic:** To teach math skills through real world applications using the game of bridge.
- Standards Addressed:** Data Analysis and Probability 4. Understand and apply basic concepts of probability.
- General Goal(s):** To teach bidding in bridge.
- Specific Objectives:** To teach the concept of the Convention, an Artificial Bid.  
To teach how to find eight card major suit fits after a 1 No Trump Opening Bid by Partner.
- Required Materials:** Paper  
Pencil  
Notebook  
WK5 LP 1.1 Practice Sheet (attached)  
Hand Records 5.1.1, 5.1.2, 5.1.3, and 5.1.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 5.1.1, 5.1.2, 5.1.3, and 5.1.4.  
WK5 LP 1.3 Handout Sheet - Responding to a 1 NT Opening Bid

**Anticipatory Set (lead-in):**

- Review WK2 LP 3 on Opening Bids, particularly the requirements for opening 1 No Trump.
- Explain that there are specialized Conventions (artificial bids) used to find eight-card major suit fits after partner opens 1 No Trump. Today's convention is Stayman.

**Step-by-step Procedures:**

1. When partner opens 1 No Trump he/she has announced a very good hand with at least 15-17 HCP and balanced shape. Opener may have one or even two four card majors. Finding an eight card major suit fit is still a priority for the partnership. If the partnership can't find that major suit fit then they will probably go ahead and play in a No Trump contract. As Responder, you may want to find out about Opener's major suit holdings. The Stayman convention is a special tool you can use to do just that.

2. This is the basic structure of invitational and forcing bids following a 1 NT opening bid. After partner opens 1 NT:
  - Pass with 0-7 HCP. Even with 7 HCP there is little chance of game.
  - Invite game with a good 8 or 9 HCP. If partner has a good 16 or 17 HCP, we belong in game. If he/she has only 15 or a bad 16 HCP, we need to quit short of game.
  - Demand game with 10 to 14 HCP. Even if partner has only 15 HCP, you know that game is a must.
  
3. If you have no four card (or longer) major suit as Responder, you probably want to keep the contract in No Trump. Why? Even if we have a good minor suit fit, No Trump will score better, and a 9 trick game is usually easier to make than one for 11 tricks. So, without a 4 card major:
  - PASS with 0-7 HCP. Even with 7 HCP there is little chance of game.
  - To INVITE 3NT, bid 2NT with a good 8 or 9 HCP with no 4 card or longer major suit.
  - To DEMAND GAME, bid 3NT with 10 – 14 HCP with no 4 card or longer major. Don't give partner a choice.
  
4. Using a convention means bidding artificially – in other words we bid a suit where the suit we bid has nothing to do with that actual suit! Stayman is a conventional bid of 2♣ by Responder.
  
5. If we hold one or both 4 card majors and at least 8 HCP, we stop along the way to see if there is a 4-4 major suit fit. The Stayman convention response of 2♣ to Partner's 1NT opening bid asks Partner to describe his/her hand further, specifically his holding in the major suits. The 2♣ says nothing about your holding in the club suit; in fact you might even be void in that suit. The 2♣ bid just asks the question, "Partner, do you have a 4 card major?"
  
6. We don't use Stayman when;
  - We don't hold a four card major.
  - We have less than 8 HCP (just PASS).

7. If Partner bids 2♣ as a response to my 1NT bid, there are only 3 possible answers I can give:
  - 2♦ Tells partner I don't have a four card major.
  - 2♥ Tells partner I have a four card heart suit. (I might also have four spades.)
  - 2♠ Tells partner I have a four card spade suit. (I don't have four hearts.)
8. From there Responder takes charge of the auction, letting the Opener know what he holds in the majors and how many points he started with.
9. With 8-9 HCP, Responder INVITES game. If Opener has bid the major you hold four cards in, Raise opener to 3 of the major. You have the 4-4 "golden fit." If Opener has not bid the major you hold, bid 2NT over his/her Stayman answer to show your 8-9 HCP. Opener will know that you must have 4 of the other major or you would not have bid stayman initially.
10. With more points, Responder can insist on game. If Opener has bid the major you hold four cards in, Raise opener to 4 of the major. If Opener has not bid the major you hold, bid 3NT (game). Opener will know that you must have 4 of the other major or you would not have bid stayman initially.
11. Hand out to students WK5 LP 1.3 Handout Sheet - Responding to a 1 NT Opening Bid.
12. Review with Students WK5 LP 1.1 Practice Sheet - Responding to a 1 NT Opening Bid.
13. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands using the handsets 1-4, as follows s time permits. One player takes the 1NT Opening hand from the handset. The other three hands are shuffled together, and redealt to the other three players. The hands are then bid and played. Repeat as time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK5 LP 1.1 Practice Sheet – Responding to 1NT Opening Bid

**Your Partner opened 1NT. What does Partner's bid mean? What do you respond with the following hands?**

1. ♠ J86 ♥ 103 ♦ 7432 ♣ AK52
2. ♠ 98 ♥ Q762 ♦ 10532 ♣ K108
3. ♠ 542 ♥ A652 ♦ 43 ♣ KJ104
4. ♠ K2 ♥ J873 ♦ QJ64 ♣ Q103
5. ♠ 6432 ♥ QJ6 ♦ J987 ♣ A8
6. ♠ K75 ♥ 105 ♦ Q108 ♣ KQ1053
7. ♠ 76 ♥ 9842 ♦ AKQ87 ♣ 102
8. ♠ AJ86 ♥ K74 ♦ 832 ♣ A105
9. ♠ A2 ♥ AQ3 ♦ Q10962 ♣ 1063
10. ♠ AJ97 ♥ K842 ♦ J72 ♣ A5
11. ♠ Q752 ♥ 73 ♦ Q1096 ♣ K743
12. ♠ A1052 ♥ Q84 ♦ QJ1076 ♣ 2

## WK5 LP 1.1 Practice Sheet – Responding to 1NT Opening Bid

### Suggested Answers.

1. 2NT
2. PASS
3. 2♣ Stayman. If Opener rebids 2♦ or 2♠, you can bid 2NT. If Opener rebids 2♥, raise to three to invite game.
4. 2♣ Stayman. If Opener rebids 2♦ or 2♠, you can bid 2NT. If Opener rebids 2♥, raise to three to invite game.
5. 2♣ Stayman, even with that weak spade suit.
6. 3NT Partnership has enough points for game, so bid it.
7. 2♣ Stayman, even with that weak Heart suit
8. 2♣ Stayman. If partner responds 2♠, rebid 4♠ - else bid 3NT.
9. 3NT
10. 2♣ If no major suit fit is found, bid 3NT.
11. Pass Unlikely to find a game that makes
12. 2♣ Stayman. If Opener rebids 2♠, raise to four to be in game. If Opener rebids 2♦ or 2♥, bid 3NT. Don't worry about the clubs.

## Hand Records 5.1.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice Responding to an opening bid of One No Trump by Partner.*

*Hand 5.1.1: Suggested Contract 3NT\_ Suggested Declarer N\_\_*

#### Board 1

North Deals

None Vul

	♠ Q 6 4					
	♥ K 7 6 5					
	♦ A K 7					
	♣ K Q 4					
♠ K 8 5 2	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: 0 auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W   E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>	N	W   E	S	♠ 9 3	
N						
W   E						
S						
♥ A 8 4		♥ 9 3 2				
♦ 8 5 3		♦ Q 9 6 4 2				
♣ J 10 5		♣ A 8 3				
	♠ A J 10 7					
	♥ Q J 10					
	♦ J 10					
	♣ 9 7 6 2					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
	1 NT	Pass	2 ♣			
Pass	2 ♥	Pass	2 NT			
Pass	3 NT	Pass	Pass			
Pass						

## Hand Records 5.1.1-4

### Pg. 2

Hand 5.1.2: Suggested Contract 3♠ \_\_\_ Suggested Declarer E \_\_\_

**Board 2**

East Deals

N-S Vul

		♠ A 10 5			
		♥ K 7 4 2			
		♦ Q 10 6			
		♣ K 10 6			
♠ Q J 9 4	N	♠ K 8 7 3	E		
♥ 9 5 3	W	♥ Q J 6	S		
♦ A 3		♦ K 7 2			
♣ J 7 3 2		♣ A Q 4			
		♠ 6 2			
		♥ A 10 8			
		♦ J 9 8 5 4			
		♣ 9 8 5			
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>		
		1 NT	Pass		
2 ♣	Pass	2 ♠	Pass		
3 ♠	Pass	Pass	Pass		

Hand 5.1.3: Suggested Contract 4♥ \_\_\_ Suggested Declarer S \_\_\_

**Board 3**

South Deals

E-W Vul

		♠ A 7 6			
		♥ Q 9 7 4			
		♦ A 9 5			
		♣ 8 6 4			
♠ 9 8 2	N	♠ Q 10 5 4	E		
♥ J 10	W	♥ A 6 5	S		
♦ Q 6 4 3		♦ J 10 8			
♣ J 10 9 7		♣ A 5 3			
		♠ K J 3			
		♥ K 8 3 2			
		♦ K 7 2			
		♣ K Q 2			
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>		
			1 NT		
Pass	2 ♣	Pass	2 ♥		
Pass	4 ♥	Pass	Pass		
Pass					

## Hand Records 5.1.1-4

### Pg. 3

Hand 5.1.4: Suggested Contract 3NT\_\_ Suggested Declarer \_W\_

**Board 4**

West Deals

Both Vul

♠ K 3 2	♠ J 7 4	♠ A Q 10 5
♥ A 7 3	♥ 10 8 4	♥ 9 2
♦ Q J 9 3	♦ K 5 4	♦ A 10 8 7
♣ A Q 10	♣ J 7 6 3	♣ 9 5 4

  

♠ 9 8 6	♠ K 8 2
♥ K Q J 6 5	
♦ 6 2	



<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
1 NT	Pass	2 ♣	Pass
2 ♦	Pass	3 NT	Pass
Pass	Pass		

## WK5 LP 1.3 Handout – Responding to 1NT Opening Bid Pg. 1

ALWAYS CATEGORIZE RESPONDER'S HAND BEFORE BIDDING!!!

- |   |                         |                 |
|---|-------------------------|-----------------|
| • | MINIMUM hands           | 0 to bad 8 HCP  |
| • | GAME INVITATIONAL hands | Good 8 to 9 HCP |
| • | GAME FORCING hands      | 10 or more HCP  |
- 

### Without a 4 card or longer major;

- MINIMUM - PASS with 0-7 HCP. Even with 7 HCP there is little chance of game.
- To INVITE 3NT, bid 2NT with a good 8 or 9 HCP with no 4 card or longer major.
- To DEMAND GAME, bid 3NT with 10 – 14 HCP with no 4 card or longer major. Don't give partner a choice.

### With a 4 card major;

- MINIMUM - PASS with 0-7 HCP. Even with 7 HCP there is little chance of game.
- To INVITE , with a good 8 or 9 HCP and a 4 card major, bid Stayman 2♣ and rebid:
  - 3 of the Major if the 4/4 major suit fit has been found, or
  - 2NT if opener did not bid your major suit
- To DEMAND GAME, with 10 – 14 HCP and a 4 card major, bid Stayman 2♣ and rebid:
  - 4 of the major if the 4/4 major suit fit has been found, or
  - 3NT if opener did not bid your major suit

## WK5 LP 1.3 Handout – Responding to 1NT Opening Bid Pg. 2

### With a 5+ card major suit;

- MINIMUM - Bid 2♦ to Transfer Partner to 2♥ (or Bid 2♥ to Transfer Partner to 2♠), then PASS with 0-7 HCP. Even with 7 HCP there is little chance of game.
- To INVITE , with a good 8 or 9 HCP and a 5+ card major suit, Bid 2♦ to Transfer Partner to 2♥ (or Bid 2♥ to Transfer Partner to 2♠),and rebid:
  - 2NT with a 5 card suit or
  - 3 of the major with a 6+ card suit
- To DEMAND GAME, with 10 – 14 HCP and a 5+ card major suit, Bid 2♦ to Transfer Partner to 2♥ (or Bid 2♥ to Transfer Partner to 2♠),and rebid:
  - 3NT with a 5 card suit or
  - 4 of the major with a 6+ card suit

- Lesson Plan Title:** Week 5 Lesson 2 - Math through Games
- Beginning Bridge:** Responding to Partner's Opening 1NT - Transfers
- Concept/Topic:** To teach math through real world applications.
- Standards Addressed:** Number and Operations 3. Compute fluently and make responsible estimates.
- General Goal(s):** To teach number sense.
- Specific Objectives:** To teach how to find Eight Card major suit fits after a 1 No Trump Opening Bid by Partner.
- Required Materials:** Paper  
Pencil  
Notebook  
WK5 LP 2.1 Practice Sheet - Responding to 1NT Opener (attached)  
Hand Records 5.2.1, 5.2.2, 5.2.3, and 5.2.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 5.2.1, 5.2.2, 5.2.3, and 5.2.4.

**Anticipatory Set (lead-in):**

- Review the previous lesson on Responses to 1 No Trump and the Stayman Convention.
- Introduce the concept of Transfer Bids after a 1 No Trump Opening Bid by Partner.

**Step-by-step Procedures:**

1. There is a second Convention to use in responding to No Trump opening bids. When you hold a long suit (5+ cards) and Partner opens 1NT, you can tell him/her to bid your suit, so Opener becomes Declarer. This has a lot of advantages, as we will soon see. You make a conventional bid, usually the one just below your suit, to request Partner to bid your suit. This is called a Transfer bid.
2. Transfer bids were invented many years ago by a famous bridge champion, Oswald Jacoby. Transfers are designed so that you tell your partner about your points and length in a major, rather than ask about his.

3. Remember – Transfers only apply after your partner makes a no trump bid. And unlike Stayman, which requires a minimum of 8 points to use, transfers can be used with a few as ZERO HCP.
4. After partner opens 1NT:
  - With 5 or more Hearts, you bid 2♦, which tells Partner to bid 2♥.
  - With 5 or more Spades, you bid 2♥, which tells Partner to bid 2♠.
5. You know that Partner, who bid 1NT, has at least two cards in each major suit based on our agreement that you can't open 1NT with any singletons or voids. At a minimum the partnership has found a 7 card fit, and you hope that you have an 8 or even 9 card fit with Partner.
6. Does the NT bidder have to accept the transfer? Usually yes. Only if your RHO interferes in the auction is opener allowed to pass. If that happens, Opener should Pass if he/she has only two cards in Responder's major suit. But that is the only time you can pass! Otherwise, Opener must trust Responder and complete the transfer!
7. Just like Stayman was merely a detour for Responder, so too is a Jacoby Transfer. When we make the detour, we have in our minds the two questions – “How high?” and “Where?” Responder's second bid will give Opener (the NT bidder) the appropriate information to answer those two questions. Responder makes an assumption that opener has the minimum possible number of HCP–15, and a minimum number of cards in the major suit – only 2. Based on those two assumptions, he can drop the auction at the two level with less than 8 HCP, invite in NT or the major with 8-9 HCP, or demand game in NT or the major with 10 or more HCP. **Remember: if you “rebid” your major suit you are promising 6+ cards in that major.** Opener will Pass or bid on depending on his/her HCP and the number major suit cards held in your suit.
8. For example, suppose Responder has only five cards in the major: Partner has opened 1NT. Let's see what happens when Responder holds the following hands; (write the hands on the white board.)
  - ♠ 97642 ♥ Q3 ♦ 10532 ♣ 54      Bid 2♥ to Transfer your partner to Spades and bid no more. With fewer than 8 HCP, you hope that Opener has three or four spades and the 2♠ contract will work out better than playing in 1NT.

- ♠ Q7642 ♥ Q3 ♦ 32 ♣ AJ54      Bid 2♥ to Transfer your partner to Spades and rebid 2NT. This sequence tells partner you have only five spades and 8 or 9 HCP. Opener can
    - Pass with a minimum Opener and only two spades, or
    - Bid 3NT with a maximum Opener and 2 spades, or
    - Correct to 3♠ with three or more spades and a minimum, or
    - Jump to 4♠ with a maximum in points and three or more spades.
  - ♠ KJ7 ♥ Q8643 ♦ 32 ♣ AJ7      Bid 2♦ to transfer your partner to Hearts and jump to 3NT. This sequence tells partner that you have enough points to bid game but only hold five hearts. Partner can Pass or correct to 4♥ depending on the number of hearts he has.
9. Now suppose Responder has (six or more) cards in the major and Partner has opened 1NT. Let's see what happens when Responder holds the following hands; (write the hands on the white board.)
- ♠ 1087643 ♥ Q5 ♦ 8532 ♣ 8      This is an easy one! Bid 2♥ to transfer partner to Spades and bail out! Clearly 2♠ is better than making partner suffer through 1NT.
  - ♠ Q87643 ♥ Q5 ♦ 85 ♣ KJ8      Bid 2♥ to Transfer partner to Spades and invite him to play game by rebidding 3♠. By rebidding the major suit you let partner know you have six or more cards in the suit. A rebid at the three level says you only have invitational values of 8 or 9 HCP. Opener will Pass with a minimum and bid 4♥ with a maximum.
  - ♠ KJ7 ♥ Q86432 ♦ 85 ♣ AJ      Bid 2♦ to Transfer partner to Hearts and jump to 4♥ for the rebid. You know you have an 8 card fit and you know you have enough points to be in game. Take command of the auction!
10. You can see that playing Transfers gives your partnership some real advantages:
- You are able to describe your shape and HCP very accurately, making it much easier to reach the best contract.
  - The strong hand (Mr. No Trump Bidder) remains hidden from the opponents, making it harder for them to play good defense.
  - The opening lead comes from the left of the no trump bidder, oftentimes giving you a head start at trick one!
  - You can SAVE your partner from having to play a miserable 1NT bid when you get a really bad hand but have at least five cards in a major suit.

11. Review with Students WK5 LP 2.1 Practice Sheet - Responding to a 1 NT Opening Bid.
12. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.
13. Collect notebooks.

**Plan for Independent Practice:** Allow students time to play additional hands using the handsets 1-4, as follows. One player takes the 1NT Opening hand from the handset. The other three hands are shuffled together, and redealt to the other three players. The hands are then bid and played. Repeat as time permits.

**Assessment Based on Objectives:** notebook check

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** L.A., communication skills

## WK5 LP 2.1 Practice Sheet – Responding to 1NT Opening Bid

Your Partner opened 1NT. What does Partner's bid mean? What do you respond with the following hands?

1. ♠ J10 ♥ KQ9765 ♦ 2 ♣ A1083
2. ♠ 8 ♥ 1065432 ♦ J93 ♣ J76
3. ♠ J106 ♥ A10632 ♦ K5 ♣ J102
4. ♠ KQ53 ♥ QJ1087 ♦ J62 ♣ 3
5. ♠ 8764 ♥ Q76542 ♦ 75 ♣ 5
6. ♠ 82 ♥ AK98742 ♦ 106 ♣ 107
7. ♠ A7652 ♥ A875 ♦ J743 ♣ Void
8. ♠ KJ10987 ♥ Q96 ♦ Q ♣ K74
9. ♠ 1097642 ♥ J83 ♦ K10 ♣ Q6
10. ♠ J8654 ♥ QJ94 ♦ 8 ♣ K103
11. ♠ AKQ10762 ♥ 1065 ♦ 4 ♣ J10
12. ♠ AK963 ♥ Q54 ♦ Q2 ♣ 532

## WK5 LP 2.1 Practice Sheet – Responding to 1NT Opening Bid

Suggested Answers.

Partner's bid means that he has a balanced hand with 15-17 HCP.

1.     2♦    Transfer to Hearts, then raise to game.
2.     2♦    Transfer to hearts, then pass.
3.     2♦    Transfer to hearts, then invite game with 2NT rebid.
4.     2♦    Transfer to hearts, then bid 2♠. This says "I have 5 hearts and 4 spades, and invitational values." Partner will pick the contract.
5.     2♣    Stayman! If partner bids one of your majors, you Pass. If partner bids 2♦ (no 4 card major), you bid 2♥ , which says "I have 5 hearts and 4 spades, and not enough points for game." Partner will pick the contract.
6.     2♦    Transfer to Hearts, then raise to game
7.     2♥    Transfer to Spades, then bid 3♥. This says "I have 5 spades and 4 hearts, and invitational values." Partner will pick the contract.
8.     2♥    Transfer to spades, then bid 4♠.
9.     2♥    Transfer to spades, then Pass.
10.    2♣    Stayman! If partner bids one of your majors, you Pass. If partner bids 2♦ (no 4 card major), you bid 2♠ , which says "I have 5 spades and 4 hearts, and not enough points for game."
11.    2♥    Transfer to spades, then bid 4♠.
12.    2♥    Transfer to spades, then bid 3NT.

## Hand Records 5.2.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice Transfer bids when Responding to an opening bid of One No Trump by Partner.*

*Hand 5.2.1: Suggested Contract 3♥ \_\_\_ Suggested Declarer \_N\_*

**Board 1**

North Deals

None Vul

♠ Q J 9						
♥ K 6 2						
♦ K 6 4 2						
♣ A Q 10						
♠ 10 8 7 6	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: 0 auto;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>	N	W E	S	♠ A K 5 3	
N						
W E						
S						
♥ 7 5		♥ 8 3				
♦ Q 7 3		♦ A 10 5				
♣ K 8 6 5		♣ J 9 3 2				
		♠ 4 2				
		♥ A Q J 10 9 4				
		♦ J 9 8				
		♣ 7 4				
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
	1 NT	Pass	2 ♦			
Pass	2 ♥	Pass	3 ♥			
Pass	Pass	Pass				

## Hand Records 5.2.1-4

### Pg. 2

Hand 5.2.2: Suggested Contract 4♠ Suggested Declarer E

**Board 2**  
East Deals  
N-S Vul

	♠ 8 7 6 4										
	♥ A 5 4										
	♦ K 7 4										
	♣ 9 8 3										
♠ A K 9 5 3	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ Q J 2
	N										
W		E									
	S										
♥ 7 6		♥ Q 10 3									
♦ 10 6 3		♦ A Q 8 5									
♣ K J 2		♣ A 7 6									
	♠ 10										
	♥ K J 9 8 2										
	♦ J 9 2										
	♣ Q 10 5 4										
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>								
		1 NT	Pass								
2 ♥	Pass	2 ♠	Pass								
3 NT	Pass	4 ♠	Pass								
Pass	Pass										

Hand 5.2.3: Suggested Contract 2♠ Suggested Declarer S

**Board 3**  
South Deals  
E-W Vul

	♠ Q 9 7 6 4 2										
	♥ 5 4 3										
	♦ 10 9										
	♣ 9 8										
♠ A 8 3	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 10 5
	N										
W		E									
	S										
♥ 9 2		♥ Q 10 8 6									
♦ K J 7 6		♦ Q 8 2									
♣ K J 6 4		♣ A Q 5 3									
	♠ K J										
	♥ A K J 7										
	♦ A 5 4 3										
	♣ 10 7 2										
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>								
			1 NT								
Pass	2 ♥	Pass	2 ♠								
Pass	Pass	Pass									

## Hand Records 5.2.1-4 Pg. 3

*Hand 5.2.4: Suggested Contract 3♥\_\_ Suggested Declarer W\_\_*

**Board 4**  
West Deals  
Both Vul

	♠ A 6 2					
	♥ 8 6 3					
	♦ K 10 5					
	♣ Q 8 7 5					
♠ J 8 4	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: 0 auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>	N	W E	S	♠ K 7 5	
N						
W E						
S						
♥ K 4 2		♥ Q J 9 7 5				
♦ A 8 7		♦ Q J 2				
♣ A K 3 2		♣ 9 4				
	♠ Q 10 9 3					
	♥ A 10					
	♦ 9 6 4 3					
	♣ J 10 6					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
1 NT	Pass	2 ♦	Pass			
2 ♥	Pass	2 NT	Pass			
3 ♥	Pass	Pass	Pass			

- Lesson Plan Title:** Week 5 Lesson 3 - Math through Games
- Beginning Bridge:** Declarer Play - No Trump Contracts
- Concept/Topic:** To teach mathematical and analytical skills through real world applications.
- Standards Addressed:** Reasoning and Proof 3. Develop and evaluate mathematical arguments and proofs.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach the CRASH method of planning Declarer Play.  
To teach three main tools for creating winners when playing in a No Trump contract.  
To teach the use of the “finesse” to take more tricks as Declarer.
- Required Materials:** Paper  
Pencil  
Notebook  
WK5 LP 3.1 Practice Sheet - Taking Tricks in a No Trump Contract (attached)  
Hand Records 5.3.1, 5.3.2, 5.3.3, and 5.3.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 5.3.1, 5.3.2, 5.3.3, and 5.3.4.  
WK5 LP 3.3 Handout – Tips on Declarer Play

**Anticipatory Set (lead-in):**

- Briefly review last week’s lessons.
- Today we are going to learn some techniques for taking the most number of tricks as Declarer.

**Step-by-step Procedures:**

1. Declarer always has to maximize trick taking. The **CRASH** method helps determine just how to best accomplish that goal. In suit contracts we determined our losers at step one and then asked such basic questions as whether or not to draw trump as soon as possible or if we had other urgent needs.

2. **COUNT** - In No Trump contract declarer starts out by counting absolute winners. These fast winners require no effort by declarer – no finesses, no knocking out aces held by the opponents. These are tricks “off the top.”
  - Declarer: ♥ AQ93                      Dummy: ♥ K72  
  
Between the two hands I clearly have three fast winners. The fourth heart in my hand might become a winner if the opponent’s cards split 3-3.
  - Declarer: ♠ K7                              Dummy: ♠ AQ  
  
Even though I hold the top three cards of the suit, I can only take two tricks in this suit. The maximum number of tricks I can take in a suit during a No Trump contract cannot exceed the number of cards held in one hand. Such is not always the case in suit contracts where the trump suit might actually provide additional tricks by using the trumps for ruffing losers.
  - Declarer: ♣ QJ963                      Dummy: ♣ K107  
  
I have no fast winners in this suit combination. But when I determine my source of tricks later on, I can see that this suit will provide four slow winners if I drive out the opponents’ Ace.
3. **REVIEW** - As with suit contracts, the second thing Declarer does upon seeing dummy is to review the auction in his/her mind. If the opponents have bid, Declarer may have strong clues as to where HCP lie; he/she may also be able to imagine possible distributions of important suits.
4. **ANALYZE** - As with suit contracts, the third step Declarer takes is to analyze the opening lead. When playing No Trump contracts, you are in a race for tricks. The defenders are trying to set up their best (and presumably longest) suit so that they can set us. As Declarer, you are trying to set up your best suit so you can make your contract and possibly extra tricks. The opening lead will frequently give you a clue as to what your LHO considers to be his/her best suit. This suit will usually become a danger suit for you.
5. **SOURCE** - Next, Declarer will ask where his/her tricks are coming from; what is the source of tricks? In No Trump, this means adding both the tricks off the top as well as the slow winners you must develop. Long suits can be just as helpful in No Trump as they are in suit contracts. A good Declarer will recognize the value of developing that long suit for extra tricks.

6. **HOW** - Finally, you have to determine how you will go about taking your tricks. One clear guideline exists. Rarely do you have enough top tricks. Almost always you must give up a trick or two or even three before you can take your tricks. Declarers must learn to develop these extra tricks before giving up control in other suits.
  
7. As noted above, No Trump contracts usually are a race. Each side will take its Aces and Kings, but victory usually goes to the first pair to get their tricks from small cards in long suits. You therefore not only count your tricks, you have to make sure the opponents can't get enough to beat your contract before yours are set up. Remember, each time you need to give up the lead (losing a finesse, forcing out a high card), the opponents will attack your stoppers (winners) in their long suit.
  
8. There are three principle ways to develop tricks at No Trump.
  - **Set up a long suit.** We've already discussed this.
  
  - **Set up winners in a short suit.** For example (*Write this Example on the board.*):
    - Declarer: ♦ K3    Dummy: ♦ QJ2
  
    - In your initial count, diamonds provide no tricks. Even though this is not a long suit, you can force out the ace and still get two tricks.
  
  - **Take finesses.** They work in No Trump as well as in a suit contract. Look at this example (*Write this Example on the board.*):
    - Declarer: ♦ 743    Dummy: ♦ AJ102
  
    - How many tricks can we take? Well, if the Honors are split between LHO and RHO (the King and Queen are not in the same hand), we can lead from our hand twice and take two finesses. If the honors are split, we will take two tricks for sure, and if the opponents' cards are splitting 3-3, we can take three tricks in the suit.
  
9. Review with Students WK5 LP2.1 Practice Sheet - Taking Tricks in a No Trump Contract.
  
10. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands as time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK5 LP 3.1 Handout – Taking Tricks in a No Trump Contract

### THE HOLD UP PLAY

If the opponents start off by leading your worst suit and their best suit, it may be necessary to hold up winning your one and only trick in that suit. This is an important “how” in our declarer work. By waiting to take your trick, you may be able to cut the communication between the opponents.

3NT by S	♠ 3 2 ♥ 7 4 ♦ A Q 9 6 2 ♣ A K Q 2										
♠ K Q J 9 6 ♥ 9 5 3 ♦ 5 4 3 ♣ 7 6	<table style="border: 1px solid black; width: 60px; height: 60px; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ 10 8 5 ♥ K J 10 8 2 ♦ K 7 ♣ 10 9 8
	N										
W		E									
	S										
	♠ A 7 4 ♥ A Q 6 ♦ J 10 8 ♣ J 5 4 3										

You are playing this hand in 3NT and West leads a spade. You count four club winners and three Aces. You need two more tricks and diamonds can surely provide those. You take the opening lead with the Ace and Finesse ♦J. East wins the ♦K and returns a spade. The defense chalks up a diamond and four spades for down one.

What went wrong? You failed to hold up in spades. Suppose you let West win her ♠K and again when she follows up with the ♠J. You of course must win the third round. You take your diamond finesse and – Voila! – No spade return. Your hold up exhausted East of all his spades. South takes ten tricks in total making 4. Even if East had a spade left, your contract is still safe. The spades then divide 4-4 and the opponents are limited to three spades along with the ♦K.

## Hand Records 5.3.1-4 Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice the mechanics of play of the hand at No Trump Contracts. .*

**Board 5.3.1**

North Deals  
N-S Vul

♠ A 6 5	♠ K 9 8	♠ J 10 2
♥ Q 7 6	♥ K J 10 3	♥ 8 4 2
♦ J 9 5 3	♦ K Q 2	♦ A 8 6 4
♣ J 10 3	♣ A 8 7	♣ 9 6 5
	<div style="display: inline-block; border: 1px solid black; background-color: #38761d; color: white; padding: 5px; text-align: center; width: 40px; height: 40px; margin: 0 auto;">             N W E S           </div>	
	♠ Q 7 4 3	
	♥ A 9 5	
	♦ 10 7	
	♣ K Q 4 2	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	1 NT	Pass	2 ♣
Pass	2 ♥	Pass	3 NT
Pass	Pass	Pass	

Opening Lead: ♦4, fourth from your longest and strongest

1NT shows 15-17 points balanced hand. 2♣ is Stayman, at least 8 points, asks partner for a four card major. 2♥ shows have four hearts. 3NT says I don't have four hearts and I have the values for game (South must have 4 spades since bid Stayman initially).

**PLANNING THE PLAY:**

If hearts and clubs behave, North will come to nine tricks with little to worry about. If not, North will still have chances to make if diamonds are 4-4. Declarer could win a diamond trick, a spade trick, and seven tricks in the other suits. Best chance is to win the opening diamond lead in hand, play a heart to dummy's ♥A, and lead a heart from dummy finessing the ♥J in North's hand. Now a club to ♣K and a third heart from dummy will bring home four tricks in hearts. Finish by playing ♣A and a club to dummy's ♣Q. Clubs split and the thirteenth club is declarer's ninth trick. And you still have a chance at overtricks!

## Hand Records 5.3.1-4 Pg. 2

**Board 5.3.2**  
East Deals  
N-S Vul

	♠ A Q 9 5					
	♥ 10 8 5					
	♦ J 5					
	♣ J 8 5 3					
♠ 10 6 3	♠ K 7					
♥ J 6 3	♥ K 9 4					
♦ A 10 9 8 7	♦ K 4 2					
♣ K 10	♣ A Q 6 4 2					
	♠ J 8 4 2					
	♥ A Q 7 2					
	♦ Q 6 3					
	♣ 9 7					
	<table style="margin: auto; border: 1px solid black; padding: 5px;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W   E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>	N	W   E	S		
N						
W   E						
S						
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
		1 NT	Pass			
2 NT	Pass	Pass	Pass			

Opening Lead: ♥2, fourth from your longest and strongest

1NT shows 15-17 points and a balanced hand. 2NT shows 8-9 points and no four card major. East passes with a minimum NT opener.

### PLANNING THE PLAY:

East only has six sure tricks unless clubs split 3-3 or the ♦Q and ♦J are doubleton. Start by playing the ♥J. When that holds, you can make an AVOIDANCE play, by leading the ♦7 from dummy and playing the ♦2 from hand if North plays the ♦5. South can win, but can't lead hearts without giving you another trick in the heart suit and the tempo to score 4 diamond winners, 3 clubs, and 2 hearts. The best South can do is guess to lead a small spade to North's ♠A, so North can return a heart through declarer's king. Even with this perfect defense, N-S can only win three heart tricks, a diamond trick and a spade trick, and East makes 2NT.

## Hand Records 5.3.1-4 Pg. 3

**Board 5.3.3**  
South Deals  
E-W Vul

	♠ 10 5					
	♥ A K 10 9					
	♦ 10 5 2					
	♣ K 8 7 5					
♠ J 9 7 4	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 2px;">N</td></tr> <tr><td style="padding: 2px;">W   E</td></tr> <tr><td style="padding: 2px;">S</td></tr> </table>	N	W   E	S	♠ A Q 6 3	
N						
W   E						
S						
♥ 6 5		♥ 8 7 4 2				
♦ K Q J 4 3		♦ 9 8				
♣ Q 2		♣ 10 9 6				
	♠ K 8 2					
	♥ Q J 3					
	♦ A 7 6					
	♣ A J 4 3					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
			1 NT			
Pass	2 ♣	Pass	2 ♦			
Pass	3 NT	Pass	Pass			
Pass						

Opening Lead: ♦K, Top of a three card honor sequence

1NT shows 15-17 points and a balanced hand. 2♣ is Stayman asking partner "Do you have a four card major?" 3♦ shows no four card major. So North places the contract in 3NT.

### PLANNING THE PLAY:

South only has seven winners off the top. South should see that the defense can take a bunch of diamond tricks if South is not careful. So South should refuse to win the first two diamond leads (a HOLD UP PLAY), and when South wins the third diamond, South notes that East has no more diamonds to lead back to partner. South should plan to set up a long club trick, but if South loses the finesse of the ♣J into West's ♣Q, West will cash two more diamond tricks and set the contract. South should refuse to finesse clubs, playing the ♣A and ♣K. Now South can cash four hearts and four clubs to go with the ♦A. If the ♣Q does not fall South can give up the third club to East and hope the ♠A is in East's hand to score the ♠K as the ninth trick.

## Hand Records 5.3.1-4

Pg. 4

**Board 5.3.4**

West Deals

None Vul

♠ Q J 10	♠ A 8 2	♠ 9 4 3
♥ A 8 4	♥ 7 6 5	♥ K J 10 2
♦ A K 8	♦ Q 10 7 3	♦ 9 5 2
♣ K 7 5 3	♣ Q 4 2	♣ A J 10
	<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center; margin: 5px;">           N W     E S         </div>	
	♠ K 7 6 5	
	♥ Q 9 3	
	♦ J 6 4	
	♣ 9 8 6	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
1 NT	Pass	2 ♣	Pass
2 ♦	Pass	2 NT	Pass
3 NT	Pass	Pass	Pass

Opening Lead: ♦3, fourth from longest and strongest

1NT shows 15-17 points and a balanced hand. 2♣ is Stayman, at least 8 points and asking if partner has a four card major. 2♦ says I don't have a four card major. 2NT shows 8-9 points inviting partner to game. 3NT says we have enough for game.

## PLANNING THE PLAY:

West has seven sure winners, two diamonds, two clubs, and three hearts (after the ♥Q is driven out). But West has lots of chances to make nine tricks. Win the opening lead and start with a club finesse to the ♣J. If that holds, lead the ♥J from dummy intending to finesse the ♥Q if South plays low. If the heart finesse wins play the ♥2 to the ♥A and repeat the club finesse. As the cards lay, West comes to 8 tricks in hearts and clubs, and two tricks in diamonds. And maybe even a spade trick at the end!

## WK5 LP 3.3 Handout – Tips on Declarer Play

### SUIT CONTRACTS

#### 1. Think CRASH

- C = COUNT Losers
- R = REVIEW the auction
- A = ANALYZE the Opening Lead
- S = SOURCE of Tricks?
- H = HOW do I take my tricks?

#### 2. Eliminate losers

- Set up a long suit in dummy and discard your losers on it.
- Trump your losers.
- Take a finesse or finesses.

### NO TRUMP CONTRACTS

#### 1. Think CRASH

- C = COUNT Winners
- R = REVIEW the auction
- A = ANALYZE the Opening Lead
- S = SOURCE of Tricks?
- H = HOW do I take my tricks?

#### 2. Develop Tricks

- Set up a long suit.
- Set up winners in a short suit.
- Take finesses.

- Lesson Plan Title:** Week 5 Lesson 4 - Math through Games
- Beginning Bridge:** Review and Practice
- Concept/Topic:** To teach math skills through the game of bridge.
- Standards Addressed:** Reasoning and Proof 2. Make and investigate mathematical conjectures.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To apply mathematical reasoning to arrive at a game bid in bridge.
- Required Materials:** Paper  
Pencil  
Notebook

**Anticipatory Set (lead-in):**

- Review Previous Lessons

**Step-by-step Procedures:**

1. Allow students to ask questions about what they have learned about bridge up to this point. Let students that are struggling or have been absent get caught up to the rest of the class.
2. For those students without questions and who understand the information that has been taught, allow them to shuffle and deal hands and practice bidding and play.

**Plan for Independent Practice:** Allow students time to shuffle a deck and deal, bid and play additional hands.

**Assessment Based on Objectives:** Observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

- Lesson Plan Title:** Week 5 Lesson 5 - Math through Games
- Beginning Bridge:** Weekly Quiz and Review- Week 5
- Concept/Topic:** To use math skills to play bridge.
- Standards Addressed:** Problem Solving 2. Solve problems that arise in mathematical and other contexts.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach how to bid and score in contract bridge.
- Required Materials:** Notebook  
Paper  
Pencil  
Bridge scorecards  
Cards

**Anticipatory Set (lead-in):**

- Review Week 5 Lessons 1-4
  - Responding to Partner's Opening 1NT Bid - Stayman
  - Responding to Partner's Opening 1NT Bid - Transfers
  - Declarer Play - No Trump Contracts

**Step-by-step Procedures:**

1. Give review quiz.
2. Hand out cards.
3. Allow Students to Shuffle, Deal, and Play hands.

**Plan for Independent Practice:** Allow students to play hands.

**Assessment Based on Objectives:** Week 5 Lesson 5 quiz.

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to play bridge hands on the computer.

**Possible Connections to Other Subjects:** L.A., communication skills

### Week 5 Lesson 5 Quiz (25 points)

1. In the anachronism CRASH what does each letter stand for (1 pt each) and what explain what it means (1 pt each explanation). (10 points)

If your partner opened 1NT, what would you bid? (2 pt each)

2. ♠AQ542 ♥K3 ♦K32 ♣854

3. ♠10874 ♥9753 ♦AQ ♣K32

4. ♠843 ♥AQ3 ♦KQJ74 ♣97

5. ♠965432 ♥842 ♦73 ♣962

6. ♠AKQ ♥853 ♦652 ♣9742

7. If you opened 1NT and your partner bid 2♦, what should you bid? (1 pt)

8. If you opened 1NT and your partner bid 2♣ and you had the following hand, what would you bid? (2 pt)

♠K107 ♥86 ♦AK52 ♣AQJ2

9. If you opened 1NT and your partner bid 2NT, what should you bid if you had the following hand? (2 pt)

♠K107 ♥86 ♦AK52 ♣AQJ2

**Week 5 Lesson 5 Quiz Answer Sheet**

1. In the anachronism CRASH what does each letter stand for (1 pt each) and what explain what it means (1 pts each explanation). (10 points)

C = COUNT Losers or COUNT Winners

R = REVIEW the auction

A = ANALYZE the Opening Lead

S = SOURCE of Tricks?

H = HOW do I take my tricks?

If your partner opened 1NT, what would you bid? (2 pt each)

2. ♠AQ542 ♥K3 ♦K32 ♣854                      2♥

3. ♠10874 ♥9753 ♦AQ ♣K32                      2♣

4. ♠843 ♥AQ3 ♦KQJ74 ♣97                      3NT

5. ♠965432 ♥842 ♦73 ♣962                      2♥

6. ♠AKQ ♥853 ♦652 ♣9742                      2NT

7. If you opened 1NT and your partner bid 2♦, what should you bid? (1 pt)

2♥

8. If you opened 1NT and your partner bid 2♣ and you had the following hand, what would you bid? (2 pt)

♠K107 ♥86 ♦AK52 ♣AQJ2                      2NT

9. If you opened 1NT and your partner bid 2NT, what should you bid if you had the following hand? (2 pt)

♠K107 ♥86 ♦AK52 ♣AQJ2                      3NT

- Lesson Plan Title:** Week 6 Lesson 1 - Math through Games
- Beginning Bridge:** Overcalls
- Concept/Topic:** To teach math through bridge.
- Standards Addressed:** Communication 4. Use the language of mathematics to express mathematical ideas precisely.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach use of Overcalls after the Opponents have opened the bidding.
- Required Materials:** Paper  
Pencil  
Notebook  
WK6 LP 1.1 Practice Sheet - Overcalls (attached)  
Hand Records 6.1.1, 6.1.2, 6.1.3, and 6.1.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 6.1.1, 6.1.2, 6.1.3, and 6.1.4.

**Anticipatory Set (lead-in):**

- Briefly review last week's lessons.
- This week we are going to learn some techniques for getting into the auction after the Opponents have opened the bidding.

**Step-by-step Procedures:**

1. Those nasty Opponents got into the auction first. Does that mean you can't bid? Of course not! Bridge is for bidders, and most of the time you should be actively seeking an opportunity to get involved in the auction.
2. Great News!! It takes a lot fewer points to make an overcall than it does to get the bidding open. (An overcall is a bid you make after the opponents have opened.) To overcall at the one level, you really only need about eight HCP and a good suit. As long as your partner remembers that your overcall may not be based on a lot of HCP, you shouldn't get in too much trouble. And who knows? You might even win the auction and get to play the hand!

3. Even if you don't win the auction, you have communicated to your partner some very important information, which will help you play better defense. For example, wouldn't you like partner to lead a diamond if the Opponents bid to 4♥ and you hold ♦ AKQJ7 of diamonds? If you have overcalled in diamonds, Partner will surely lead one if he/she is on lead.
4. Almost all overcalls in a suit promise one important characteristic: a five card suit (or longer). The better the suit, the fewer HCP you need to make that overcall. If the suit isn't so great, you'll want a lot more HCP.
5. **Bidding Your Own Suit** When your opponents open the bidding at the one level and you've got 8-16 HCP and a nice suit, you can come into the auction with an overcall. If the opponents' bidding forces you to bid your nice suit at the two level, you'll want a little better quality suit and more like 11-16 HCP to make that call. With minimal values (8 HCP), the suit quality should be at least KJ10xx. You could have J10xxx if you had closer to a maximum in HCP. (Note: We often use an "x" in a bridge hand description to indicate any card lower than a Ten.)
6. Length in the opponent's suit is a red flag. You'll want to up the requirements a bit. If you have 3+ cards in Opener's suit, it is much less likely that they have a fit. That means your chances to defeat their contract improves. Also, if partner doesn't like your suit, chances are you won't have length in his suit either.
7. **Overcalling 1NT** - A 1NT overcall is a bit stronger than an opening bid of 1NT, 15+ to 18 HCP. You promise at least one stopper (winner - something like Ax or Kx or Qxx) in the opponent's suit and a balanced hand. Your partner bids just as if you had opened 1NT, using Stayman, Jacoby Transfers and any other conventions you play.
8. The point here is that when you overcall, you want the security of a good suit. Remember, one opponent has already shown a lot of points. The more points you have, the more you can relax the good suit requirement.
9. Review with Students WK6 LP1.1 Practice Sheet - Overcalling.
10. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands as time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK6 LP 1.1 Practice Sheet - Overcalls

Suppose your RHO opens 1♣. The following overcalls are reasonable:

1. ♠ K5 ♥ Q76 ♦ KQJ865 ♣ 42 Bid 1♦
2. ♠ KQJ54 ♥ Q76 ♦ 65 ♣ Q42 Bid 1♠
3. ♠ K54 ♥ K76 ♦ KQJ65 ♣ AJ4 Bid 1NT
4. ♠ K5 ♥ AQ762 ♦ 9865 ♣ 42 Bid 1♥
5. ♠ KJ5 ♥ Q76 ♦ 65 ♣ AJ542 PASS! (When your best suit is the opponent's first bid suit, pass and hope you'll get to play defense! They may be getting into trouble)

If RHO opens 1♠, I'd make these overcalls:

6. ♠ K93 ♥ Q75 ♦ 85 ♣ AK743 2♣ (a real minimum!)
7. ♠ KJ3 ♥ Q9875 ♦ Q5 ♣ AJ3 PASS your suit quality is too ugly!
8. ♠ K93 ♥ AJ10875 ♦ 85 ♣ K3 2♥ Much better suit
9. ♠ J93 ♥ AQ875 ♦ 85 ♣ J43 PASS Not enough points for the 2-level.
10. ♠ KJ3 ♥ AQ75 ♦ K5 ♣ A1043 1NT

## Hand Records 6.1.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice Overcalling.*

#### Board 6.1.1

North Deals

None Vul

♠ 8 3	♠ 7 6 2	♠ K J 10 9
♥ 5 2	♥ J 10 7 4	♥ Q 6 3
♦ 7 6 5 4 3	♦ A Q 2	♦ K J 10
♣ 8 7 6 3	♣ K 10 4	♣ Q J 9

  

♠ A Q 5 4	♠ A Q 5 4	♠ A Q 5 4
♥ A K 9 8	♥ A K 9 8	♥ A K 9 8
♦ 9 8	♦ 9 8	♦ 9 8
♣ A 5 2	♣ A 5 2	♣ A 5 2

  

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	Pass	1 ♣	1 NT
Pass	2 ♣	Pass	2 ♥
Pass	4 ♥	Pass	Pass
Pass			

Opening Lead: ♣3, partner's suit

South's overcall of 1NT shows 15-18 points, a stopper in clubs, and a balanced hand.

North's 2♣ bid is Stayman, asking the NT bidder if he has a four card major.

South bids 2♥ showing four hearts. North now bids 4♥ showing the values to bid game and a heart fit.

West leads the ♣3, partner's suit. South should anticipate that all the missing high cards (including the ♣QJ) will be in East's hand as he would not have had an opening bid without it. South should win the ♣K in dummy and lead the ♥J finessing for the ♥Q. Later South will return to dummy and lead a spade towards the ♠AQ in his hand and finesse for the ♠K.

## Hand Records 6.1.1-4 Pg. 2

**Board 6.1.2**  
East Deals  
N-S Vul

	♠ 10 9 3										
	♥ J 10										
	♦ 10 4 3 2										
	♣ Q 9 6 4										
♠ A 7	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 6 5 2
	N										
W		E									
	S										
♥ K Q 9 8 5		♥ A 6 3									
♦ J 9 5		♦ Q 8 6									
♣ A 10 8		♣ K 7 3 2									
	♠ K Q J 8 4										
	♥ 7 4 2										
	♦ A K 7										
	♣ J 5										
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>								
		Pass	1 ♠								
2 ♥	Pass	3 ♥	Pass								
Pass	Pass										

Opening Lead: ♠10

After South bids 1♠ West overcalls 2♥ showing a good five card or longer heart suit and five hearts and 11+ points.

With a heart fit and 6-9 points East raises to 3♥.

## Hand Records 6.1.1-4 Pg. 3

**Board 6.1.3**  
South Deals  
E-W Vul

	♠ 8 5					
	♥ Q 8 5					
	♦ K 5					
	♣ A K Q J 3 2					
♠ A Q J 10 9	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W   E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>	N	W   E	S	♠ 7 6	
N						
W   E						
S						
♥ A J 2		♥ K 9 7 6 4				
♦ A 3		♦ Q 8 2				
♣ 9 8 5		♣ 10 6 4				
	♠ K 4 3 2					
	♥ 10 3					
	♦ J 10 9 7 6 4					
	♣ 7					
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>			
1 ♠	2 ♣	Pass	Pass			
Pass						

Opening Lead: ♠7, partner's suit

After North's overcall and South must pass.

## Hand Records 6.1.1-4

### Pg. 4

**Board 6.1.4**

West Deals

Both Vul

♠ K 2			
♥ A J 8			
♦ A J 8 7 5			
♣ K 7 5			
♠ Q 9 4 3	♠ A J 10 7 6 5		
♥ K Q 7 4	♥ 9 3		
♦ 9	♦ K Q 3		
♣ 10 9 8 4	♣ A 2		
	♠ 8		
	♥ 10 6 5 2		
	♦ 10 6 4 2		
	♣ Q J 6 3		

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	1 NT	2 ♠	Pass
3 ♠	Pass	Pass	Pass

Opening Lead: ♣Q, top of touching honors

East overcalls North's 1NT bid with a very good overcall and a six card suit. East's partner raises with four trumps and a good raise.

East could decide to bid game as he has a pretty good hand, but it's all going to depend on if his partner's honor cards fit with his hand.

- Lesson Plan Title:** Week 6 Lesson 2 - Math through Games
- Beginning Bridge:** Takeout Doubles
- Concept/Topic:** To teach math through bridge.
- Standards Addressed:** Reasoning and Proof 3. Develop and evaluate mathematical arguments and proofs.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To teach the use of Takeout Double.  
To teach the meaning of a Cue Bid.  
To Learn the Role of Advancer.
- Required Materials:** Paper  
Pencil  
Notebook  
WK6 LP 2.1 Practice Sheet – Takeout Doubles (attached)  
Hand Records 6.2.1, 6.2.2, 6.2.3, and 6.2.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 6.2.1, 6.2.2, 6.2.3, and 6.2.4.

**Anticipatory Set (lead-in):**

- Briefly review last week’s lessons.
- There is a very useful tool in competitive auctions called the “Takeout Double.” Today, you will learn what it is and how to use it.

**Step-by-step Procedures:**

1. After an opponent opens the bidding with a suit you will sometimes have a hand that has enough points to bid, but doesn’t have a 5+ card suit. If you have shortness in the suit the opponent opened (0, 1, or 2 cards) and 11 or more points there is a bid you can make to allow your side to enter the auction. It is a conventional bid called a **Takeout Double**. After an opponent has bid a suit (not No Trump!), a Takeout Double promises at least the values of an opening bid. You almost always have shortness in the opponents’ suit(s) and at least three cards in the unbid suits. After a 1♥ bid by Opener, Overcaller might have something like the following to make a Takeout Double: *(Put the following hand on the board)*

♠ AJ106 ♥ 4 ♦ K932 ♣ KJ106

2. When you make a Takeout Double, the likelihood is that your partner will play the hand if your side gets the contract. You will therefore be the dummy and you should therefore count your hand using dummy points. Let's change the above hand just a bit;

♠ AJ106 ♥ 4 ♦ K932 ♣ QJ106

This is a most interesting hand. You probably would not open this hand, as you have only 11 high card points. Your RHO bidding hearts actually improved your hand. Your points are not wasted in the opponent's long suit, and your chances of finding a fit are good. You can count three points for your singleton since you are counting Dummy Points. Fourteen points is more than enough for a Takeout Double. But if the Opener had bid 1♠ you'd have no choice but to Pass since you don't have good support for all the unbid suits.

3. The primary obligation of the person making a Takeout Double in the minimal range (<17 points) is to **have support for the unbid suits!** The lower the number of points, the better the shape must be. Remember, you're basically saying to Partner that no matter what he/she bids you'll make a good dummy! And since you're forcing partner to bid (unless LHO makes a bid), you'd best live up to your promise.
4. A Takeout Double can also be made after the opponents have bid two suits. Here again the promise is at least 11 HCP and good **support for the two unbid suits.** Suppose the auction goes: (*Put the following auction on the board*)

LHO	Partner	RHO	You	
1♣	Pass	1♥	X	("X" = Double.)

Here the Takeout Double shows diamonds and spades and, of course, values.

5. Most Takeout Doubles occur at your first turn to bid, although when the auction has died at a very low level, you might choose to stretch a bit, either in points or shape, to keep the bidding alive. Holding ♠K10xx, ♥xx, ♦Axx, Kxxx, you aren't strong enough for a Takeout Double of 1♥ by LHO. So you Pass. But if RHO now raises to 2♥ and it's passed back around to you, consider a Takeout Double. Partner will bid a suit (you hope it is spades), and good things might happen;
- Partner might make it. Plus 110 for your side.
  - The opponents may bid 3♥ and go set. Plus 50 or more for your side.
  - Partner may only go set one trick undoubled. Minus 50 is way better than the minus 110 the Opponents would have gotten for making 2♥.

6. One other thing: Since one of our goals in bidding is to find that golden 8-card fit in a major, partner is more likely to bid a major when you double. Therefore, when you double a major suit bid, partner will expect you to have four cards in the other major suit. You can have less, but then you should have something extra in HCP to compensate. If you double a minor, partner expects you to have four cards in one major and at least three cards in the other one.
7. Here is the absolute **Requirements for a Takeout Double** (*Write these requirements on the board.*):
  - You have the hand strength of an opening bid (In HCP and Dummy Points).
  - You are no higher than the four level.
  - Your partner has Passed or not bid.
  - You have at least three card support for each unbid suit. (Except in one case we'll discuss later this week.)
8. These are some reasons to compete with a Takeout Double:
  - Your side might have part score or even a game.
  - You take up the opponent's bidding room.
  - If you don't get the contract, you help guide the defense.
9. Let's look at some examples. Refer to your Practice Sheet WK6 LP 2.1 Takeout Doubles, Hands 1-4. (*Review the Examples with students.*)
10. Let's discuss **Responding to the Takeout Double** by Partner. In Bridge parlance, there are four players at the table - Opener, Overcaller (who overcalls or doubles), Responder (Opener's partner), and Advancer (Overcaller's partner.)
11. Presume Partner has overcalled with a Takeout Double, and has 11 HCP and a perfect 4-4-4-1 shape with well placed honor cards. How high would you really want to bid, given that Overcaller (partner) has that hand?
12. When your RHO bids, you are not required to bid. A bid by you is no longer necessary. With a very weak hand, pass happily. If you choose to bid when you are not required to, partner will know that you have around 8 points as otherwise you would have simply passed.

13. **When RHO has passed**, you see you have a terrible hand, with two HCP. What do you do? First and foremost, you cannot Pass. You must bid something. With 0-8 HCP bid as cheaply as possible. The worse your hand is, the more important it is to bid! Many a partnership has experienced harsh words after one partner made a Takeout Double and the other partner passed with 2 HCP.
14. With a good 9+ to 11 points, make a single *jump bid* in your best suit. This is an Invitational bid that asks partner to bid game with 14 or 15 points.
15. With a good 12+ points and a desire to play a game contract, you have two choices;
- If you know where you belong, bid it!
  - If you're not sure which suit to play in, bid the opponent's suit. (We call this a "Cue Bid," a kind of Convention.)

Since your partnership has an opening bid opposite an opening bid, you likely will not stop below game. After Advancer's Cue Bid, Overcaller (Doubler) should bid his longest suit, or the one with the best quality if the suits are equal in length.

16. With a good 8-11 HCP, no good four card major suit of your own and a solid stopper in the opponent's suit, bid 1NT. Remember, partner is short in the opponent's suit and may have only 11 HCP.
17. Let's look at some more examples. Refer to your Practice Sheet WK6 LP 2.1 Takeout Doubles, Hands 5-8. (*Review the Examples with students.*)
18. Finally, let's talk about **Bidding After Making a Takeout Double**.
19. After making a minimal (up to 16 HCP) Takeout Double, you've basically "told your story". Leave further decisions up to partner. Assume partner has ZERO points. Would you really want to hang your partner out to dry after you forced them into the auction?
20. The corollary is that if you Double and bid again, you have something more to say. A bid after you Double shows 17+ HCP. Here is how you show support after a double and partner bids at the one level:
- Up to 16 HCP            Pass!
  - 17-20 HCP             Raise to the two level
  - 21-24 HCP             Raise to the three level
  - 25+                     Raise to Game
21. Remember, Advancer (partner) may have zero points, and may only have three cards in the suit he/she bid, and raising may get you too high!

22. There is one exception. If you raise partner in competition, you don't show anything extra. You are just trying to win the auction for your side. You of course promise four card support as well. Thus after (Write this Example on the board.):

<u>Opener</u>	<u>Overcaller</u>	<u>Responder</u>	<u>Advancer</u>
1♥	X	Pass	1♠
2♥			

Overcaller can raise to 2♠ with minimum values. All you are saying is you'd rather play your 8 card fit than let the opponents play at the two level. Just remember partner (Advancer) could have zero points.

23. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands s time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK6 LP 2.1 Practice Sheet - Takeout Doubles Pg. 1

Let's look at some examples. Suppose RHO Opens 1♦. You hold the following hands:

### 1. Hand 1

♠ K1074  
♥ K942  
♦ QJ76  
♣ A

Perfect time for a Takeout Double if RHO had opened 1♣ but not over 1♦! PASS and see how the auction progresses. Patience. You may get a chance later to get into the auction.

### 2. Hand 2

♠ AK52  
♥ Q1042  
♦ A8  
♣ Q64

This is a great Takeout Double.

### 3. Hand 3

♠ AJ10  
♥ KJ105  
♦ AQ  
♣ Q653

1NT is a better description of this hand as an Overcall. 17 HCP and a double stopper of RHO's suit.

### 4. Hand 4

♠ KQJ  
♥ KQJ2  
♦ 6  
♣ Q10743

This is a good takeout double.

## WK6 LP 2.1 Practice Sheet - Takeout Doubles

### Pg. 2

The bidding starts 1♥ - X - P - ?? Partner has Doubled and now it's up to you. What do you do with these hands?

#### 5. Hand 5

♠ K76  
♥ Q854  
♦ 765  
♣ 743

Yuck! No choice but to bid 1♠. You will almost always have a four card or longer suit when partner doubles. This doesn't happen very often, but when it does and you have a weak hand, just bid as cheaply as you can and hope it works out.

#### 6. Hand 6

♠ 92  
♥ 874  
♦ A43  
♣ A8653

A simple bid of 2♣ is enough. I'm sure partner was hoping you'd bid spades.

#### 7. Hand 7

♠ AK72  
♥ 92  
♦ K1065  
♣ 763

Certainly enough HCP to make a little jump to 2♠. Let partner know you've got some extras. With 11 HCP, partner will pass and you'll be safe. With a good 14 or 15, partner may just put you in a makeable game.

#### 8. Hand 8

♠ AK8  
♥ AJ10  
♦ Q74  
♣ J974

Bid 3NT. You know where this hand belongs! With two stoppers in hearts and a full 15 HCP, there has to be game in this hand. Move the ♥A to clubs and you'd cue bid 2♥ to show your 12+ HCP.

## Hand Records 6.2.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. The objective is for students to practice making takeout doubles. Hands can test both Overcaller and Advancer to make the right bids.*

#### Board 6.2.1

North Deals

None Vul

♠ K 9	♠ Q J 8 6 2	♠ 5 4	
♥ A Q 9 8	♥ J 5 3	♥ K 10 7 2	
♦ 7 6 5 2	♦ A 3	♦ K 10 8	
♣ 9 8 4	♣ K Q 5	♣ A J 7 3	
	<div style="display: inline-block; border: 1px solid black; background-color: #4a7c59; color: white; padding: 5px; text-align: center;">             N W     E S           </div>		
	♠ A 10 7 3		
	♥ 6 4		
	♦ Q J 9 4		
	♣ 10 6 2		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
3 ♥	1 ♠	Dbl	2 ♠
	Pass	Pass	Pass

Opening Lead: ♥2

East's Double is a Take-out double showing shortness in Spades, an opening hand (or close to it) and at least three cards in the remaining three suits.

West does not have to bid since South bid, but chooses to bid 3♥ as he has some values and his partner has promised hearts.

## Hand Records 6.2.1-4

### Pg. 2

**Board 6.2.2**

East Deals

N-S Vul

♠ 10 4	♠ A Q J 8 2	♠ 9 7 6
♥ J 10 8 7	♥ 6	♥ K 5 4 3
♦ A 10 9 4	♦ 8 7 2	♦ K Q 6 5
♣ 10 8 3	♣ 9 7 6 5	♣ A J

  

♠ K 5 3	♠ 9 7 6
♥ A Q 9 2	♥ K 5 4 3
♦ J 3	♦ K Q 6 5
♣ K Q 4 2	♣ A J

  

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
1 ♥	1 ♠	1 ♦	Dbl
Pass	2 ♠	2 ♥	Pass
Pass		Pass	Pass

Opening Lead: ♦K

South's double is a Take-out double showing shortness in diamonds, an opening hand and at least three cards in every other suit.

North only bids 1♠ as he has just seven points. After East bids 2♥, North should compete to 2♠ with five spades and shortness in hearts.

## Hand Records 6.2.1-4

### Pg. 3

**Board 6.2.3**

South Deals

E-W Vul

♠ K 6 5 2	♠ 10 8	♠ J 9 7
♥ 10	♥ 7 3 2	♥ K 5 4
♦ A K 9 7	♦ Q 10 6 3	♦ J 8 5 4
♣ A Q 9 2	♣ 8 7 6 3	♣ K 10 4
	<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center; margin: 5px;">             N W     E S           </div>	
	♠ A Q 4 3	
	♥ A Q J 9 8 6	
	♦ 2	
	♣ J 5	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			1 ♥
Dbl	Pass	2 ♦	2 ♥
3 ♦	Pass	Pass	Pass

Opening Lead: ♣J, top of shortness

West doubles showing shortness in hearts. East bids his long suit - diamonds.

After South rebids his heart suit showing six hearts or more and a good hand. West competes to 3♦ with a stronger hand than he promised in his original bid.

## Hand Records 6.2.1-4

Pg. 4

**Board 6.2.4**

West Deals

Both Vul

♠ 9 6 3	♠ A J 8 7	♠ 10 5									
♥ K 6 4	♥ A Q 8 5	♥ 10 7 3									
♦ A K 5 2	♦ 8 4	♦ Q J 10 6 3									
♣ Q J 3	♣ K 10 7	♣ 8 6 2									
<table style="border: 1px solid black; background-color: #4b7a3d; color: white; width: 60px; height: 60px; margin: 0 auto; text-align: center; font-size: 24px; line-height: 1;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>				N		W		E		S	
	N										
W		E									
	S										
♠ K Q 4 2	♠ K Q 4 2	♠ K Q 4 2									
♥ J 9 2	♥ J 9 2	♥ J 9 2									
♦ 9 7	♦ 9 7	♦ 9 7									
♣ A 9 5 4	♣ A 9 5 4	♣ A 9 5 4									

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
1 ♦	Dbl	Pass	2 ♠
Pass	3 ♠	Pass	Pass
Pass			

Opening Lead: ♠2

North's double is a take-out double. South bids 2♠ as he has 10 points and four spades.

North bids 3♠ confirming an eight card fit with a slightly better hand than he has to have for his double and South passes.

- Lesson Plan Title:** Week 6 Lesson 3 - Math through Games
- Beginning Bridge:** Big Hand Takeout Doubles
- Concept/Topic:** To teach math through bridge.
- Standards Addressed:** Reasoning and Proof 4. Select and use various types of reasoning and methods of proof.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To teach how to handle big hands in competitive auctions.
- Required Materials:** Paper  
Pencil  
Notebook  
WK6 LP 3.1 Practice Sheet - Big Hand Doubles (attached)  
Hand Records 6.3.1, 6.3.2, 6.3.3, and 6.3.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 6.3.1, 6.3.2, 6.3.3, and 6.3.4.

**Anticipatory Set (lead-in):**

- Briefly review yesterday's lesson on Takeout Doubles
- Today we continue our exploration of competitive auctions, looking at what you can do when RHO opens the bidding and you hold a hand that is too strong for a simple overcall.

**Step-by-step Procedures:**

1. When you make a takeout double, Advancer (Partner) should assume you have a minimum hand, that is, 11-16 HCP with good takeout double shape and at least three card support for the unbid suits. Unless Advancer invites a game, any free rebid by you following your takeout double will announce a much stronger hand (usually 17+ HCP, maybe a very good 16 HCP with super shape). There are three basic situations where the bidding will reveal this strong hand.
  - **Doubling and Bidding Your Own Suit Shows a Big Hand!**  
  
We have limited the strength of Overcalls to a maximum of 16 HCP. Sometimes you'll have more. Start with a double and then bid your suit. Doubling followed by bidding your own suit announces a very strong hand and at least a good five card suit.

- **Doubling and Raising Advancer's Suit Shows a Big Hand!**

This reiterates what we discussed in the last lesson about doubling and raising partner. Another bid after you Double and the opponents have not competed shows 17+ HCP. Here is how you (Overcaller) show support for Advancer's (Partner's) suit after you have doubled and Advancer bids at the one level:

- Up to 16 HCP            Pass!
- 17-20 HCP            Raise to the two level
- 21-24 HCP            Raise to the three level
- 25+ HCP              Raise to Game

- **Doubling and Bidding NT Shows a Big Balanced Hand with Stoppers!**

2. Be sure to know the ranges of NT overcalls. RHO opens one of a suit, and you hold a big balanced hand with a stopper in Opener's suit. You bid;
  - 15-18 HCP            Overcall 1NT
  - 19-21 HCP            Double and then Bid cheapest NT
  - 22+ HCP              Double and then Jump Bid NT
3. What do you bid as Advancer after Overcaller has revealed a Big Hand? With an opening hand to your left and a big hand across from you, there aren't many points left in the deck for you. It is quite rare that you are able to bid anything over partner's takeout double except a simple suit bid at the very cheapest level. (Keep in mind that you don't know yet that your partner has a big hand. His takeout double could be a minimum, so You are required to bid.) Your bid reveals a hand of 0-8 or a bad 9 points.
4. When Overcaller partner takes another call after doubling he/she is basically asking you whether or not you have
  - the top range of that call    6 to a bad 9 points
  - the middle range            a good 4, 5, or 6 points
  - or a very bad hand          0 to 3 points
5. With the middle or good range you owe your partner another bid. Even an Advancers hand with a king and trump support may be worth enough for a second bid.

6. Only with truly “bust” hands can you as Advancer feel comfortable passing Overcaller’s second bid. A “bust” hand is a hand with less than 4 HCP without a good fit with partner. Evaluate the hand, presume partner has a good 17 HCP, and make the bid that best describes the value of your hand.
7. Review with Students WK6 LP 3.1 Practice Sheet - Big Hand Takeout Doubles.
8. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play additional hands as time permits.

**Assessment Based on Objectives:** notebook, observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK6 LP 3.1 Practice Sheet - Big Takeout Doubles Pg. 1

1. You hold this hand. After RHO bids 1♣, now what?

♠ KQJ10864  
♥ AJ  
♦ AQ73  
♣ void

Start with a double. Partner will probably bid 1♥ which you follow with a bid of 1♠. Doubling followed by bidding your own suit announces a very strong hand.

2. After RHO bids 1♦

♠ 9  
♥ AQ10763  
♦ AK  
♣ A653

Start with a double. Partner will probably bid 1♠ which you follow with a bid of 2♥. Partner should know you have a good heart suit with a hand worth at least 17 points.

3. After RHO bids 1♦

♠ AK98  
♥ AQ75  
♦ void  
♣ AJ1063

Start with a double. If partner bids 1♥, 1♠, or 2♣ you should jump raise; that's how much value this hand has! It will take precious little in partner's hand to make game. Remember you are counting Dummy points. You have a 21 point hand.

## WK6 LP 3.1 Practice Sheet - Big Takeout Doubles Pg. 2

4. Following a 1♣ opening bid by RHO

♠ KJ73  
♥ AQ5  
♦ AK64  
♣ 63

Start with a double. Not near as nice as the hand above but still worth an extra bid. If partner bids 1♥ or 1♠ you should raise him/her to the two level. Game is not out of the question.

5. Following a 1♦ opening bid by RHO

♠ AK  
♥ AQ  
♦ KQ73  
♣ J10853

Start with a double followed by a NT rebid if partner bids 1♥ or 1♠. Doubling and then bidding No Trump shows 19-21 HCP, balanced with stoppers.

## Hand Records 6.3.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice takeout doubles with a big hand. North, East, South, and West should in turn be dealer and have an opening hand. East, West, South, and North are Overcallers and should in turn have hands sufficient in HCP and shape to make a big takeout double, and then make another call should Advancer bid. Hands can test both Overcaller and Advancer to make the right bids.*

**Board 6.3.1**  
North Deals  
None Vul

♠ 9 8	<div style="border: 1px solid black; padding: 5px; display: inline-block;">             N W   E S           </div>	♠ A Q J 6
♥ A 9 8 6 5 3		♥ K J 7 4
♦ 9 7 6		♦ A Q 10 5
♣ K J		♣ 3
♠ 10 7 2 ♥ 10 2 ♦ K 2 ♣ 10 9 8 5 4 2		

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	1 ♣	Dbl	Pass
1 ♥	Pass	2 ♥	Pass
4 ♥	Pass	Pass	Pass

## Hand Records 6.3.1-4

### Pg. 2

#### Board 6.3.2

East Deals

E-W Vul

♠ K 10 9 8 6 5 4		♠ 7 2									
♥ 7		♥ Q 8									
♦ 10 7 3		♦ K 8 2									
♣ 9 4		♣ A Q J 8 6 2									
♠ A J 3	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ 7 2
	N										
W		E									
	S										
♥ 9 6 2		♥ Q 8									
♦ 6 5		♦ K 8 2									
♣ K 10 7 5 3		♣ A Q J 8 6 2									
♠ Q											
♥ A K J 10 5 4 3											
♦ A Q J 9 4											
♣ —											

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	1 ♠	1 ♣	Dbl
Pass	Pass	2 ♣	4 ♥
Pass	Pass	Pass	

#### Board 6.3.3

South Deals

N-S Vul

♠ 7 2		♠ 10 8 4 3									
♥ 10 7 6 2		♥ 3									
♦ 7 4 2		♦ J 5 3									
♣ K Q 7 5		♣ A J 9 4 2									
♠ K Q 6 5	<table border="1" style="border-collapse: collapse; width: 40px; height: 40px; margin: auto;"> <tr><td></td><td style="text-align: center;">N</td><td></td></tr> <tr><td style="text-align: center;">W</td><td></td><td style="text-align: center;">E</td></tr> <tr><td></td><td style="text-align: center;">S</td><td></td></tr> </table>		N		W		E		S		♠ 10 8 4 3
	N										
W		E									
	S										
♥ K Q J 8 5		♥ 3									
♦ A Q 10 6		♦ J 5 3									
♣ —		♣ A J 9 4 2									
♠ A J 9											
♥ A 9 4											
♦ K 9 8											
♣ 10 8 6 3											

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Dbl	1 ♥	Pass	1 ♣
Dbl	Pass	1 ♠	Pass
3 ♠	Pass	4 ♠	Pass
Pass	Pass		

West's bidding suggests a monster hand with 4 spades. East bids game with only 5 HCP.

## Hand Records 6.3.1-4

### Pg. 3

**Board 6.3.4**

West Deals

Both Vul

	♠ A 10 8 6										
	♥ A 5										
	♦ A Q 7 6 3										
	♣ A Q										
♠ K Q J	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 9 5 3
	N										
W		E									
	S										
♥ Q 4 2		♥ J 8 7 6									
♦ K J 9 8 4		♦ 10 2									
♣ J 6		♣ 10 8 5 2									
	♠ 7 4 2										
	♥ K 10 9 3										
	♦ 5										
	♣ K 9 7 4 3										
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>								
1 ♦	Dbl	Pass	1 ♥								
Pass	1 NT	Pass	3 NT								
Pass	Pass	Pass									

- Lesson Plan Title:** Week 6 Lesson 4 - Math through Games
- Beginning Bridge:** Scoring Update - Penalties and Vulnerability
- Concept/Topic:** To learn math through bridge.
- Standards Addressed:** Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach Bonuses and Penalties in Bridge and their Influence on the Auction.
- Required Materials:** Paper  
Pencil  
Notebook  
WK 6 LP 4.1 Handout - Bridge Scoring (attached)

**Anticipatory Set (lead-in):**

- Briefly review last week's lessons.
- Before we go much further in competitive auctions, it is appropriate that we take a look at the Penalties and Bonuses associated with our actions. Today we will expand our knowledge of the scoring rules.
- Doubles can be used to punish the opponents for bidding too high.

**Step-by-step Procedures:**

1. In Week 2, we discussed the points you earn for each trick and the bonus for making game. But a lesson on overcalls is a good time to point out the points lost for not making, or "going down" in, your contract. Penalties start at 50 points per trick if not vulnerable and 100 per trick when vulnerable. (You can tell who is vulnerable by looking at the Bridge board.)
2. If you think the opponents have overbid, you can punish them with a Double. (NOTE: If the class uses bidding boxes, it is the card with the red "X" on it.) A "Penalty Double" is a double of the opponents' contract where you do not think they will be able to take the required number of tricks for the level they are at. The penalties are greater if you set the contract, but the opponents get a bonus if they make the doubled contract.
3. A common concern is distinguishing a Takeout Double from a Double meant to

punish those overreaching opponents. Partner's Double is a Takeout Double if both these conditions are met (Write these points on the board.):

- You are not higher than the three level, and
  - Partner of the Doubler has Passed or not bid.
4. With a probable three tricks in the opponent's suit and some other defensive values, you can elect to Pass a Takeout Double. This is usually risky, but it may be profitable if the opponents are vulnerable and you aren't. While this is a rare choice after a double of One in a suit, it becomes more practical when partner has made a Takeout Double at a higher level. You must have a real stack of trumps and definite tricks in the rest of your hand to Pass Overcaller's Takeout Double.
  5. And for the first time in our lessons vulnerability really does matter! You already know that being Vulnerable increases the bonus for making a game or slam. More importantly, it substantially increases your penalties for going set!
  6. If you are set undoubled, the penalties are 50 points per trick Non-Vulnerable and 100 per trick Vulnerable. Doubling changes all that. Failing to make your contract follows this scale: *(Write the two Scales below on the board)*

Non-Vulnerable Penalties Doubled:

- 100 for the 1<sup>st</sup> trick
- 200 more for tricks 2 & 3 set
- 300 more per trick set after that

Vulnerable Penalties Doubled:

- 200 for the 1<sup>st</sup> trick
- 300 more for all others

7. The fun doesn't stop! If the opponents Double you, and you think they are wrong, you can Redouble. (That's the blue "XX" card.) This once again increases the reward for making the contract but increases the penalty if you go down. Redoubles for penalty don't happen very often. You might play in a redoubled contract once every 5 years. *(Write the two Scales below on the board)*

Non-Vulnerable Penalties Redoubled:

- 200 for the 1st trick set
- 400 more for tricks 2 & 3 set
- 600 more per trick set after that

Vulnerable Penalties Redoubled:

- 400 for the 1st trick
  - 600 more for all others
8. Hand out the student Handout Sheet WK6 LP 4.1 Bridge Scoring, Page 2.
9. Expressed a different way (*Refer to student Handout Sheet WK6 LP2.3 Bridge Scoring, Page2*);

	<b>Non-Vulnerable</b>			<b>Vulnerable</b>		
	Down	Undoubled	Doubled	Redoubled	Undoubled	Doubled
-1	50	100	200	100	200	400
-2	100	300	600	200	500	1000
-3	150	500	1000	300	800	1600
-4	200	800	1600	400	1100	2200
-5	250	1100	2200	500	1400	2800

And so on to Down 13!!

**Plan for Independent Practice:** Allow students time to shuffle a deck and bid and play hands as time permits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK6 LP 4.1 Handout – Bridge Scoring Pg. 1

### Trick Values

No trick points are scored until declaring side has won at least six tricks (the Book). After the Book is made, then points are awarded as follows:

20 points	Each trick with Clubs as Trumps
20 points	Each trick with Diamonds as Trumps
30 points	Each trick with Hearts as Trumps
30 points	Each trick with Spades as Trumps
40 Points	First trick with No Trump as Denomination
30 points	Each trick after the first trick with No Trumps as Denomination

### Game Contracts

To make a Game at Bridge, and receive the game score bonus, you must win 100 trick points. To bid a Game, you must bid and make:

5 Clubs	(20 x 5 tricks = 100) plus 6 tricks for Book = 11 Tricks
5 Diamonds	(20 x 5 tricks = 100) plus 6 tricks for Book = 11 Tricks
4 Hearts	(30 x 4 tricks = 120) plus 6 tricks for Book = 10 Tricks
4 Spades	(30 x 4 tricks = 120) plus 6 tricks for Book = 10 Tricks
3 No Trump	(40 x 1 trick plus 30 x 2 tricks = 100) plus 6 tricks for Book = 9 Tricks

#### Game Bonus

Not Vulnerable	= 300 bonus points
Vulnerable	= 500 bonus points

## WK6 LP 4.1 Handout – Bridge Scoring Pg. 2

### Slam Contracts

Small Slam (Declarer takes 12 tricks)

Not Vulnerable = 500 bonus points

Vulnerable = 750 bonus points

Grand Slam (Declarer takes all 13 tricks)

Not Vulnerable = 1000 bonus points

Vulnerable = 1500 bonus points

### PENALTY SCORING

#### Non-vulnerable Penalties Doubled:

- 100 for the 1<sup>st</sup> trick set
- 200 more for tricks 2 & 3 set
- 300 more per trick set after that

#### Vulnerable Penalties Doubled:

- 200 for the 1<sup>st</sup> trick
- 300 more for all others

#### Non-vulnerable Penalties Redoubled:

- 200 for the 1<sup>st</sup> trick set
- 400 more for tricks 2 & 3 set
- 600 more per trick set after that

#### Vulnerable Penalties Redoubled:

- 400 for the 1<sup>st</sup> trick
- 600 more for all others

## WK6 LP 4.1 Handout – Bridge Scoring Pg. 3

### Summary chart

<b>Non-Vulnerable</b>			<b>Vulnerable</b>			
<u>Down</u>	<u>Undoubled</u>	<u>Doubled</u>	<u>Redoubled</u>	<u>Undoubled</u>	<u>Doubled</u>	<u>Redoubled</u>
-1	50	100	200	100	200	400
-2	100	300	600	200	500	1000
-3	150	500	1000	300	800	1600
-4	200	800	1600	400	1100	2200
-5	250	1100	2200	500	1400	2800

<b>Lesson Plan Title:</b>	Week 6 Lesson 5 - Math through Games
<b>Beginning Bridge:</b>	Weekly Quiz and Review - Week 6
<b>Concept / Topic:</b>	To teach math through real world concepts.
<b>Standards Addressed:</b>	Problem Solving 2. Solve problems that arise in mathematical and other contexts.
<b>General Goal(s):</b>	To teach math.
<b>Specific Objectives:</b>	To teach bridge.
<b>Required Materials:</b>	Notebook Paper Pencils Bridge boards Bridge scorecards Cards

**Anticipatory Set (lead-in):**

- Review week 6 lesson 1-4
  - Overcalls
  - Scoring Update - Penalties, Vulnerabilities, and Slam Bidding
  - Takeout Doubles
  - Big Hand Doubles

**Step-by-step Procedures:**

1. Return notebooks.
2. Give review quiz.
3. Hand out cards.
4. Allow Students to Shuffle, Deal, and Play hands.

**Plan for Independent Practice:** Allow students to play hands.

**Assessment Based on Objectives:** weekly test

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** When students finish test, they can play bridge on the computer.

**Possible Connections to Other Subjects:** Communication skills, L.A.

**Week 6 Lesson 5 Quiz (10 points)**

Your Right Hand Opponent (RHO) Opens 1♥.  
What would you bid on the following hands? (10 points)

1. ♠AQ10842 ♥73 ♦6 ♣K643 \_\_\_\_\_

2. ♠A87 ♥KQJ103 ♦87 ♣J73 \_\_\_\_\_

3. ♠QJ5432 ♥K42 ♦A76 ♣4 \_\_\_\_\_

4. ♠8 ♥Q3 ♦KQ10543 ♣K754 \_\_\_\_\_

5. ♠A4 ♥KJ4 ♦KJ3 ♣K10973 \_\_\_\_\_

6. ♠873 ♥1098 ♦7 ♣AJ10542 \_\_\_\_\_

7. ♠AK542 ♥A854 ♦♦Q74 ♣3 \_\_\_\_\_

8. ♠J107543 ♥A75 ♦Q54 ♣3 \_\_\_\_\_

9. ♠6 ♥K74 ♦AQJ1086 ♣A62 \_\_\_\_\_

10. ♠K85432 ♥J43 ♦742 ♣4 \_\_\_\_\_

**Week 6 Lesson 5 Quiz Answer Sheet**

Your Right Hand Opponent (RHO) Opens 1♥.  
What would you bid on the following hands? (10 points)

1. ♠AQ10842 ♥73 ♦6 ♣K643 \_1♠\_\_
2. ♠A87 ♥KQJ103 ♦87 ♣J73 \_Pass\_\_
3. ♠QJ5432 ♥K42 ♦A76 ♣4 \_1♠\_\_
4. ♠8 ♥Q3 ♦KQ10543 ♣K754 \_2♦\_\_
5. ♠A4 ♥KJ4 ♦KJ3 ♣K10973 \_1NT\_\_
6. ♠873 ♥1098 ♦7 ♣AJ10542 \_Pass\_\_
7. ♠AK542 ♥A854 ♦Q74 ♣3 \_1♠\_\_
8. ♠J107543 ♥A75 ♦Q54 ♣3 \_Pass\_\_
9. ♠6 ♥K74 ♦AQJ1086 ♣A62 \_2♦\_\_
10. ♠K85432 ♥J43 ♦742 ♣4 \_Pass\_\_

- Lesson Plan Title:** Week 7 Lesson 1 - Math through Games
- Beginning Bridge:** Preemptive Bids
- Concept/Topic:** To teach math in the real world.
- Standards Addressed:** Communication 1. Organize and consolidate their mathematical thinking through communication.
- General Goal(s):** To teach math using bridge.
- Specific Objectives:** To learn the use of Preemptive bids.
- Required Materials:** Paper  
Pencil  
Notebook  
WK 7 LP 1.1 Practice Sheet -Preemptive Bids (attached)  
Hand Records 7.1.1, 7.1.2, 7.1.3, and 7.1.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 7.1.1, 7.1.2, 7.1.3, and 7.1.4.

**Anticipatory Set (lead-in):**

- Briefly review last week's lessons.
- Last week we learned some methods for competing in the auction when we had good hands. Now we are going to become familiar with ways to disrupt our Opponents' bidding when we don't have strong hands, but we do have long suits.

**Step-by-step Procedures:**

1. Sometimes you get a really nice suit dealt to you, maybe as many as 6, 7, or 8 cards in a single suit, but you have hardly any HCP to go with it. It is time to put on the boxing gloves and come out swinging. If you have a good long suit and very few HCP, there is a good chance the opponents are short in that suit. There is an even better chance they have lots of HCP and a fit in another suit.
2. You are trying to make it very difficult for them to bid by eating up their bidding room. Cause havoc! Make a preemptive strike!

3. Basic Concept:
  - With a decent 6 card suit: Preempt (Open) at the 2 level
  - With a decent 7 card suit: Preempt (Open) at the 3 level
  - With a decent 8 card suit: Preempt (Open) at the 4 level
  - With a bad suit: Wait until partner bids and then show your suit.
  
4. A decent suit is one that has two of the top three honors or three of the top five honors. The more the better.
  
5. A hand to preempt with has less than opening points, somewhere around 5 to 10 HCP with most of the points located in your long suit.
  
6. The basic message of a preemptive bid is this:
 

If my suit is trump, I can take a lot of tricks. If anything else is trump, my hand is pretty worthless.
  
7. Do not preempt with lots of HCP. If you preempt, your partner will think you have a weak hand and even with a strongish hand partner might decide not to bid. This could cause your side to miss a game. If you've got 11 or 12 HCP and a 7 card suit open one of that suit and then rebid the suit. Good hands don't preempt – only weak hands preempt.
  
8. Don't preempt with good defensive values outside your suit. If you have most of your points located in side suits, you'll just have to be patient and hope to enter the auction later.
  
9. Don't preempt with length in another major suit or strength in other suits. Suppose you've got six great diamonds and four little hearts and three little spades. You'd like to bid 2♦ as a preemptive bid. DON'T! You and your partner might just have a game in one of the majors. Be patient. Partner may open. If not, you may be able to overcall later.
  
10. When you preempt, you are undoubtedly putting yourself at some risk. In fact, a preemptive bidder doesn't really expect to make his contract! He hopes he'll only go set one or two tricks at most. If his partner shows up with a couple of good cards he might even make it. So why make the bid expecting to go set? Your hope is that you will only go down a small amount compared to the amount the opponents will score if they can make game or slam.

11. Since you have some familiarity with scoring, you can understand the popularity of preemptive bids. Remember that a preemptive hand is a weak hand with a very long suit. Suppose you are Not Vulnerable and the opponents are Vulnerable. If you Open 3♠ and they double you and you go set three tricks, you will lose 500 points. But if the Opponents can make 4♥, you would lose 620 points. If they can make a small slam, you would lose 1430 points! However, if you bid high early you might make it hard for them to discover their fit or they may not find their game or slam.
12. Preempts can also be useful as overcalls when the Opponents open the bidding. You must skip a level of bidding when you overcall to indicate that you have a preemptive hand. This is call a Weak Jump Overcall. You can see from the penalties scale that making Non-Vulnerable preemptive bids is a lot safer than making Vulnerable ones.
13. After partner preempts, what are my choices as Responder? Partner's message should be loud and clear. Partner has a good long suit and at most one decent outside card. From there you have to decide where you want to go.
14. With a weak hand and at least three trumps for partner, you might think about adding to the preempt. Together you can really take all the bidding room away from the opponents and leave them guessing big time. Try a jump raise with more than three card support, especially if your hand is weak.
15. With a really good hand that has lots of tricks in the side suits you can raise partner to game. You don't need much trump support – the preemptive bidder has that covered. You need to be able to help with the side suit tricks since partner has no strength there. Preempts are about how many tricks your side can take, not about how many points you have. Aces and Kings in partner's short suits and honor cards in partner's long suits are indicators that your side might be able to make game.
16. If partner preempts in a minor suit and you have a good hand with a fit for partner's minor consider if 3NT might be a possible contract. You would need to have stoppers in the remaining three suits, a fit with partner and around 15 HCP to consider that your side might be able to make game in NT.
17. Most of the time you'll have a mediocre hand with something like 8-11 HCP and little trump support. Now's the time to Pass. Your few good cards might help partner make his bid. If the opponents bid, let them win the auction. Maybe they'll bid too low, maybe too high. Maybe they won't find their best suit. Just because we preempted in an auction doesn't mean we want to win the auction. Our primary goal is to interfere with opponents' communication.

18. What if you are short in partner's suit? Don't try to rescue partner. Remember that if partner has seven cards in one suit, then he only has six other cards split between the remaining three suits. Partner is very unlikely to have a fit for any long suit you might have. Partner can survive playing a 6-1 or even a 6-0 trump suit. If you bid, partner will bid again – your bid is forcing – and you'll most likely make matters worse.
19. Review with Students WK7 LP 1.1 Practice Sheet - Preemptive Bidding.
20. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand (#4), gather up the tricks into a single deck. DO NOT SHUFFLE. Just cut the cards and deal them out three at a time to each player. This method tends to create very distributional hands with long suits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK7 LP 1.1 Practice Sheet – Preemptive Bidding

Your RHO has passed and it is your bid. What do you bid with the following hands?

1. ♠ KQ109642 ♥ 743 ♦ 8 ♣ Q8
2. ♠ 3 ♥ AKJ8543 ♦ 1095 ♣ 54
3. ♠ KJ109843 ♥ J10 ♦ 953 ♣ 8
4. ♠ 3 ♥ 42 ♦ AKJ109742 ♣ 32
5. ♠ AQ109532 ♥ A43 ♦ 62 ♣ 3
6. ♠ 64 ♥ 832 ♦ QJ95432 ♣ 9
7. ♠ KQJ109754 ♥ 532 ♦ 3 ♣ 6
8. ♠ T9 ♥ 542 ♦ AQJ109643 ♣ Void

Partner Opens 3♥. What do you bid?

9. ♠ A4 ♥ K743 ♦ KJ109543 ♣ Void

Partner Opens 4♠. What do you bid?

10. ♠ Void ♥ KQJ10943 ♦ K4 ♣ J984

Partner Opens 3♦. What do you bid?

11. ♠ AQ4 ♥ KJ4 ♦ QJ42 ♣ A43

Partner Opens 3♠. What do you bid?

12. ♠ KJ32 ♥ 653 ♦ 3 ♣ AQ742

## WK7 LP 1.1 Practice Sheet – Preemptive Bidding

### Suggested Answers

1. 3♠
2. 3♥
3. 3♠ 3S nonvulnerable vs. vul. Otherwise, Pass
4. 4♦ You have eight diamonds, Bid ‘em all!!
5. 1♠ Plan to rebid 4S. If Partner is a passed hand, open 4♠, as slam is unlikely. If partner doesn’t have enough winners for you to make 4♠, the Opponents surely have a game somewhere.
6. Pass Too weak even to preempt.
7. 3♠ At favorable vulnerability, bid 4♠!!
8. 4♦ We might make 5, or the opponents may overbid and we can beat them. Let partner decide.
9. 4♥ I expect to make this one. Partner can ruff his club losers, and lose perhaps one spade and one diamond.
10. Pass Partner figures to have 8 spades. You have no Aces, so slam is out of the question.
11. 3NT You surely have 7 running diamonds and two outside aces, plus potential for several overtricks. 3NT scores better than 5 of a minor. Even with this beast of a hand, slam is probably unlikely.
12. 4♠ This bid is a bit of a gamble. 3♠ is odds on to make, so I might Pass 3♠ if I was having a good game otherwise.

## Hand Records 7.1.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice bidding, responding to, and playing Preemptive hands.*

#### **Board 7.1.1**

North Deals

None Vul

	♠ A Q J 10 9 8 7		
	♥ 8 3		
	♦ 6		
	♣ J 10 7		
♠ 2		♠ K 5	
♥ 7 5 2		♥ K J 4	
♦ A J 9		♦ Q 10 8 5 4	
♣ A Q 6 5 3 2		♣ K 9 8	
	♠ 6 4 3		
	♥ A Q 10 9 6		
	♦ K 7 3 2		
	♣ 4		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	3 ♠	Pass	4 ♠
Pass	Pass	Pass	

North Opens 3♠ with 7 spades and four of the top five honors.

South Raises to 4♠ as they have a fit in spades, a singleton and an Ace in a side suit.

## Hand Records 7.1.1-4

### Pg. 2

#### Board 7.1.2

East Deals

N-S Vul

	♠ K 10 5		
	♥ 9 8 5 3		
	♦ A 10 2		
	♣ K J 6		
♠ A Q 9 8 6	<div style="display: inline-block; border: 1px solid black; padding: 5px; text-align: center;">             N W     E S           </div>	♠ 3	
♥ A 6 4		♥ 10 7 2	
♦ 3		♦ K Q J 9 7 6 5	
♣ 9 8 7 3		♣ 10 5	
	♠ J 7 4 2		
	♥ K Q J		
	♦ 8 4		
	♣ A Q 4 2		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		3 ♦	
Pass	Pass		Pass

East opens 3♦ with a good 7 card suit and a weak hand.

West does not have a fit in diamonds and knows that partner probably does not have a fit in spades so passes.

#### Board 7.1.3

South Deals

E-W Vul

	♠ Q 10 8		
	♥ Q 2		
	♦ J 6 5 3		
	♣ K 9 7 2		
♠ K 7 3 2	<div style="display: inline-block; border: 1px solid black; padding: 5px; text-align: center;">             N W     E S           </div>	♠ A 9 6 5	
♥ 10 3		♥ 5	
♦ A K 2		♦ Q 10 7 4	
♣ Q 10 8 5		♣ A J 6 3	
	♠ J 4		
	♥ A K J 9 8 7 6 4		
	♦ 9 8		
	♣ 4		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			4 ♥
Pass	Pass	Pass	

South opens 4♥ with eight good hearts and a weak hand. Even though they will go down two tricks as you can see East/West could make 4♠ and would have bid game had they had an opportunity to communicate.

## Hand Records 7.1.1-4

## Pg. 3

**Board 7.1.4**

West Deals

Both Vul

♠ 5	♠ J 10 4 2	♠ K Q 9 3			
♥ 7	♥ Q 9 8 6	♥ A 10 4			
♦ J 9 8 3	♦ A K Q 5	♦ 10 7 6			
♣ K Q 10 8 7 5 2	♣ 4	♣ A J 6			
<table style="border: 1px solid black; background-color: #336633; color: white; width: 100px; height: 50px; margin: auto;"> <tr><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">W     E</td></tr> <tr><td style="text-align: center;">S</td></tr> </table>			N	W     E	S
N					
W     E					
S					
♠ A 8 7 6	♠ A 8 7 6	♠ A 8 7 6			
♥ K J 5 3 2	♥ K J 5 3 2	♥ K J 5 3 2			
♦ 4 2	♦ 4 2	♦ 4 2			
♣ 9 3	♣ 9 3	♣ 9 3			

*West*  
3 ♣

*North*  
Pass

*East*  
Pass

*South*  
Pass

West has a good 7 card club suit with three of the top five honors so opens 3♣.

Even though East has a good fit for his partner he should pass 3♣ as he doesn't have enough tricks for them to make 5♣ and has some good defensive values should the opponents decide to bid.

- Lesson Plan Title:** Week 7 Lesson 2 - Math through Games
- Beginning Bridge:** Weak Two Bids
- Concept/Topic:** To teach math through games.
- Standards Addressed:** Reasoning and Proof 2. Make and investigate mathematical conjectures.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To teach the use of Weak Two Bids.  
To teach how to apply the Rule of 2, 3 and 4 when Preempting.
- Required Materials:** Paper  
Pencil  
Notebook  
WK7 LP 2.1 Practice Sheet - Weak Two Bids (attached)  
Hand Records 7.2.1, 7.2.2, 7.2.3, and 7.2.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 7.1.1, 7.1.2, 7.1.3, and 7.1.4.

**Anticipatory Set (lead-in):**

- Briefly review previous lesson on Preempts.
- Today we will learn more about the use of Preempts, and we will learn a technique that may help you to judge when to preempt, and when not to.

**Step-by-step Procedures:**

1. Preempts at the two level are called “Weak Two Bids.” They get a special name because, for many years, all opening two bids were very strong hands. However, experience has proven that weak two bids are a better use for these two bids. We don’t need the entire two level for monster hands that come up maybe once every 25 hands. Weak hands with long suits come up much more often.
2. The exception bid is an opening 2♣ bid. We need some bid to show the really monster hands to Partner, so he/she knows to keep the auction open even with ZERO points. As you will see later this week, we reserve the 2♣ for virtually all monster hands of 22 HCP or more. So an opening 2♣ bid is super strong, and opening bids of 2♦, 2♥, and 2♠ are weak two bids.

3. As we saw in the last lesson, the Weak Two Bidder's Partner, has several choices in his response.
  - Raise the preempt with a weak hand and at least three trumps for partner. You might even jump raise with more than three card support. Your primary goal is to interfere with the Opponents' communication.
  - Raise partner to game with a really good hand that has lots of tricks in the side suits.
  - Pass with a mediocre hand with something like 8-11 HCP and little trump support. If the opponents bid, let them win the auction.
  - Pass if you are short in partner's suit. Don't try to rescue partner, you'll most likely make matters worse.
  
4. When you Preempt, you are putting yourself at risk. You don't really expect to make your contract. You hope you only go set one or two tricks. What you don't want to happen is - you preempt, the Opponents double your bid, and you go set more than the value of their game. If you bid 3♥, they double, and you go down 3 Vulnerable, you lose 800 points. Even if the opponents have a Vulnerable game, they would only reap 600 or 620 or so.
  
5. **The Rule of 2-3-4** is a simple technique that may help you avoid one of those catastrophes. You count your "reasonably sure" winners. For example, if you hold ♥ AKxxxx and are thinking of preempting, you can count six reasonably sure winners. You would have to be very unlucky not to win six heart tricks. The Rule of 2-3-4 says: To obtain the safe level to Preempt at, add 2 to your winners at adverse Vulnerability, add 3 to your winners at equal Vulnerability, and add 4 to your winners at Favorable Vulnerability. (*Write the chart on the board*)

Vulnerability		<u>Level to Preempt at</u>
<u>You</u>	<u>Opponents</u>	
• Vul	Not Vul	Add <b>2</b> to your reasonably sure winners.
• Vul	Vul	Add <b>3</b> to your reasonably sure winners.
• Not Vul	Not Vul	Add <b>3</b> to your reasonably sure winners.
• Not Vul	Vul	Add <b>4</b> to your reasonably sure winners.

6. The Rule of 2-3-4 presumes the Preempter's partner is going to provide one trick for him/her. That should be enough so you don't go set doubled more than the value of Opponents' game.
  
7. You can apply the Rule of 2-3-4 to any hand you might want to preempt with, even a Weak Two bid kind of hand. Sometimes you might even decide to make a Weak Two Bid with a seven card suit, because the Rule says you don't have enough reasonably sure winners to bid at the three level.

8. Review with Students WK7 LP 2.1 Practice Sheet - Weak Two Bids.
9. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand (#4), gather up the tricks into a single deck. DO NOT SHUFFLE. Just cut the cards and deal them out three at a time to each player. This method tends to create very distributional hands with long suits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A

## WK7 LP 2.1 Practice Sheet – Weak Two Bids

### Pg. 1

Let's look at some potential weak two bid examples;

1. Hand 1

♠ KQ10642  
♥ 743  
♦ 8  
♣ Q86

Open 2♠ in 1st, 2nd, or 3rd seat. We never, ever preempt in 4th seat if there have been three passes before us. Who would we be preempting? Just go ahead and pass. The opponents must have more HCP than we do. Don't let them find out!

2. Hand 2

♠ KQJ1064  
♥ 743  
♦ 8  
♣ 862

Open 2♠ in any of first three seats. Even vulnerable this is a great suit. You should be able to take five sure tricks with spades as trump and probably not a single trick on defense.

3. Hand 3

♠ KQ10642  
♥ 9743  
♦ Void  
♣ A86

Pass in first two seats. Partner might have hearts and your hand would be great support for a game in hearts. In third seat, if partner has passed, go ahead and preempt 2♠. You can't have enough points for game even if there is a heart fit.

## WK7 LP 2.1 Practice Sheet – Weak Two Bids Pg. 2

### 4. Hand 4

♠ KJ9543  
♥ Void  
♦ A864  
♣ Q843

Pass in first two seats. Too many points outside your long suit gives you some real defensive values. Your own suit lacks a top honor. If partner has passed and so does RHO, you can probably make the 2♠ preempt.

### 5. Hand 5

♠ 2  
♥ Q98  
♦ 764  
♣ KQ7542

You'd like to bid 2♣ as a preempt but don't do it. We reserve the 2♣ bid for describing monster hands. If you really would like to preempt on this hand, you'll have to lie and bid 3♣. Partner will expect you to have seven clubs. It is a reasonable lie if Partner has already passed and you are Not Vulnerable.

### 6. Hand 6

♠ 4  
♥ QJ9764  
♦ A63  
♣ A72

Open 1♥. With 2 aces outside your long suit, you're too good to preempt. Partner will probably bid 1♠ and you can make the simple rebid of 2♥ to let partner know you've got a minimum hand with at least one extra heart.

## Hand Records 7.2.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice bidding and playing Weak Two Bids. North, East, South, and West should each have a chance to be declarer.*

#### **Board 7.2.1**

North Deals

None Vul

	♠ 6 4		
	♥ K 8		
	♦ A Q 10 6 3 2		
	♣ 8 5 2		
♠ A K 8 5	<div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">             N W     E S           </div>	♠ Q 10 7 3	
♥ 10 7 2		♥ A 9 6 3	
♦ K J 4		♦ 7 5	
♣ 10 6 3		♣ K J 7	
	♠ J 9 2		
	♥ Q J 5 4		
	♦ 9 8		
	♣ A Q 9 4		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♦	Pass	Pass
Pass			

2♦ is a weak two bid showing a good six card suit and 5-10 points.

## Hand Records 7.2.1-4 Pg. 2

**Board 7.2.2**

East Deals

N-S Vul

	♠ Q J 9 8 3 2										
	♥ 9										
	♦ A Q 9 3										
	♣ K 3										
♠ 6	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ 10 4
	N										
W		E									
	S										
♥ A 10 5 3		♥ K Q 8 7 6 2									
♦ 6 4 2		♦ K J 5									
♣ A 7 6 4 2		♣ J 10									
	♠ A K 7 5										
	♥ J 4										
	♦ 10 8 7										
	♣ Q 9 8 5										

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
4 ♥	Pass	2 ♥	Pass
		Pass	Pass

East's 2♥ bid shows a good six card suit and 5-10 points.

West with a singleton, four trumps and an outside Ace bids game.

**Board 7.2.3**

South Deals

E-W Vul

	♠ 10 9 6 5										
	♥ K 6 4 2										
	♦ Q 10 3										
	♣ 7 6										
♠ 3	<table style="border: 1px solid black; width: 40px; height: 40px; margin: auto; text-align: center; border-collapse: collapse;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>		N		W		E		S		♠ A 4
	N										
W		E									
	S										
♥ A J 10 5		♥ Q 9 3									
♦ K 2		♦ A J 9 8 4									
♣ Q J 10 8 5 2		♣ A 4 3									
	♠ K Q J 8 7 2										
	♥ 8 7										
	♦ 7 6 5										
	♣ K 9										

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	3 ♠	Pass	2 ♠
Pass			Pass

South opens 2♠ showing a good six card suit and 5-10 points.

North raises to 3♠ with a good spade fit, even though he doesn't have a good hand. This is an attempt to make it hard for East/West to communicate.

## Hand Records 7.2.1-4

### Pg. 3

**Board 7.2.4**

West Deals

Both Vul

♠ 9 4	♠ K Q 7 6 3	♠ A 10 5				
♥ 9 6 4	♥ J 8	♥ A 5 3 2				
♦ A Q 8 7 4 2	♦ 9 3	♦ K J 10				
♣ J 2	♣ 10 9 8 4	♣ A 6 3				
<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center;"> <table style="border-collapse: collapse; margin: 0 auto;"> <tr><td style="padding: 2px 5px;">N</td></tr> <tr><td style="padding: 2px 5px;">W</td><td style="padding: 2px 5px;">E</td></tr> <tr><td style="padding: 2px 5px;">S</td></tr> </table> </div>			N	W	E	S
N						
W	E					
S						
	♠ J 8 2					
	♥ K Q 10 7					
	♦ 6 5					
	♣ K Q 7 5					
<i>West</i>	<i>North</i>	<i>East</i>				
2 ♦	Pass	3 NT				
Pass	Pass	<i>South</i>				
		Pass				

2♦ shows a good six card suit with 5-10 points.

Since his diamonds are so strong, East knows that West must have the ♦AQ and that they will have six diamond tricks in NT. Since he has three Aces, East can count nine tricks in no trump.

- Lesson Plan Title:** Week 7 Lesson 3 - Math through Games
- Beginning Bridge:** Preemptive Jump Overcalls
- Concept/Topic:** To teach math through games.
- Standards Addressed:** Reasoning and Proof 1. Recognize reasoning and proof as fundamental aspects of mathematics.
- General Goal(s):** To teach math.
- Specific Objectives:** To learn the use of Preemptive Jump Overcalls.
- Required Materials:** Paper  
Pencil  
Notebook  
WK7 LP 3.1 Practice Sheet - Preemptive Jump Overcalls (attached)  
Hand Records 7.3.1, 7.3.2, 7.3.3, and 7.3.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 7.3.1, 7.3.2, 7.3.3, and 7.3.4.

**Anticipatory Set (lead-in):**

- Briefly review the last two lessons on preempts.
- We have seen that Preemptive Opening bids can disrupt the Opponents to our advantage. Good news! We can also apply some preempting techniques when the Opponents open the auction.

**Step-by-step Procedures:**

1. If your RHO opens the bidding, you can still preempt. A jump overcall carries the same message as an opening preemptive bid. As before, you're telling your partner you've got a great suit with little overall defensive value.
2. **The Rule of 2-3-4** applies to Preemptive Jump Overcalls as well as Opening Preempts. To obtain the safe level to Preempt at, add 2 to your winners at adverse Vulnerability, add 3 to your winners at equal Vulnerability, and add 4 to your winners at Favorable Vulnerability. (*Write the chart on the board*)

Vulnerability		
<u>You</u>	<u>Opponents</u>	<u>Level to Jump Overcall at</u>
• Vul	Not Vul	Add 2 to your reasonably sure winners.
• Vul	Vul	Add 3 to your reasonably sure winners.
• Not Vul	Not Vul	Add 3 to your reasonably sure winners.
• Not Vul	Vul	Add 4 to your reasonably sure winners.

3. The Advancer, Preemptive Jump Overcaller's Partner, bids very much like Overcaller had opened with a preempt.
  - Raises or jump raises with length in Overcaller's suit. Your primary goal is to interfere with the Opponents' communication.
  - Raises partner to game with a really good hand that has lots of tricks in the side suits. Very unlikely, but it could happen.
  - Passes with a mediocre hand. If the opponents bid, let them win the auction.
  - Passes if short in partner's suit. Don't try to rescue partner.
4. Review with Students WK7 LP 3.1 Practice Sheet - Preemptive Jump Overcalls.
5. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand #4, gather up the tricks into a single deck. DO NOT SHUFFLE. Just cut the cards and deal them out three at a time to each player. This method tends to create very distributional hands with long suits.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK7 LP 3.1 Practice Sheet – Preemptive Jump Overcalls Pg. 1

If RHO opens 1♣:

1. Hand 1

♠ KQ10652

♥ 865

♦ 83

♣ Q74

Overcall 2♠. Lots of spades, no defense, and I can guarantee your LHO will glare at you!

2. Hand 2

♠ KQJ10652

♥ 865

♦ 8

♣ 74

Overcall 2♠ vulnerable, but go ahead and bid 3♠ nonvulnerable. Keep the risk of going set vulnerable and doubled to a minimum.

3. Hand 3

♠ 6

♥ AQJ107543

♦ 5

♣ J87

Overcall 4♥. The opponents may have a game or slam in spades. Make it tough for them to talk to each other.

4. Hand 4

♠ 4

♥ QJ97643

♦ A6

♣ A72

Overcall 1♥. With 2 aces outside your long suit you're too good to preempt either as an opening bid or as an overcall.

## WK7 LP 3.1 Practice Sheet – Preemptive Jump Overcalls Pg. 2

5. Hand 5

♠ 6

♥ KQ109542

♦ 5

♣ J874

Overcall 3♥. You have a very weak distributional hand

6. Hand 6

♠ A10953

♥ 42

♦ 10975

♣ 5

Overcall 2♠. The opponents may have a game in hearts or clubs. Let your partner know that you have a good long

The opponents open 1♦ and your partner bids 3♥. What do you bid?

7. Hand 7

♠ 6

♥ Q1043

♦ 532

♣ AJ875

Raise to 4♥. The opponents may have a game or slam in spades. Make it tough for them to talk to each other.

8. Hand 8

♠ AQ10

♥ 42

♦ AJ87

♣ KJ103

Pass. You are unlikely to be able to make game and your opponents may bid again and give you a chance to set them.

## Hand Records 7.3.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice Preemptive Jump Overcalls. North, East, South, and West should in turn be dealer and have an opening hand. East, West, South, and North are Overcallers and in turn have hands suitable to make a Preemptive Jump Overcall. Hands can test both Overcaller and Advancer to make the right bids.*

#### **Board 7.3.1**

North Deals

None Vul

	♠ 8 4 2											
	♥ A Q 10 9 5											
	♦ Q 7 5											
	♣ A K											
♠ A Q 10 3	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <table style="border-collapse: collapse; text-align: center; width: 40px; height: 40px;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table> </div>		N		W		E		S		♠ 6 5	
	N											
W		E										
	S											
♥ K J 3 2		♥ 8										
♦ J		♦ A K 10 9 8 6 2										
♣ 6 5 4 3		♣ J 10 8										
	♠ K J 9 7											
	♥ 7 6 4											
	♦ 4 3											
	♣ Q 9 7 2											
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>									
	1 ♥	3 ♦	Pass									
Pass	Pass											

East's 3♦ bid shows seven diamonds and a weak hand.

## Hand Records 7.3.1-4

### Pg. 2

#### Board 7.3.2

East Deals

N-S Vul

<p>♠ J 9 4 ♥ J 6 3 ♦ A 8 5 3 ♣ 9 5 4</p>		<p>♠ A 10 6 ♥ A 9 4 ♦ J 9 2 ♣ K 10 8 6</p>	<p>♠ K Q 7 5 ♥ 2 ♦ K 10 7 ♣ A Q J 3 2</p>
		<p>♠ 8 3 2 ♥ K Q 10 8 7 5 ♦ Q 6 4 ♣ 7</p>	
<p><i>West</i></p>	<p><i>North</i></p>	<p><i>East</i></p>	<p><i>South</i></p>
<p>Pass</p>	<p>3 ♥</p>	<p>1 ♣ Pass</p>	<p>2 ♥ Pass</p>
<p>Pass</p>			

South's 2♥ bid shows a good six card suit and a weak hand.

North continues the preempt by raising to 3♥ to make it difficult for East/West to communicate.

#### Board 7.3.3

South Deals

E-W Vul

<p>♠ A K J 10 9 5 4 ♥ 7 6 2 ♦ 9 2 ♣ J</p>		<p>♠ 8 7 ♥ J 5 4 ♦ A 10 6 ♣ K 10 9 7 6</p>	<p>♠ Q 3 ♥ K 10 3 ♦ K 8 5 3 ♣ Q 8 5 2</p>
		<p>♠ 6 2 ♥ A Q 9 8 ♦ Q J 7 4 ♣ A 4 3</p>	
<p><i>West</i></p>	<p><i>North</i></p>	<p><i>East</i></p>	<p><i>South</i></p>
<p>3 ♠</p>	<p>Pass</p>	<p>Pass</p>	<p>1 ♦ Pass</p>

West's 3♠ bid shows a seven card suit and a weak hand.

## Hand Records 7.3.1-4 Pg. 3

**Board 7.3.4**  
West Deals  
Both Vul

	♠ 9 2		
	♥ 9		
	♦ 9 3		
	♣ A Q 8 6 5 4 3 2		
♠ K J 8 4	♠ Q 10 5		
♥ A K Q 6 5 3	♥ J 7 4	N	
♦ K 8 5	♦ Q J 10 7 4	W	E
♣ —	♣ J 7	S	
	♠ A 7 6 3		
	♥ 10 8 2		
	♦ A 6 2		
	♣ K 10 9		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
1 ♥	4 ♣	Pass	5 ♣
Pass	Pass	Pass	

North bids 4♣ which shows a good eight card suit.

South raises to 5♣ because he has a good fit with partner and little defensive strength against 4♥.

- Lesson Plan Title:** Week 7 Lesson 4 - Math through Games
- Beginning Bridge:** Opening Very Strong Hands - 2 Clubs
- Concept/Topic:** To teach math through games.
- Standards Addressed:** Problem Solving 1. Build new mathematical knowledge through problem solving.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To Learn How to Open Very Strong Hands, typically containing 21 or more HCP or equivalent playing strength in high cards and distribution.
- Required Materials:** Paper  
Pencil  
Notebook  
WK7 LP 4.1 Practice Sheet - Strong Two Clubs Bids (attached)  
Hand Records 7.4.1, 7.4.2, 7.4.3, and 7.4.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 7.4.1, 7.4.2, 7.4.3, and 7.4.4.

**Anticipatory Set (lead-in):**

- We touched briefly on the 2♣ opener when we discussed Weak Two bids a few lessons ago.
- Today we learn how to open the bidding when we have a very strong hand.

**Step-by-step Procedures:**

1. Ask students to suppose they got dealt the following example hand: (*Write the following hand on the blackboard.*):

♠ AKQ10753 ♥ AK6 ♦ VOID ♣ KQ4

21 HCP and a void! What would their opening bid be?

2. This hand can probably take 10 tricks all by itself! (7 spade tricks, 2 hearts, and at least 1 club). If you open 1♠, Partner might Pass, and you don't want partner to pass any bid short of game. If partner has even a couple of useful cards like the ♣A and ♥Q, we might take all 13 tricks. To announce to Partner that you have a very powerful hand, and tell him he/she cannot Pass your Opening bid even if he/she has no points at all, you open 2♣. The 2♣ bid is artificial, and does not promise any clubs. The 2♣ bid simply announces a huge hand, and forces Partner to keep the bidding open until you have told your story.
3. Put the following on the board, and have students copy into notebook:  
  
Open 2♣ when you've got one of the following types of hands:
  - 22+ HCP that are balanced (better than a 2NT opening bid)
  - 21+ HCP in an unbalanced hand, especially if the long suit is a major
  - 8 ½ or 9 tricks in your own hand
4. Review with Students WK7 LP 4.1 Practice Sheet - Strong Two Clubs Bids.
5. Direct the students to look at the hands that dealer will be opening on each of the Handsets and the Responder's hand. As a group discuss what they would like as the final contract. They can then play the hand if time allows.
6. Collect notebook at end of class.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand #4, take the aces and kings out of the deck. Shuffle the remainder and deal 6 cards to each of the other three players, but not the dealer. Then shuffle the Aces and Kings into the remainder of the deck, and deal 6 cards to the dealer. Finally, deal the remaining cards to all four players in turn. This method tends to create hands where the dealer has a LOT of points. Dealer often has a 2♣ opener.

**Assessment Based on Objectives:** notebook, observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK7 LP 4.1 Practice Sheet – Opening 2♣ Hands

What do you open with the following hands?

1. ♠ A ♥ AKJ7632 ♦ A6 ♣ KQJ

Open 2♣ and rebid the heart suit.

2. ♠ AQJ ♥ KQJ10 ♦ KQJ ♣ A85

Open 2♣ and rebid 2NT, showing 22-24 HCP

3. ♠ AKQ10753 ♥ AK6 ♦ -- ♣ KQ4

Open 2♣ and rebid the spade suit. This is the example from our lesson blackboard.

4. ♠ A8 ♥ AKJ7 ♦ AJ6 ♣ KJ108

Don't open 2♣. Open 2NT with a balanced 20 or 21 HCP (we will see this in a later lesson)

5. ♠ AQ ♥ 7 ♦ AKQ ♣ AKJ10874

Open 2♣ and rebid 3♣.

6. ♠ A83 ♥ AKQJ7 ♦ AKJ6 ♣ 8

Open 2♣ and rebid hearts.

## Hand Records 7.4.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice Strong Two Clubs Opening Bids. North, East, South, and West should in turn be dealer and have an opening Two Clubs hand. Hands can test both Opener and responder to make the right bids.*

#### **Board 7.4.1**

North Deals

None Vul

	♠ A K Q 5 2		
	♥ 2		
	♦ A K 4 2		
	♣ A K 6		
♠ 8 7 6	<div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">             N W     E S           </div>	♠ 9 4	
♥ Q 10 8		♥ J 7 6 3	
♦ Q J 10		♦ 9 8 5 3	
♣ Q J 8 3		♣ 10 9 5	
	♠ J 10 3		
	♥ A K 9 5 4		
	♦ 7 6		
	♣ 7 4 2		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♥
Pass	2 ♠	Pass	4 ♠
Pass	Pass	Pass	

North opens 2♣ showing 22+ points. South bids 2♥ showing a five card suit with two of the top three honors.

North rebids 2♠ to show his suit.

South raises to game as they have exactly what they have already shown partner with their first bid.

## Hand Records 7.4.1-4

## Pg. 2

**Board 7.4.2**

East Deals

N-S Vul

	♠ 10 8 7		
	♥ 7 4		
	♦ K Q 6 2		
	♣ Q 9 5 4		
♠ 9 4 3	<div style="display: inline-block; border: 1px solid black; padding: 5px; text-align: center;">           N W     E S         </div>	♠ A K Q 5	
♥ J 10 5		♥ A K Q 8 6	
♦ J 9 7 5 3		♦ 10 4	
♣ A 7		♣ K J	
	♠ J 6 2		
	♥ 9 3 2		
	♦ A 8		
	♣ 10 8 6 3 2		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		2 ♣	Pass
2 ♦	Pass	2 ♥	Pass
3 ♥	Pass	4 ♥	Pass
Pass	Pass		

East opens 2♣ showing 22+ points. West does not have a good five card major with two of the top three honors so West bids 2♦ (Waiting).

East shows his suit by bidding 2♥.

West has a heart fit and six points so raises to 3♥ and with nothing extra, East bids game.

## Hand Records 7.4.1-4

### Pg. 3

#### Board 7.4.3

South Deals

E-W Vul

<p>♠ 10 4 3 ♥ K 6 ♦ J 9 5 4 ♣ Q 8 7 2</p>	<p>♠ J 9 7 ♥ A 10 7 4 2 ♦ 10 7 6 3 ♣ 6</p>	<p>♠ Q 8 5 2 ♥ Q 9 8 5 3 ♦ A 2 ♣ 5 3</p>	
			
<p>♠ A K 6 ♥ J ♦ K Q 8 ♣ A K J 10 9 4</p>			
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	2 ♦	Pass	2 ♣
Pass	3 ♥	Pass	3 ♣
Pass	Pass	Pass	3 NT

South opens 2♣ showing 22+ points.

North bids two diamonds since he does not have a five card suit with two of the top three honors.

South shows clubs. North now shows that he has a heart suit. South bids game in NT.

## Hand Records 7.4.1-4

### Pg. 4

**Board 7.4.4**

West Deals

Both Vul

♠ A K Q 9	♠ 7 6 2	♠ 3
♥ A Q J 10 7 6	♥ K 5 3	♥ 9 4 2
♦ A Q	♦ K J 5 2	♦ 9 4
♣ 4	♣ A 9 3	♣ K Q J 8 7 6 5

  

♠ J 10 8 5 4	♠ 3
♥ 8	♥ 9 4 2
♦ 10 8 7 6 3	♦ 9 4
♣ 10 2	♣ K Q J 8 7 6 5

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
2 ♣	Pass	3 ♣	Pass
3 ♥	Pass	4 ♥	Pass
Pass	Pass		

West opens 2♣ showing 22+ points.

East bids 3♣ showing a six card suit with two of the top three honors.

West bids 3♥ showing his suit. East raises to game. West passes with no club fit and a minimum for his 2♣ opener.

- Lesson Plan Title:** Week 7 Lesson 5 - Math through Games
- Beginning Bridge:** Weekly Review and Quiz – Week 7
- Concept/Topic:** To teach math through games.
- Standards Addressed:** Reasoning and Proof 4. Select and use various types of reasoning and methods of proof.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To teach responder's responsibilities and bidding rules.
- Required Materials:** Notebook  
Paper  
Pencil

**Anticipatory Set (lead-in):**

- Review week 7 lessons 1 – 4
  - Preemptive Bidding
  - Weak Two Bids
  - Preemptive Jump Overcalls
  - Opening Very Strong Hands - 2 Clubs

**Step-by-step Procedures:**

1. Give review quiz
2. Hand out cards
3. Students Shuffle, Deal, and Play hands
4. Give back notebook

**Plan for Independent Practice:** allow time to play hand

**Assessment Based on Objectives:** Week 7 quiz

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** After quiz, allow students to play bridge on the computer.

**Possible Connections to Other Subjects:** communication skills, L.A.

### Week 7 Lesson 5 Quiz (10 points)

What would you bid on the following hands? (10 points)

1. ♠ AQ10842 ♥ 73 ♦ 6 ♣ 8643 \_\_\_\_\_

2. ♠ 7 ♥ KQJ10753 ♦ 87 ♣ J73 \_\_\_\_\_

3. ♠ J9765432 ♥ K42 ♦ 3 ♣ 4 \_\_\_\_\_

4. ♠ 8 ♥ Q3 ♦ KQ10543 ♣ J754 \_\_\_\_\_

5. ♠ A4 ♥ KJ10764 ♦ KJ3 ♣ 73 \_\_\_\_\_

6. ♠ 873 ♥ 1098 ♦ 7 ♣ AQ10542 \_\_\_\_\_

7. ♠ K542 ♥ AJ10854 ♦ 74 ♣ 3 \_\_\_\_\_

8. ♠ Q107543 ♥ A75 ♦ 754 ♣ 3 \_\_\_\_\_

9. ♠ 6 ♥ 74 ♦ AQJ108643 ♣ 62 \_\_\_\_\_

10. ♠ K85432 ♥ J43 ♦ 742 ♣ 4 \_\_\_\_\_

**Week 7 Lesson 5 Quiz Answers**

What would you bid on the following hands? (10 points)

1. ♠ AQ10842 ♥ 73 ♦ 6 ♣ 8643 \_2♠\_
2. ♠ 7 ♥ KQJ10753 ♦ 87 ♣ J73 \_3♥\_
3. ♠ J9765432 ♥ K42 ♦ 3 ♣ 4 \_Pass\_
4. ♠ 8 ♥ Q3 ♦ KQ10543 ♣ J754 \_2♦\_
5. ♠ A4 ♥ KJ10764 ♦ KJ3 ♣ 73 \_1♥\_
6. ♠ 873 ♥ 1098 ♦ 7 ♣ AQ10542 \_Pass\_
7. ♠ K542 ♥ AJ10854 ♦ 74 ♣ 3 \_Pass\_
8. ♠ Q107543 ♥ A75 ♦ 754 ♣ 3 \_Pass\_
9. ♠ 6 ♥ 74 ♦ AQJ108643 ♣ 62 \_4♦\_
10. ♠ K85432 ♥ J43 ♦ 742 ♣ 4 \_Pass\_

- Lesson Plan Title:** Week 8 Lesson 1 - Math through Games
- Beginning Bridge:** Responding to a 2 Club Opening Bid
- Concept/Topic:** To learn to bid with competition.
- Standards Addressed:** Data Analysis and Probability 4. Understand and apply basic concepts of probability.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To Learn How to Open Very Strong Hands, typically containing 21 or more HCP or equivalent playing strength in high cards and distribution.
- Required Materials:** Paper  
Pencil  
Notebook  
WK8 LP 1.3 Handout - Two Clubs Bids and Responses  
WK8 LP 1.1 Practice Sheet - Responding to a Two Clubs Bid (attached)  
Hand Records 8.1.1, 8.1.2, 8.1.3, and 8.1.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 8.1.1, 8.1.2, 8.1.3, and 8.1.4.

**Anticipatory Set (lead-in):**

- We discussed opening 2♣ in the last lesson.
- Today we learn how to respond to an opening 2♣ bid by Partner.

**Step-by-step Procedures:**

1. An opening bid of 2♣ by your partner demands that you keep the bidding open at least one round no matter how bad your hand is. If your RHO bids, you can Pass with a bad hand, because Partner will get another chance to bid. Otherwise, you must bid something; you can not Pass.
2. Hand out to Students the Handout WK8 LP 1.3 Handout - Two Clubs Bids and Responses. They can use it to follow along in the lesson.

3. Here is a simple method Responder can use to answer a 2♣ Opener by Partner:
- 2♦ This is a conventional bid; and says nothing about diamonds. It is just a waiting bid, saying you don't have the hand strength or suit quality and length to make a stronger bid. Most of the time you will make this bid. Opener now has room to describe his hand some more.
  - 2♥, 2♠ These are the constructive responses. Each of these bids sends a positive message to partner. You have a good five card suit of your own. A good suit is one which contains two of the top three honors in the suit. Better translation: "We should be thinking about bidding slam! So tell me more about your hand..."
  - 3♣, 3♦ These are the constructive responses. Each of these bids sends a positive message to partner. You have eight or more HCP with a good six card suit of your own that contains two of the top honors. Better translation: "We should be thinking about bidding slam! So tell me more about your hand..."
4. Suppose Partner opens 2♣ and you make a waiting bid of 2♦. Opener then rebids 2♥ showing 21+ HCP with a good heart suit. What do you bid?
- 3♣ Responder's rebid of the cheapest minor suit at the three level is conventional, and shows a bust hand. It is called a "double negative." You have absolutely nothing, maybe zero HCP or a couple of Jacks. It does not promise clubs. Partner is on his own.
  - 4♥ With a fit in partner's suit and one possible trick for him/her, jump to game.
  - 3♥ With a fit for partner and 2 tricks or better, say a good 6 or 7 HCP, bid more slowly. The slower you go the more you have. The idea here is to leave room to explore slam possibilities with better hands.
  - 2♠, 3♦ If you bid a new suit of your own here, it shows values for game, but not a good suit. (You denied having a good 5 card major or 6 card minor when you bid 2♦.)
  - 2NT If you bid No Trump here, it denies a 3 card fit with partner, but promises at least enough points for game.

5. Once the bidding starts with 2♣, the partnership must bid game except in two cases:
  - Opener bids 2NT, showing a balanced 22-24. Responder can pass with a bust hand.
  - Responder rebids the cheaper minor (the “double negative”). Responder will pass at his next turn if Opener rebids his suit. If Opener has enough for game, he must bid a new suit or bid game at his next turn.
6. Tell students that, as they saw in the scoring summaries, if you bid to the six or seven level (slam) they get very large bonuses for taking that risk. Having a Strong Two Club Opening bid will sometimes allow you and your partner to get the information you need to decide that your hands are strong enough to take this risk. We will explore this idea later this week in more detail.
7. Review with Students WK8 LP 1.1 Practice Sheet - Two Clubs Bids and Responses.
8. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand #4, take the aces and kings out of the deck. Shuffle the remainder and deal 6 cards to each of the other three players, but not the dealer. Then shuffle the Aces and Kings into the remainder of the deck, and deal 6 cards to the dealer. Finally, deal the remaining cards to all four players in turn. This method tends to create hands where the dealer has a LOT of points. Dealer often has a 2♣ opener.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK8 LP 1.1 Practice Sheet – 2♣ Bids and Responses Pg. 1

These auctions might describe the hands that follow:

**Board 1**  
North Deals  
None Vul

♠ A Q  
♥ K Q J 10 8 6 4  
♦ A Q 10 8  
♣ —



♠ 9 4 3 2  
♥ 7 5 3  
♦ K 9 2  
♣ J 7 3

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♦
Pass	2 ♥	Pass	4 ♥
Pass	Pass	Pass	

With one trick, Responder jumps to game.

**Board 2**  
East Deals  
N-S Vul

♠ A Q  
♥ K Q J 8  
♦ K Q 10  
♣ A Q 6 5



♠ J 4 3 2  
♥ 7 5  
♦ J 7 6 3  
♣ K 4 2

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		Pass	Pass
Pass	2 ♣	Pass	2 ♦
Pass	2 NT	Pass	3 ♣
Pass	3 ♥	Pass	3 NT
Pass	Pass	Pass	

Responder bids 3♣, Stayman, and signs off in 3NT.

## WK8 LP 1.1 Practice Sheet – 2♣ Bids and Responses Pg. 2

**Board 3**  
North Deals  
None Vul

♠ A K 9 8 6 4  
♥ K  
♦ A J 9 5  
♣ A K



♠ J 7 5  
♥ A Q 7 6 5  
♦ Q 10 4  
♣ 6 5

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♥
Pass	2 ♠	Pass	3 ♠
Pass	6 ♠	Pass	Pass
Pass			

Responder shows values and a good suit, and then raises spades.

**Board 4**  
West Deals  
Both Vul

♠ A K  
♥ K Q J 9 8 7 6  
♦ A K 8  
♣ 6



♠ 9 7 6 4  
♥ 10 2  
♦ 7 4 3  
♣ 7 4 3 2

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
Pass	2 ♣	Pass	2 ♦
Pass	2 ♥	Pass	3 ♣
Pass	4 ♥	Pass	Pass
Pass			

Responder shows bad values by rebidding in the cheaper minor (a conventional negative bid). Opener has game in hand, and bids it.

## WK8 LP 1.1 Practice Sheet – 2♣ Bids and Responses

### Pg. 3

**Board 5**  
North Deals  
N-S Vul

♠ A K Q 6  
♥ A 6 3  
♦ K 7 4  
♣ K Q J

	N	
W		E
	S	

♠ 7 2  
♥ K J 10 7 5 2  
♦ 8 6 5 3  
♣ A

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♦
Pass	2 NT	Pass	3 ♦
Pass	3 ♥	Pass	4 ♥
Pass	Pass	Pass	

Responder bids 3♦ as a transfer to hearts, and then raises to game.

**Board 6**  
East Deals  
E-W Vul

♠ K Q 10  
♥ K J 4  
♦ A Q  
♣ A K Q 7 2

	N	
W		E
	S	

♠ A J 8  
♥ A Q 9  
♦ 10 9 7 3  
♣ J 8 6

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		Pass	Pass
Pass	2 ♣	Pass	2 ♦
Pass	2 NT	Pass	6 NT
Pass	Pass	Pass	

Responder has just short of an opening bid. South has a hand where after North shows 22-23 points, he should consider bidding slam in order to get the large slam bonus.

## WK8 LP 1.1 Practice Sheet – 2♣ Bids and Responses Pg. 4

**Board 7**  
South Deals  
Both Vul

♠ K 10 9 6 5 2  
♥ 10  
♦ K J 7 2  
♣ A 8



♠ A Q 8  
♥ K Q  
♦ A Q 8  
♣ K Q J 9 5

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			2 ♣
Pass	2 ♦	Pass	2 NT
Pass	3 ♥	Pass	3 ♠
Pass	6 ♠	Pass	Pass
Pass			

Responder transfers to spades, then bids 6 Spades since he knows they have a fit in Spades and enough points that they should be able to make slam and get the large slam bonus.

**Board 8**  
West Deals  
None Vul

♠ A K Q J  
♥ A 9 4 3  
♦ A 8  
♣ A Q 3



♠ 7 6 3 2  
♥ Q J 7  
♦ J 9 7  
♣ K J 4

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
2 ♣	Pass	2 ♦	Pass
2 NT	Pass	3 ♣	Pass
3 ♥	Pass	3 NT	Pass
4 ♠	Pass	Pass	Pass

East bids 3♣ Stayman, then 3NT without a heart fit. Opener corrects to 4♠, knowing that responder has to have a four card major to bid Stayman, and it must be spades since Responder didn't like hearts.

## Hand Records 8.1.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice bidding and playing very strong hands that are typically opened Two Clubs. North, East, South, and West will in turn be dealer and have a hand of 22 or more HCP (or equivalent in distribution. Responder is expected to use Two Diamonds Waiting, or some other appropriate bid to describe his/her hand.*

#### Board 8.1.1

North Deals  
None Vul

	♠ A K Q 7 6 5 2		
	♥ A K 4		
	♦ A Q		
	♣ 10		
♠ J 3	<div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">             N W     E S           </div>	♠ 9 8	
♥ 10 9 2		♥ J 8 7 6	
♦ K 8 7 5		♦ J 10 9 3	
♣ A J 8 6		♣ K 5 2	
	♠ 10 4		
	♥ Q 5 3		
	♦ 6 4 2		
	♣ Q 9 7 4 3		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♦
Pass	2 ♠	Pass	3 ♣
Pass	4 ♠	Pass	Pass
Pass			

North opens 2♣ showing 22+ points. South bids 2♦ (waiting) because South does not have a good five card suit.

North bids 2♠ showing at least five spades. South bids 3♣ showing less than three spades and less than six points.

North bids 4♠ saying he can make game on his own.

## Hand Records 8.1.1-4

### Pg. 2

#### Board 8.1.2

East Deals

N-S Vul

<p>♠ K Q 10 9 5 ♥ 10 6 3 ♦ J 6 4 ♣ J 9</p>	<p>♠ J 6 4 3 ♥ 7 4 ♦ 9 8 2 ♣ Q 8 6 4</p>		<p>♠ A 2 ♥ A K Q J 2 ♦ A Q ♣ K 7 5 2</p>
	<p>♠ 8 7 ♥ 9 8 5 ♦ K 10 7 5 3 ♣ A 10 3</p>		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		2 ♣	Pass
2 ♠	Pass	3 ♥	Pass
4 ♥	Pass	Pass	Pass

East opens 2♣ showing 22+ points. West responds 2♠ showing a good five card spade suit.

East bids 3♥ showing no fit in spades and a good heart suit.

West raises to 4♥ with a fit in hearts.

## Hand Records 8.1.1-4

## Pg. 3

**Board 8.1.3**

South Deals

E-W Vul

	♠ A 10 4		
	♥ K 8 6		
	♦ 10 9 7 3		
	♣ 9 8 3		
♠ 9 2	<div style="display: inline-block; border: 1px solid black; padding: 5px; text-align: center;">           N W    E S         </div>	♠ 8 7 5	
♥ J 10 7 3 2		♥ Q 9 4	
♦ Q 6		♦ A J 8 5	
♣ J 10 6 4		♣ 7 5 2	
	♠ K Q J 6 3		
	♥ A 5		
	♦ K 4 2		
	♣ A K Q		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			2 ♣
Pass	2 ♦	Pass	2 ♠
Pass	3 ♠	Pass	4 ♠
Pass	Pass	Pass	

South opens 2♣ showing 22+ points. North bids 2♦ (waiting) because South does not have a good five card suit.

South bids 2♠ showing five or more spades. North bids 3♠ showing a spade fit with more than one trick.

South bids 4♠ showing a minimum 2♣ opening bid.

## Hand Records 8.1.1-4

Pg. 4

**Board 8.1.4**

West Deals

Both Vul

♠ A 2	♠ Q J 5 4	♠ K 10 8 7 6
♥ A Q J 8 7	♥ 10 9 4 2	♥ 6 3
♦ A K 9 2	♦ J 7	♦ 8 6 4
♣ A J	♣ Q 7 6	♣ K 9 4
	<div style="display: inline-block; border: 1px solid black; background-color: #38761d; color: white; padding: 5px; text-align: center; width: 40px; height: 40px; margin: 0 auto;">           N W   E S         </div>	
	♠ 9 3	
	♥ K 5	
	♦ Q 10 5 3	
	♣ 10 8 5 3 2	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
2 ♣	Pass	2 ♦	Pass
2 ♥	Pass	2 ♠	Pass
2 NT	Pass	3 NT	Pass
Pass	Pass		

West opens 2♣ showing 22+ points. East bids 2♦ (waiting) because South does not have a good five card suit.

West bids 2♥ showing five or more hearts. East bids 2♠ showing five or more spades and enough points for game.

West bids 2NT showing a balanced hand with the other suits stopped. East bids 3NT saying that it looks good to play the hand in NT without any extra points.

## WK8 LP 1.3 Handout – Responding to a Opening 2♣ Bid Pg. 1

### Responding to a 2♣ Opener by Partner

1. Partner opens 2♣. Your Bid;
  - 2♦ a conventional waiting bid;  
Says nothing about diamonds  
Very weak hand
  - OR
  - 2♥ Good hand, but no long good suit.
  - 2♠ Constructive response, eight or more HCP  
and a good five card suit of your own.
  - 3♣ Constructive response, eight or more HCP  
and a good six card suit of your own.
  - 3♦
  
2. After making a waiting bid of 2♦:  
Opener then rebids 2♥ (or 2♠) showing 21+ HCP with a good suit.
  - 3♣ Cheapest minor suit is a conventional “double negative” and shows a very weak hand.
  - 4♥/4♠ Jump to game with a fit and a trick for Partner.
  - 3♥/3♠ Raise one level with a fit and 2 tricks or better for partner. The slower you go the more you have. Leave room to explore slam possibilities.
  - New suit New suit bid shows game values, mediocre suit.
  - 2NT No Trump bid shows game values, no fit for Partner.

**WK8 LP 1.3 Handout – Responding to a Opening 2♣ Bid**  
**Pg. 2**

3. 2♣ Opener is Game Forcing, except in two cases:

Opener bids 2NT, showing a balanced 22-24 HCP. Responder can pass with a bust hand.

Responder rebids the cheaper minor (“double negative”). Responder will pass at his next turn if opener rebids his own suit.

- Lesson Plan Title:** Week 8 Lesson 2 - Math through Games
- Beginning Bridge:** Opening Strong Balanced Hands
- Concept/Topic:** To teach math in real world applications.
- Standards Addressed:** Problem Solving 1. Build new mathematical knowledge through problem solving.
- General Goal(s):** To teach bridge
- Specific Objectives:** To Learn How to Open Very Strong Balanced Hands of 22 HCP or more.
- Required Materials:** Paper  
Pencil  
Notebook  
WK8 LP 2.1 Practice Sheet - Bidding Strong Balanced Hands (attached)  
Hand Records 8.2.1, 8.2.2, 8.2.3, and 8.2.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 8.2.1, 8.2.2, 8.2.3, and 8.2.4.

**Anticipatory Set (lead-in):**

- Review the last two lessons on the 2♣ opener and Responses. Refresh class memory of Stayman Convention and Transfers over a NT opener.
- Today we learn how to open the bidding when we have a very strong balanced hand. We will review how to bid balanced hands in general.

**Step-by-step Procedures:**

1. This lesson gives us the last two ranges for bidding balanced hands. I know this is partly review but we can now describe any balanced hand. For our purposes, there are five ranges for balanced hands.
  - 12-14 HCP Open one of a suit, then rebid 1NT. You don't always get to do that, e.g., the bidding may already passed 1NT or you may instead raise partner's major, but that's your bidding plan.
  - 15-17 HCP Open 1NT

- 18-19 HCP Open one of a suit and then jump in No Trump. Usually the jump is to 2NT, but if Partner responds at the two level, you must jump to 3NT.
  - 20-21 HCP Open 2NT
  - 22-24 HCP Open 2♣ and rebid 2NT
  - 25-27 HCP Open 3NT
2. The same No Trump conventional responses you learned for 1NT are used over 2NT openings and 2♣ and rebid 2NT hands - Stayman, Jacoby Transfers and any you may add later (There are many others.)
  3. Review with Students WK8 LP2.1 Practice Sheet - Bidding Strong Balanced Hands.
  4. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand #4, take the aces and kings out of the deck. Shuffle the remainder and deal 6 cards to each of the other three players, but not the dealer. Then shuffle the Aces and Kings into the remainder of the deck, and deal 6 cards to the dealer. Finally, deal the remaining cards to all four players in turn. This method tends to create hands where the dealer has a LOT of points. Dealer often has a 2♣ opener.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK8 LP 2.1 Practice Sheet – Strong Balanced Hands

What do you open with the following hands?

1. ♠ Q83 ♥ AJ7 ♦ AKJ3 ♣ AQ3
2. ♠ AQ63 ♥ AJ ♦ QJ2 ♣ AK95
3. ♠ KQ ♥ K109 ♦ KQ52 ♣ AQJ5
4. ♠ K86 ♥ KQJ52 ♦ A86 ♣ AK
5. ♠ KQ10 ♥ KQ10 ♦ AK8 ♣ AQJ8

Partner opened 2NT. As responder, what do you bid? Why?

6. ♠ 10 ♥ 108652 ♦ 1082 ♣ 9762
7. ♠ K542 ♥ KQ76 ♦ K107 ♣ 73

## WK8 LP 2.1 Practice Sheet – Strong Balanced Hands

Suggested Answers:

1. 2NT
2. 2NT
3. 2NT
4. 2NT
5. 2♣ followed by a 2NT rebid. Your hand is too big to open 2NT.
6. 3♦ transfer to 3♥, then Pass. If really weak, try to put the contract into a suit. You may win some tricks with small trumps.

Your hand ♠ 10 ♥ 108652 ♦ 1082 ♣ 9762  
 Partner ♠ Q83 ♥ AJ7 ♦ AKJ3 ♣ AQ3

7. 3♣ Stayman. And if a golden fit is found, look for a possible slam, ask for aces.

Your hand ♠ K542 ♥ KQ76 ♦ KT7 ♣ 73  
 Partner ♠ AQ63 ♥ AJ ♦ QJ2 ♣ AK95

## Hand Records 8.2.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice bidding and playing strong balanced hands. North, East, South, and West will in turn be dealer and should be given balanced hands of 20 HCP or more. Responder may have hands suitable for Jacoby, Stayman, or 2D Waiting.*

#### **Board 8.2.1**

North Deals

None Vul

	♠ A K 7 2		
	♥ A K 4		
	♦ A Q 8		
	♣ K 10 6		
♠ J 6 5 3	<div style="display: inline-block; border: 1px solid black; background-color: #38761d; color: white; padding: 5px; text-align: center;">             N W     E S           </div>	♠ Q 9 8	
♥ 10 9 2		♥ J 8 7 6	
♦ K 7 5		♦ J 10 9 3	
♣ A J 8		♣ 5 2	
	♠ 10 4		
	♥ Q 5 3		
	♦ 6 4 2		
	♣ Q 9 7 4 3		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♦
Pass	2 NT	Pass	3 NT
Pass	Pass	Pass	

North opens 2♣ showing 22+ points. South responds 2♦ showing no good five card suit.

North bids 2NT to show 22-24 points and a balanced hand. South bids 3NT because South has enough for game no 4 or 5 card major and not enough for slam.

## Hand Records 8.2.1-4

### Pg. 2

#### Board 8.2.2

East Deals

N-S Vul

<p>♠ K 10 9 5 4 ♥ K 6 3 ♦ J 6 4 ♣ J 9</p>	<p>♠ J 6 3 ♥ 10 7 4 ♦ 9 8 2 ♣ Q 8 6 4</p> <div style="border: 1px solid black; background-color: #38761d; color: white; padding: 5px; width: 40px; margin: 0 auto; text-align: center;">             N W     E S         </div> <p>♠ 8 7 ♥ J 9 8 ♦ K 10 7 5 3 ♣ A 10 3</p>	<p>♠ A Q 2 ♥ A Q 5 2 ♦ A Q ♣ K 7 5 2</p>	
<p><i>West</i></p>	<p><i>North</i></p>	<p><i>East</i></p>	<p><i>South</i></p>
		2 NT	Pass
3 ♥	Pass	3 ♠	Pass
3 NT	Pass	4 ♠	Pass
Pass	Pass		

East opens 2NT showing 20-21 points and a balanced hand.

West bids 3♥(Jacoby Transfer) telling partner to bid 3♠ to show at least five spades.

East bids 3♠ doing as partner asked. West bids 3NT showing exactly 5 spades and enough points to be in game.

East bids 4♠ because East knows they have a spade fit.

## Hand Records 8.2.1-4

### Pg. 3

#### Board 8.2.3

South Deals

E-W Vul

	♠ A 10		
	♥ K 8 6 2		
	♦ 10 9 7 3		
	♣ 9 8 3		
♠ 9 4 2	<div style="display: inline-block; border: 1px solid black; padding: 5px; text-align: center;">             N W     E S           </div>	♠ 8 7 5 3	
♥ J 10 7 3		♥ Q 9 4	
♦ Q 6		♦ A J 8	
♣ J 10 6 4		♣ 7 5 2	
	♠ K Q J 6		
	♥ A 5		
	♦ K 5 4 2		
	♣ A K Q		
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			2 ♣
Pass	2 ♦	Pass	2 NT
Pass	3 ♣	Pass	3 ♠
Pass	3 NT	Pass	Pass
Pass			

South opens the bidding with 2♣ showing 22+ points. North responds with 2♦ since North does not have a good five card major.

South bids 2NT showing 22-24 points and a balanced hand. North bids 3♣ (Stayman) asking partner, do you have a four card major?

South bids 3♠ showing a four card spade suit and denying a four card heart suit. North bids 3NT because North does not have a fit in the major.

## Hand Records 8.2.1-4

Pg. 4

**Board 8.2.4**

West Deals

Both Vul

♠ A 2  
♥ Q J 9 8  
♦ A K 9 2  
♣ A Q 5

♠ J 5 4  
♥ A 10 4 2  
♦ J 7  
♣ K J 7 6



♠ K Q 10 8 7 6  
♥ 6 3  
♦ 8 6 4  
♣ 9 4

♠ 9 3  
♥ K 7 5  
♦ Q 10 5 3  
♣ 10 8 3 2

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
2 NT	Pass	3 ♥	Pass
3 ♠	Pass	4 ♠	Pass
Pass	Pass		

West opens 2NT showing 20-21 points. East bids 3♥ (Jacoby Transfer) telling partner to please bid 3♠.

West bid 3♠ doing as East wants. East bid 4♠ showing at least six spades and enough to be in game.

## WK8 LP 2.3 Handout – Bidding balanced Hands

### Bidding the Five Ranges for Balanced Hands

12-14 HCP      Open one of a suit, then rebid 1NT

15-17 HCP      Open 1NT

18-19 HCP      Open one of a suit, then jump in NT

20-21 HCP      Open 2NT

22-24 HCP      Open 2♣ and rebid 2NT

25-27 HCP      Open 3NT

The No Trump conventional responses – Stayman and Jacoby Transfers - are used after Opening 1NT, or 2NT, or 2C followed by a 2NT rebid.

- Lesson Plan Title:** Week 8 Lesson 3 - Math through Games
- Beginning Bridge:** Slam Bidding
- Concept/Topic:** To teach math in real world situations.
- Standards Addressed:** Reasoning and Proof 2. Make and investigate mathematical conjectures.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To Learn How to Use Blackwood convention in slam bidding.
- Required Materials:** Paper  
Pencil  
Notebook  
WK8 LP 3.1 Practice Sheet – Blackwood; Suit Slams (attached)  
Hand Records 8.3.1, 8.3.2, 8.3.3, and 8.3.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 8.3.1, 8.3.2, 8.3.3, and 8.3.4.

**Anticipatory Set (lead-in):**

- Review the last three lessons on the 2♣ opener and strong balanced hands.
- Today we will learn some bidding techniques on bidding slams and receiving the huge slam bonuses that go with them.

**Step-by-step Procedures:**

1. Once in a while you and your partner get dealt most of the HCP and start thinking about reaching for that slam bonus. Knowing you've got the lion's share of points, you decide to bid six of a suit. Dummy comes down and you find out you're missing two Aces, which the opponents happily take.
2. Two conventions keep us from bidding too high in these cases. One is designed for us to ask for Aces when we've agreed upon a suit, the other helps us ask for Aces when we're bidding in No Trump. (We will cover the second one in the next Lesson.)

3. Like other conventions we've learned – Stayman and Jacoby Transfers and the Strong 2♣ bid – we have to stop thinking literally about the suits that are being bid. We must remember the suits we bid don't always refer to our holdings in that specific suit. When partner opens a suit and we have a good fit and a very strong hand (18+) we should think about the possibility of bidding to slam and getting our slam bonus.
4. If we have agreed to play in a suit, a bid of 4NT asks Partner, "How many aces to you have?" This is the **Blackwood** convention. You and Partner have agreed on a suit to play in. You now bid 4NT. Here's how Partner answers, in Steps: (*Write this chart on the board.*)

#### After Blackwood 4NT

Step	Bid	Number of Aces
1 step	<b>5♣</b>	0 or 4 Aces
2 steps	<b>5♦</b>	1 Ace
3 steps	<b>5♥</b>	2 Aces
4 steps	<b>5♠</b>	3 Aces

5. Someone always asks, "How do I know if it's zero or four aces?" You should be able to figure that out, based on the number of points partner has shown. A good rule of thumb is not to ask for Aces unless you have at least one in your own hand.
6. Look at the following auction: (*Put this hand on the board*)

<u>Opener</u>	<u>LHO</u>	<u>Responder</u>	<u>RHO</u>
1♠	Pass	3♠	Pass
4N	Pass	5♦	Pass
6♠			

7. Opener's bid shows 12-21 HCP with at least five spades. Responder promises 10-12 HCP with a good spade fit. Opener has lots of extras and thinks slam is possible, so he/she bids 4NT Blackwood to ask Responder for the number of Aces Responder holds. Responder makes the 2<sup>nd</sup> step response showing one Ace. That's all Opener needed to know to bid a slam.
8. Let's say you have all the Aces and you're now thinking about taking all thirteen tricks. You can use 5NT to ask about your partner's kings. You only ask for kings when you are looking for a Grand Slam, so the partnership must have all the aces to bid 5NT.

9. The responses work just like those for aces: (*Write this chart on the board.*)

After **Blackwood** 5NT

Step	Bid	Number of Kings
1 step	<b>6♣</b>	0 or 4 Kings
2 steps	<b>6♦</b>	1 King
3 steps	<b>6♥</b>	2 Kings
4 steps	<b>6♠</b>	3 Kings

10. In the auction above, we don't know why Opener didn't ask for kings. Opener might be missing an ace. He/she might realize there can't be enough points for the grand slam. He/she may just be cautious. Just remember that you don't have to ask for Kings simply because you asked for Aces. Ask only if you need the information.
11. Review with Students WK8 LP 3.1 Practice Sheet – Blackwood; Suit Slams.
12. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand #4, take the aces and kings out of the deck. Shuffle the remainder and deal 6 cards to each of the other three players, but not the dealer. Then shuffle the Aces and Kings into the remainder of the deck, and deal 6 cards to the dealer. Finally, deal the remaining cards to all four players in turn. This method tends to create hands where the dealer has a LOT of points. Dealer often has a 2♣ opener.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK8 LP 3.1 Practice Sheet – Blackwood; Suit Slams

Look at the following hands and the auctions that accompany them.

### Auction

<u>Opener</u>	<u>Responder</u>
2♣	2♦
2♥	3♥
4NT	5♦
6♥	
♠ A K	♠ 9 4 3 2
♥ A Q J 10 8 6 4	♥ 7 5 3
♦ A Q	♦ K 9 2
♣ 10 8	♣ A 7 3

Responder's 3♥ showed more than one trick in support of hearts. That's enough for Opener to bid 4NT. Responder has the ♣A and the slam is bid.

### Auction

<u>Opener</u>	<u>Responder</u>
1♠	4NT
5♣	5♠
♠ K 8 5 3 2	♠ A Q 9 8 7
♥ 9	♥ K Q
♦ K Q 6 2	♦ 4
♣ K J 4	♣ A 6 5 2

Responder can envision slam opposite even a minimum opener. He/she fears that if he/she doesn't ask for aces immediately, he/she might be passed once he/she later supports spades. Opener is Aceless and Responder checks out in 5♠.

## Hand Records 8.3.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice bidding and playing slams in a suit. Some hands should reflect the use of Blackwood.*

#### **Board 8.3.1**

North Deals

None Vul

<p>♠ 3 ♥ 10 9 ♦ K 8 7 6 5 4 ♣ Q J 8 6</p>		<p>♠ A K Q 7 6 5 2 ♥ A K 4 ♦ A Q ♣ 10</p>	<p>♠ 9 8 ♥ Q J 8 7 ♦ J 10 3 2 ♣ K 5 2</p>
	<p>♠ J 10 4 ♥ 6 5 3 2 ♦ 9 ♣ A 9 7 4 3</p>		
<p><i>West</i></p>	<p><i>North</i></p>	<p><i>East</i></p>	<p><i>South</i></p>
	2 ♣	Pass	2 ♦
	2 ♠	Pass	3 ♠
	4 NT	Pass	5 ♦
	5 NT	Pass	6 ♣
	6 ♠	Pass	Pass
	Pass		

North opens the bidding 2♣ showing 22+ points. South responds 2♦ showing no good five card suit.

North bids 2♠ showing at least five spades. South bids 3♠ to show a spade fit with you and at least two tricks.

North bids 4NT which asks how many aces do you have?  
South bids 5♦ showing only one Ace.

North bids 5NT which asks how many Kings do you have?  
South responds 6♣ showing no kings.

North bids 6♠ in order to play it here.

## Hand Records 8.3.1-4

### Pg. 2

#### Board 8.3.2

East Deals

N-S Vul

	♠ J 6 4 3		
	♥ 7 4		
	♦ 9 8 2		
	♣ Q 8 6 4		
♠ K Q 10 9 5	<div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">             N W     E S           </div>	♠ A 2	
♥ 10 6 3		♥ A K Q J 5 2	
♦ J 6 4		♦ A K	
♣ J 9		♣ K 7 5	
	♠ 8 7		
	♥ 9 8		
	♦ Q 10 7 5 3		
	♣ A 10 3 2		

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		2 ♣	Pass
2 ♠	Pass	3 ♥	Pass
4 ♥	Pass	4 NT	Pass
5 ♣	Pass	6 ♥	Pass
Pass	Pass		

East opens 2♣ showing 22+ points. West responds 2♠ showing a good five card suit with two of the top three honors.

East bids 3♥ showing no fit in spades and a good heart suit.

West bids 4♥ showing a fit in hearts but no extra points.

East bids 4NT showing a slam going hand and is asking for aces. West bids 5♣ showing no aces.

East bids 6♥ thinking they probably have enough tricks for slam anyway. East won't ask for Kings since they are missing one Ace.

## Hand Records 8.3.1-4 Pg. 3

**Board 8.3.3**  
South Deals  
E-W Vul

<p>♠ 9 2 ♥ 10 7 5 3 2 ♦ Q 6 2 ♣ J 10 4</p>	<p>♠ A 10 4 ♥ 8 6 ♦ K 10 9 7 3 ♣ 9 8 3</p>	<p>♠ 8 7 5 ♥ Q 9 4 ♦ A 8 5 ♣ Q 7 5 2</p>	
	<p>♠ K Q J 6 3 ♥ A K J ♦ J 4 ♣ A K 6</p>		

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			2 ♣
Pass	2 ♦	Pass	2 ♠
Pass	3 ♠	Pass	4 ♠
Pass	Pass	Pass	

South opens 2♣ showing 22+ points. North responds 2♦ showing no good 5 card suit.

South bids 2♠ showing a 5 card spade suit. North bids 3♠ showing a fit in spades and more than just one trick.

South bids 4♠ showing a minimum 2♣ bid. North passes because they do not have enough points for slam after South showed a minimum.

## Hand Records 8.3.1-4

Pg. 4

**Board 8.3.4**

West Deals

Both Vul

♠ A 2	♠ Q 5 4 3	♠ K J 10 8 7 6									
♥ A Q J 8 7 4	♥ 10 9	♥ K 3									
♦ A K 2	♦ J 9 7	♦ Q 8 6									
♣ A J	♣ Q 9 7 6	♣ 4 2									
<table style="border: 1px solid black; background-color: #38761d; color: white; width: 60px; height: 60px; margin: auto; text-align: center; font-size: 24px; line-height: 1;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table>				N		W		E		S	
	N										
W		E									
	S										
	♠ 9										
	♥ 6 5 2										
	♦ 10 5 4 3										
	♣ K 10 8 5 3										

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
2 ♣	Pass	2 ♦	Pass
2 ♥	Pass	2 ♠	Pass
3 ♥	Pass	4 NT	Pass
5 ♣	Pass	5 NT	Pass
6 ♦	Pass	6 ♥	Pass
Pass	Pass		

West opens the bidding 2♣ showing 22+ points. East responds 2♦ showing no good five card suit.

West bids 2♥ showing a five card or longer heart suit. East bids 2♠ showing no fit in hearts, five or more spades, and enough points to be in game.

West bids 3♥ showing at least six hearts. East bids 4NT which asks partner the number of aces he has.

West bids 5♣ showing zero or four aces (It must be four or else would not have enough to open 2♣). East bids 5NT which asks how many Kings do you have?

West responds 6♦ showing one king. East signs off in 6♥ settling because they are missing a king.

- Lesson Plan Title:** Week 8 Lesson 4 - Math through Games
- Beginning Bridge:** Slam Bidding - Gerber
- Concept/Topic:** Teaching math through real world applications.
- Standards Addressed:** Problem Solving 4. Monitor and reflect on the process of mathematical problem solving.
- General Goal(s):** To teach bridge.
- Specific Objectives:** To Learn How to Open Very Strong Balanced Hands of 22 HCP or more.
- Required Materials:** Paper  
Pencil  
Notebook  
WK8 LP 4.1 Practice Sheet - Gerber, No Trump Slams (attached)  
Hand Records 8.4.1, 8.4.2, 8.4.3, and 8.4.4 (attached)  
Four Prepared Handsets in Duplicate Bridge Boards for each Table of four student players. Handsets will have to be dealt and duplicated in advance of the class according to the attached Hand Records 8.4.1, 8.4.2, 8.4.3, and 8.4.4.  
WK8 LP 4.3 Handout – Blackwood, Gerber, NT Slams (attached)

**Anticipatory Set (lead-in):**

- Review the last lesson on the Blackwood Convention.
- Continuing our exploration of slam bidding, today we will learn a Convention for Ace asking when Opener has shown a balanced hand.

**Step-by-step Procedures:**

1. We use Blackwood 4NT only when we have agreed on a suit. We can't use 4NT to ask for aces in No Trump auctions; we'll see why a bit later. We use a similar convention called Gerber. We use the **Gerber** convention when our partnership's opening bid was 1NT, or 2NT, or even 2♣ followed by 2NT (showing 22-24 HCP balanced) or when the last bid by either partner was No Trump. Instead of 4NT to ask for aces, we use 4♣ to ask for Aces, and if we have all four, we can use 5♣ to check on kings. Here are the responses:

2. If it appears we are going to play in a No Trump contract, a bid of 4♣ asks Partner, “How many aces to you have?” This is the **Gerber** convention. You and Partner have agreed to play in No Trump. You now bid 4♣. Here’s how Partner answers, in Steps:

**After Gerber 4♣**

Step	Bid	Number of Aces
1 step	4♦	0 or 4 Aces
2 steps	4♥	1 Ace
3 steps	4♠	2 Aces
4 steps	4NT	3 Aces

3. To ask for Kings;

**After Gerber 5♣**

Step	Bid	Number of Kings
1 step	4♦	0 or 4 Kings
2 steps	4♥	1 King
3 steps	4♠	2 Kings
4 steps	4NT	3 Kings

4. Now look at this auction (*Put this auction on the board*):

Opener	LHO	Responder	RHO
1NT	Pass	4♣	Pass
4♥	Pass	4NT	Pass
Pass	Pass		

Responder’s 4♣ is the Gerber Convention. Once Responder learned Opener only had one Ace, he can safely stop the auction from going any higher by signing off at 4NT.

5. About a month ago, we learned the basic Responder ranges to a 1NT Opener: 0-7 Pass, 8-9 Invite Game, 10-14 Bid Game. Now we can expand that to include No Trump slam bidding. Responder can now put his hand into one of seven categories! You don’t have to memorize them. You can always figure them out by adding your HCP as Responder to Opener’s known 15-17 HCP in Opener’s hand and comparing that total with the 25, 33 and 37 HCP required for a game, a small slam, and a grand slam, respectively.

6. We do, however, need to understand how to bid when the Partnership holds a lot of points. We noted above the 1NT - 4♣ auction can help us avoid being in a slam missing two Aces. That's fine if Responder has enough points for slam, 18-19 HCP in the table. But what if Responder is in the 15-17 HCP range? Now we can only invite Partner to slam. Just as 2NT was invariably an invitation to game, 4NT is invitational to a small slam and 5NT is invitational to a grand slam.
7. Assume Responder has no four card or five card major and a balanced hand. Here is a very useful chart for Responder to determine how high to bid in No Trump:

Responder Actions after Partner Opens 1NT

<u>Points</u>	<u>Prospects</u>	<u>Responder's bid</u>
0-7 HCP	No game	Pass
8-9 HCP	Invitational to game	2NT
10-14 HCP	Game for sure, slam unlikely	3NT
15-17 HCP	Possible small slam	4NT or 4♣
18-19 HCP	Small slam	6NT or 4♣
20-21 HCP	Possible grand slam	5NT or 4♣
22-25 HCP	Grand slam	7NT or 4♣

8. Two important points should be noted here. First, note in the chart that you have the option to ask for Aces by bidding 4♣. You can also make the appropriate NT bid if you think you have enough Aces. Second, when holding 22 HCP, going for the grand slam, 4♣ is bid not to ask for Aces (you know the Partnership has 37 HCP so you can't be missing an Ace), but you have to ask for Aces before you can ask for Kings, and you could be missing a King. Don't bid the Grand slam missing a King; settle for a small slam.
9. The same principles apply after Partner opens 2NT or 2♣ and he/she rebids 2NT. Add your points to Opener's point range, compare the total range to the 25 HCP (game), 33 HCP (small slam), and 37 HCP (grand slam) and invite or bid game, invite a small slam with 4NT, bid a small slam, invite a grand slam with 5NT or bid a grand slam. Or ask for Aces first. But the point range should tell you what to do.
10. If you invite a grand slam by bidding 5NT, Opener cannot Pass. Opener must bid either 6NT or 7NT.
11. Review with Students WK8 LP 4.1 Practice Sheet - Gerber, No Trump Slams.
12. Direct students to bid and play Handsets 1-4 at each table. (Students may wind up in any number of different contracts, but the suggested contract and Declarer is listed on the hand record.) Coach students at each table as required.

**Plan for Independent Practice:** Allow students time to play additional hands as time permits. A tip: When you finish up the last lesson plan hand #4, take the aces and kings out of the deck. Shuffle the remainder and deal 6 cards to each of the other three players, but not the dealer. Then shuffle the Aces and Kings into the remainder of the deck, and deal 6 cards to the dealer. Finally, deal the remaining cards to all four players in turn. This method tends to create hands where the dealer has a LOT of points. Dealer often has a 2♣ opener.

**Assessment Based on Objectives:** notebook

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

## WK8 LP 4.1 Practice Sheet – Gerber, NT Slams Pg. 1

Look at the following hands and the auctions that accompany them.

### Auction

#### Opener

2NT  
4♠  
5♠

♠ A Q  
♥ K J 8 7  
♦ K Q 10  
♣ A Q 6 5

#### Responder

4♣  
5♣  
7NT

♠ K 4 3  
♥ A  
♦ A 7 6  
♣ K J 8 5 3 2

Responder knows there is enough for a small slam and Gerber tells him they have all the aces and kings. That in itself is not enough to guarantee the grand slam but it's awfully close.

### Auction

#### Opener

1NT  
4♠

♠ A 4  
♥ K J 2  
♦ A Q 7 6  
♣ Q 5 3 2

#### Responder

4♣  
6♠

♠ K Q 7 5 3 2  
♥ A Q 8 5  
♦ 2  
♣ A J 6

Responder knows there is at least an 8 card spade fit. While a bit short on points to insist on slam, he has great shape to make up for it. Once Opener shows two Aces, slam is a good bet.

## WK8 LP 4.1 Practice Sheet – Gerber, NT Slams

### Pg. 2

**All of the following sequences are slam invitational:**

(A)	(B)	(C)	(D)
1NT 4NT	1NT 2♣ 2♠ 4NT	1NT 2♥ 2♠ 4NT	2NT 4NT

- In (A) Responder has no major suit interest and is just inviting slam. Opener must recognize that 4NT is not Blackwood; there is no suit agreement.
- In (B) Responder first checks on a 4-4 heart fit (there is none) and then invites slam. Had Opener in (B) bid the right major, hearts in this case, Responder could then bid 4♣ Gerber. Gerber applies when the first or last bid was No Trump.
- In (C) Responder looks for the 5-3 spade fit (2♥ transfer) and then invites slam. With only 2 spades, Opener can pass with a minimum or jump to slam with a maximum. With 3+ spades, Opener can bid 5♠ or 6♠, depending on his HCP. This is quite similar to Opener's choices after an invitational 2NT.
- In (D) Responder invites slam just as in (A) but obviously with fewer points. How many does he have?

Answer: With 10 HCP there would be a maximum of 31, not enough for slam. With 13 HCP there would be a minimum of 33, and Responder would bid 4♣ Gerber. Responder therefore should have a good 11 or 12 HCP.

## Hand Records 8.4.1-4

### Pg. 1

*Teacher directions: Prepare four duplicate boards with North, South, East, and West in turn as Dealer. Use the hand diagrams below to prepare the boards. Prepare an additional set of the same hands for each additional table of students in the class. Hand out a set of four boards to each table at the beginning of the class. Objective is for students to practice bidding and playing slams in No Trump. Some hands should lend themselves to the use of Gerber or Quantitative raises in No trump.*

#### Board 8.4.1

North Deals

None Vul

	♠ A Q J 5 ♥ K J 4 ♦ A Q J ♣ K J 7		
♠ 6 3 ♥ 9 2 ♦ 8 7 6 5 4 ♣ A 10 8 6		♠ 9 8 7 ♥ A 8 7 6 ♦ 10 9 3 ♣ 9 5 2	♠ K 10 4 2 ♥ Q 10 5 3 ♦ K 2 ♣ Q 4 3
<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
	2 ♣	Pass	2 ♦
Pass	2 NT	Pass	3 ♣
Pass	3 ♠	Pass	4 ♣
Pass	4 ♠	Pass	Pass
Pass			

North opens 2♣ showing 22+ points. South responds 2♦ showing no good 5 card suit.

North bids 2NT showing 22-24 points. South bids 3♣ asking if partner has a four card major.

North bids 3♠ showing a four card spade suit and no four card heart suit. South bids 4♣ (Gerber) which asks how many aces do you have?

North bids 4♠ showing two Aces. South passes knowing they are off two Aces and there is no hope for slam to make.

## Hand Records 8.4.1-4

### Pg. 2

**Board 8.4.2**

East Deals

N-S Vul

♠ K Q 10 9 5	♠ J 6 4	♠ A 2
♥ J 10 6 3	♥ 7 4	♥ A K Q 2
♦ K 4	♦ 9 8 6 2	♦ A Q J
♣ 9 7	♣ Q 8 6 4	♣ K J 5 2
	<div style="display: inline-block; border: 1px solid black; background-color: #336633; color: white; padding: 5px; text-align: center;">             N W     E S           </div>	
	♠ 8 7 3	
	♥ 9 8 5	
	♦ 10 7 5 3	
	♣ A 10 3	

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
		2 ♣	Pass
2 ♠	Pass	2 NT	Pass
4 NT	Pass	6 NT	Pass
Pass	Pass		

East opens 2♣ showing 22+ points. West bids 2♠ showing a five card suit with two of the top three honors.

East bids 2NT showing no spade fit and 22-24 points. West bids 4NT asking partner to bid slam with a 24 point hand.

East is on the top of his range so bids 6NT.

## Hand Records 8.4.1-4

### Pg. 3

#### Board 8.4.3

South Deals

E-W Vul

♠ 10 9 2  
♥ J 10 3 2  
♦ 6 5 3  
♣ J 6 4

♠ A 4  
♥ K 8 6  
♦ 10 9 7 4  
♣ 10 9 8 3



♠ 8 7 5  
♥ Q 9 7 4  
♦ A J 8  
♣ 7 5 2

♠ K Q J 6 3  
♥ A 5  
♦ K Q 2  
♣ A K Q

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
			2 ♣
Pass	2 ♦	Pass	2 ♠
Pass	2 NT	Pass	4 ♣
Pass	4 ♥	Pass	6 NT
Pass	Pass	Pass	

South opens 2♣ showing 22+ points. North responds 2♦ showing a hand with no good five card suit.

South bids 2♠ showing at least five spades. North bids 2NT showing a good response with a balanced hand.

South bids 4♣(Gerber) which asks how many Aces do you have? North responds 4♥ showing one Ace

North places the contract by bidding 6NT since they are missing one ace.

## Hand Records 8.4.1-4

Pg. 4

**Board 8.4.4**

West Deals

Both Vul

♠ K 4 2  
 ♥ A K Q 7  
 ♦ K 9 8 2  
 ♣ A J

♠ Q J 5  
 ♥ 10 9 8 4 2  
 ♦ J 7  
 ♣ Q 7 6



♠ A 7 6  
 ♥ 6  
 ♦ A Q 10 6 5 4  
 ♣ K 9 4

♠ 10 9 8 3  
 ♥ J 5 3  
 ♦ 3  
 ♣ 10 8 5 3 2

<i>West</i>	<i>North</i>	<i>East</i>	<i>South</i>
2 NT	Pass	4 ♣	Pass
4 ♠	Pass	5 ♣	Pass
5 NT	Pass	7 NT	Pass
Pass	Pass		

West opens 2NT showing 20-21 points. East responds 4♣ (Gerber) which asks how many aces do you have?

West bids 4♠ showing two aces. East bids 5♣ asking how many kings do you have?

West bids 5NT showing three Kings. East bids 7NT because East can count that they likely have all the tricks.

## WK8 LP 4.3 Handout – Blackwood, Gerber, NT Slams Pg. 1

### The Blackwood Convention

If we have agreed to play in a suit, a bid of 4NT asks Partner “How many aces to you have?”

#### After **Blackwood** 4NT

Step	Bid	Number of Aces
1 step	<b>5♣</b>	0 or 4 Aces
2 steps	<b>5♦</b>	1 Ace
3 steps	<b>5♥</b>	2 Aces
4 steps	<b>5♠</b>	3 Aces

#### After **Blackwood** 5NT

Step	Bid	Number of Kings
1 step	<b>6♣</b>	0 or 4 Kings
2 steps	<b>6♦</b>	1 King
3 steps	<b>6♥</b>	2 Kings
4 steps	<b>6♠</b>	3 Kings

## WK8 LP 4.3 Handout – Blackwood, Gerber, NT Slams Pg. 2

### The Gerber Convention

If it appears we are going to play in a No Trump contract, a bid of 4♣ asks Partner, “How many aces to you have?”

#### After Gerber 4♣

Step	Bid	Number of Aces
1 step	4♦	0 or 4 Aces
2 steps	4♥	1 Ace
3 steps	4♠	2 Aces
4 steps	4NT	3 Aces

#### After Gerber 5♣

Step	Bid	Number of Kings
1 step	4♦	0 or 4 Kings
2 steps	4♥	1 King
3 steps	4♠	2 Kings
4 steps	4NT	3 Kings

## WK8 LP 4.3 Handout – Blackwood, Gerber, NT Slams Pg. 3

Assume Responder has no four card or five card major and a balanced hand. Here is a very useful chart for Responder to determine how high to bid in No Trump:

### Responder Actions after Partner Opens 1NT

<u>Points</u>	<u>Prospects</u>	<u>Responder's bid</u>
0-7 HCP	No game	Pass
8-9 HCP	Invitational to game	2NT
10-14 HCP	Game for sure, slam unlikely	3NT
15-17 HCP	Possible small slam	4NT or 4♣
18-19 HCP	Small slam	6NT or 4♣
20-21 HCP	Possible grand slam	5NT or 4♣
22-25 HCP	Grand slam	7NT or 4♣

If you invite a grand slam by bidding 5NT, Opener cannot Pass. Opener must bid either 6NT or 7NT.

The same principles apply after Partner opens 2NT or 2♣ and he/she rebids 2NT. Add your points to Opener's point range, compare the total range to the points needed for game (25 HCP), small slam (33 HCP), and grand slam (37 HCP). The point range tells you what to do, Pass, invite, or bid on.

- Lesson Plan Title:** Week 8 Lesson 5 - Math through Games
- Beginning Bridge:** Weekly Review and Quiz – Week 8
- Concept/Topic:** To teach math through real world applications.
- Standards Addressed:** Reasoning and Proof 3. Develop and evaluate mathematical arguments and proofs.
- General Goal(s):** To teach math through bridge.
- Specific Objectives:** To teach bridge.
- Required Materials:** Notebook  
Paper  
Pencil

**Anticipatory Set (lead-in):**

- Review week 8 lessons 1 – 4
  - Responding to 2 Clubs Opener
  - Opening Strong Balanced Hands
  - Slam Bidding
  - Slam Bidding - Blackwood and Gerber

**Step-by-step Procedures:**

1. Give review quiz
2. Hand out cards
3. Students Shuffle, Deal, and Play hands
4. Give back notebooks

**Plan for Independent Practice:** Allow time to play hands.

**Assessment Based on Objectives:** test

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** After exam, allow students time to play bridge on the computer.

**Possible Connections to Other Subjects:** communication skills, L.A.

**Week 8 Lesson 5 Quiz (10 points)**

With the following hands, what would you open? (5 points)

1. ♠AQJ7 ♥KQJ ♦AKJ4 ♣K7 \_\_\_\_\_
2. ♠AK32 ♥AQJ9873 ♦AK ♣ Void \_\_\_\_\_
3. ♠97 ♥AQJ5 ♦AK4 ♣AK32 \_\_\_\_\_
4. ♠K3 ♥87 ♦Q32 ♣AKJ1087 \_\_\_\_\_
5. ♠AQ43 ♥KQ3 ♦7 ♣AKQ74 \_\_\_\_\_

Your Partner opens 2♣. What would you respond with the following hands? (5 points)

1. ♠KQ543 ♥Q7 ♦874 ♣1074 \_\_\_\_\_
2. ♠A63 ♥K74 ♦75 ♣J7632 \_\_\_\_\_
3. ♠J107643 ♥QJ3 ♦K3 ♣Q3 \_\_\_\_\_
4. ♠973 ♥742 ♦1074 ♣10843 \_\_\_\_\_
5. ♠AQ4 ♥75 ♦73 ♣AQ7432 \_\_\_\_\_

## Week 8 Lesson 5 Quiz Answer Sheet

With the following hands, what would you open? (5 points)

1. ♠AQJ7 ♥KQJ ♦AKJ4 ♣K7 \_2♣\_
2. ♠AK32 ♥AQJ9873 ♦AK ♣ Void \_2♣\_
3. ♠97 ♥AQJ5 ♦AK4 ♣AK32 \_2NT\_
4. ♠K3 ♥87 ♦732 ♣AKJ1087 \_1♣\_
5. ♠AQ43 ♥KQ3 ♦7 ♣AKQ74 \_2♣\_

Your Partner opens 2♣. What would you respond with the following hands? (5 points)

1. ♠KQ543 ♥Q7 ♦874 ♣1074 \_2♠\_
2. ♠A63 ♥K74 ♦75 ♣J7632 \_2♦\_
3. ♠J107643 ♥QJ3 ♦K3 ♣Q3 \_2♦\_
4. ♠973 ♥742 ♦1074 ♣10843 \_2♦\_
5. ♠AQ4 ♥75 ♦73 ♣AQ7432 \_3♣\_

<b>Lesson Plan Title:</b>	Week 9 Lesson 1 - Math through Games
<b>Beginning Bridge:</b>	Weekly Review - Weeks 1-4
<b>Concept/Topic:</b>	To teach math through bridge.
<b>Standards Addressed:</b>	Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
<b>General Goal(s):</b>	To improve math skills through card games.
<b>Specific Objectives:</b>	To teach bridge.
<b>Required Materials:</b>	Paper Pencil Notebook

**Anticipatory Set (lead-in):**

- Review previous lessons
  - Card Playing, Card Ranks, and Trick Taking
  - Suits and Trumps
  - Taking Tricks with Trumps
  - Introduction to Hand Evaluation and Bidding
  
  - Keeping Score and The Auction
  - Play of the Hand
  - Opening Bids - Part 1
  - Opening Bids - Part 2
  
  - Responding to Partner's Opening Major Suit Bid
  - Responding to Partner's Opening Minor Suit Bid
  - Forcing Principles in Bridge Bidding
  - Rebids by Opener - Part 1
  
  - Rebids by Opener - Part 2
  - Rebids by Opener - Part 3
  - Responding to Partner's Opening 1NT Bid - Stayman
  - Responding to Partner's Opening 1NT Bid - Transfers

**Step-by-step Procedures:**

1. Review all previous lessons.

**Plan for Independent Practice:** Allow time to play hands.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

<b>Lesson Plan Title:</b>	Week 9 Lesson 2 - Math through Games
<b>Beginning Bridge:</b>	Weekly Review - Weeks 5-8
<b>Concept/Topic:</b>	To teach math through bridge.
<b>Standards Addressed:</b>	Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
<b>General Goal(s):</b>	To improve math skills through card games.
<b>Specific Objectives:</b>	To teach bridge.
<b>Required Materials:</b>	Paper Pencil Notebook

**Anticipatory Set (lead-in):**

- Review previous lessons
  - Declarer Play - Suit Contracts
  - Declarer Play - No Trump Contracts
  - Reevaluating Your Hand - 1
  - Reevaluating Your Hand - 2
  
  - Overcalls
  - Scoring Update - Penalties, Vulnerabilities, and Slam Bidding
  - Takeout Doubles
  - Big Hand Doubles
  
  - Preemptive Bidding
  - Weak Two Bids
  - Preemptive Jump Overcalls
  - Opening Very Strong Hands - 2 Clubs
  
  - Responding to 2 Clubs Opener
  - Opening Strong Balanced Hands
  - Slam Bidding
  - Slam Bidding - Blackwood and Gerber

**Step-by-step Procedures:**

1. Review all previous lessons.

**Plan for Independent Practice:** Allow time to play hands.

**Assessment Based on Objectives:** observation

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

<b>Lesson Plan Title:</b>	Week 9 Lesson 3 - Math through Games
<b>Beginning Bridge:</b>	Final Exam
<b>Concept/Topic:</b>	To teach math through bridge.
<b>Standards Addressed:</b>	Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
<b>General Goal(s):</b>	To improve math skills through card games.
<b>Specific Objectives:</b>	To teach bridge.
<b>Required Materials:</b>	Paper Pencil Notebook

**Anticipatory Set (lead-in):**

**Step-by-step Procedures:**

1. Give Final Exam.

**Plan for Independent Practice:**

**Assessment Based on Objectives:** exam

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):** Allow students to help those who are struggling.

**Possible Connections to Other Subjects:** communication skills, L.A.

**Final Exam 50 pts**

On a separate sheet of paper list the letter of the correct answer. 1 pt each

1. What are the major suits?  
A. Hearts & Diamonds B. Spades & Clubs  
C. Diamonds & Clubs D. Spades & Hearts
2. What are the first six tricks taken by declarer called?  
A. Contract B. Book  
C. Game D. Part-score
3. How many tricks does declarer need to bid for game in No Trump?  
A. Four B. Five C. Six D. Three
4. What is the rank of the suits in the bidding ladder, from lowest to highest?  
A. Diamonds-Clubs-Hearts-Spades B. Spades-Hearts-Diamonds-Clubs  
C. Clubs-Diamonds-Hearts-Spades D. No Trump- Clubs-Hearts-Spades
5. Who is declarer?  
A. The player who bid the trump suit first.  
B. The player who bid the trump suit first on the side that won the auction.  
C. The player who made the last bid before three passes.  
D. None of the above
6. Who is Opener?  
A. The player who deals the cards.  
B. The player who makes a bid other than pass first  
C. The player who bids the trump suit first  
D. The dealer
7. Who is Responder?  
A. The player who is to the left of the opening bidder  
B. The partner of the Overcaller  
C. The partner of Opener  
D. None of the Above
8. If partner opens 1 No Trump, how do you ask them if they have a four card major?  
A. Bid 2♦ B. Bid 2♠ C. Bid 2♣ D. Bid 2NT
9. If partner overcalls 1 No Trump and you have 3 points and six spades, what should you bid?  
A. 2♣ B. 2♠ C. 2♥ D. Pass

10. If you make an opening bid of 3♦, what is that called?  
 A. A Jump Shift  
 B. A Weak Two Bid  
 C. A Pre-emptive Bid  
 D. An Overcall
11. An Opening Bid of 1NT shows how many high card points?  
 A. 14-17 B. 16-18 C. 15-18 D. 15-17
12. Which of the following distributions is not balanced?  
 A. 5-4-2-2 B. 4-4-3-2 C. 3-3-3-4 D. 3-3-2-5
13. If your partner opened 2♣ and you had 2 points and five spades what would you bid?  
 A. Pass B. 2♥ C. 2♠ D. 2♦
14. If you make an opening bid of 2♥, what is that called?  
 A. A Jump Shift B. A Weak Two Bid C. A Pre-emptive Bid D. An Overcall
15. What bid is called Blackwood?  
 A. 4♣ B. 2♣ C. 4NT D. 2♦

If you were Dealer what would you bid with the following hands? 1 pt each

1. ♠AQ10876 ♥K6 ♦932 ♣85 \_\_\_\_\_
2. ♠KJ85 ♥AQ32 ♦K3 ♣KJ4 \_\_\_\_\_
3. ♠QJ7 ♥109754 ♦AQ8 ♣A109 \_\_\_\_\_
4. ♠AKQ98 ♥J65 ♦864 ♣86 \_\_\_\_\_
5. ♠AKJ10765 ♥8 ♦7532 ♣9 \_\_\_\_\_

If you're partner had opened the bidding with 1♣ and your right hand opponent passed, what would you bid with the following hands? 2 pts each

1. ♠AK87 ♥10976 ♦932 ♣85 \_\_\_\_\_
2. ♠J85 ♥Q1032 ♦3 ♣KQJ42 \_\_\_\_\_
3. ♠QJ7 ♥754 ♦AQ87 ♣A109 \_\_\_\_\_
4. ♠Q98 ♥J65 ♦A74 ♣9863 \_\_\_\_\_
5. ♠95432 ♥KQ84 ♦A52 ♣9 \_\_\_\_\_

If you're partner had opened the bidding with 1♥ and your right hand opponent passed, what would you bid with the following hands? 2 pts each

1. ♠AJ1076 ♥K65 ♦932 ♣85 \_\_\_\_\_

2. ♠K85 ♥AQ32 ♦873 ♣QJ4 \_\_\_\_\_

3. ♠7 ♥109754 ♦A875 ♣1094 \_\_\_\_\_

4. ♠AKQ98 ♥J65 ♦A64 ♣86 \_\_\_\_\_

5. ♠AKJ1076 ♥8 ♦7532 ♣95 \_\_\_\_\_

If you opened the bidding with 1♥ and your partner responded with 2♥, (assuming your opponents passed) what would you bid with the following hands? 2 pts each

1. ♠AQ ♥KQJ856 ♦932 ♣85 \_\_\_\_\_

2. ♠K2 ♥AQJ432 ♦K3 ♣KJ4 \_\_\_\_\_

3. ♠AKJ7 ♥J10954 ♦AK7 ♣10 \_\_\_\_\_

4. ♠A986 ♥AKJ65 ♦Q6 ♣86 \_\_\_\_\_

5. ♠82 ♥Q10875 ♦AK53 ♣K9 \_\_\_\_\_

Extra Credit:

Define what CRASH means in the context of playing out a hand. (10 points)

## Final Exam 50 pts - Answer Sheet

On a separate sheet of paper list the letter of the correct answer. 1 pt each

1. What are the major suits?  
 A. Hearts & Diamonds B. Spades & Clubs  
 C. Diamonds & Clubs **D. Spades & Hearts**
2. What are the first six tricks taken by declarer called?  
 A. Contract **B. Book**  
 C. Game D. Part-score
3. How many tricks does declarer need to bid for game in No Trump?  
 A. Four B. Five C. Six **D. Three**
4. What is the rank of the suits in the bidding ladder, from lowest to highest?  
 A. Diamonds-Clubs-Hearts-Spades B. Spades-Hearts-Diamonds-Clubs  
**C. Clubs-Diamonds-Hearts-Spades** D. No Trump-Clubs-Hearts-Spades
5. Who is Declarer?  
 A. The player who bid the trump suit first.  
**B. The player who bid the trump suit first on the side that won the auction.**  
 C. The player who made the last bid before three passes.  
 D. None of the above
6. Who is Opener?  
 A. The player who deals the cards.  
**B. The player who makes a bid other than pass first**  
 C. The player who bids the trump suit first  
 D. The dealer
7. Who is Responder?  
 A. The player who is to the left of the opening bidder  
 B. The partner of the Overcaller  
**C. The partner of Opener**  
 D. None of the Above
8. If partner opens 1 No Trump, how do you ask them if they have a four card major?  
 A. Bid 2♦ B. Bid 2♠ **C. Bid 2♣** D. Bid 2NT
9. If partner overcalls 1 No Trump and you have 3 points and six spades, what should you bid?  
 A. 2♣ B. 2♠ **C. 2♥** D. Pass

10. If you make an opening bid of 3♦, what is that called?  
 A. A Jump Shift  
 B. A Weak Two Bid  
**C. A Pre-emptive Bid**  
 D. An Overcall
  
11. An Opening Bid of 1NT shows how many high card points?  
 A. 14-17 B. 16-18 C. 15-18 **D. 15-17**
  
12. Which of the following distributions is not balanced?  
**A. 5-4-2-2** B. 4-4-3-2 C. 3-3-3-4 D. 3-3-2-5
  
13. If your partner opened 2♣ and you had 2 points and five spades what would you bid?  
 A. Pass B. 2♥ C. 2♠ **D. 2♦**
  
14. If you make an opening bid of 2♥, what is that called?  
 A. A Jump Shift **B. A Weak Two Bid** C. A Pre-emptive Bid D. An Overcall
  
15. What bid is called Blackwood?  
 A. 4♣ B. 2♣ **C. 4NT** D. 2♦

If you were Dealer what would you bid with the following hands? 1 pt each

1. ♠AQ10876 ♥K6 ♦932 ♣85 \_\_\_1♠\_\_\_
2. ♠KJ85 ♥AQ32 ♦K3 ♣KJ4 \_\_\_1NT\_\_\_
3. ♠QJ7 ♥109754 ♦AQ8 ♣A109 \_\_\_1♥\_\_\_
4. ♠AKQ98 ♥J65 ♦864 ♣86 \_\_\_Pass\_\_\_
5. ♠AKJ10765 ♥8 ♦7532 ♣9 \_\_\_3♠\_\_\_

If you're partner had opened the bidding with 1♣ and your right hand opponent passed, what would you bid with the following hands? 2 pts each

1. ♠AK87 ♥10976 ♦932 ♣85 \_\_\_1♥\_\_\_
2. ♠J85 ♥Q1032 ♦3 ♣KQJ42 \_\_\_1♥\_\_\_
3. ♠QJ7 ♥754 ♦AQ87 ♣A109 \_\_\_3NT\_\_\_
4. ♠Q98 ♥J65 ♦A74 ♣9863 \_\_\_1NT\_\_\_
5. ♠95432 ♥KQ84 ♦A52 ♣9 \_\_\_1♠\_\_\_

If you're partner had opened the bidding with 1♥ and your right hand opponent passed, what would you bid with the following hands? 2 pts each

1. ♠AJ1076 ♥K65 ♦932 ♣85 \_\_2♥\_\_

2. ♠K85 ♥AQ32 ♦873 ♣QJ4 \_\_3♥\_\_

3. ♠7 ♥109754 ♦A875 ♣1094 \_\_4♥\_\_

4. ♠AKQ98 ♥J65 ♦A64 ♣86 \_\_1♠\_\_

5. ♠AKJ1076 ♥8 ♦7532 ♣95 \_\_1♠\_\_

If you opened the bidding with 1♥ and your partner responded with 2♥, (assuming your opponents passed) what would you bid with the following hands? 2 pts each

1. ♠AQ ♥KQJ856 ♦932 ♣85 \_\_Pass\_\_

2. ♠K2 ♥AQJ432 ♦K3 ♣K94 \_\_3♥\_\_

3. ♠AKJ7 ♥J10954 ♦AK7 ♣10 \_\_4♥\_\_

4. ♠A986 ♥AKJ65 ♦Q6 ♣86 \_\_Pass\_\_

5. ♠82 ♥Q10875 ♦AK53 ♣K9 \_\_Pass\_\_

Extra Credit:

Define what CRASH means in the context of playing out a hand. (10 points)

C = COUNT Losers

R = REVIEW the auction

A = ANALYZE the Opening Lead

S = SOURCE of Tricks?

H = HOW do I take my tricks?

<b>Lesson Plan Title:</b>	Week 9 Lesson 4 - Math through Games
<b>Beginning Bridge:</b>	Mini Tournament - Part 1
<b>Concept/Topic:</b>	To teach math through bridge.
<b>Standards Addressed:</b>	Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
<b>General Goal(s):</b>	To improve math skills through card games.
<b>Specific Objectives:</b>	To teach bridge.
<b>Required Materials:</b>	Paper Pencil Notebook Bridge Boards Bridge Scorecards Cards Mini tournament hand records

**Step-by-step Procedures:**

1. Play the prepared handsets. Turn in your scores to the teacher.

**Plan for Independent Practice:**

**Assessment Based on Objectives:**

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):**

**Possible Connections to Other Subjects:** communication skills, L.A.

<b>Lesson Plan Title:</b>	Week 9 Lesson 5 - Math through Games
<b>Beginning Bridge:</b>	Mini Tournament - Part 2
<b>Concept/Topic:</b>	To teach math through bridge.
<b>Standards Addressed:</b>	Problem Solving 3. Apply and adapt a variety of appropriate strategies to solve problems.
<b>General Goal(s):</b>	To improve math skills through card games.
<b>Specific Objectives:</b>	To teach bridge.
<b>Required Materials:</b>	Paper Pencil Notebook Bridge Boards Bridge Scorecards Cards Mini tournament hand records

**Step-by-step Procedures:**

1. Play the 8-12 prepared handsets. Turn in your scores to the teacher.
2. Teacher to score the boards and announce the winners.

**Plan for Independent Practice:**

**Assessment Based on Objectives:**

**Adaptations (For Students with Learning Disabilities):** Allow students to use their notebooks.

**Extensions (For Gifted Students):**

**Possible Connections to Other Subjects:** communication skills, L.A.

## Instructions to Run a Duplicate Bridge Game

Supplies:

Table Mats  
Scoring slips  
Pre-dealt Duplicate Boards  
Pencils

Place a table mat (Game Attachment 1) indicating table number and direction on each table. Have the players sit at the tables and write their names, table number and direction on a slip of paper.

Example:

Table 1 East/West      John Brown and Sally Davis  
Table 1 North/South   Steve Smith and Dave Johnson

The East/West Players will play East/West for the remainder of the game.  
The North/South Players will play North/South for the remainder of the game.

Distribute one Duplicate board to each table in consecutive order. Table 1 will receive board 1. Table 2 will receive board 2. Table 3 will receive board 3. Complete until every table has one board. While distributing the boards, pick up the slips with each pair's name and location.

To begin the game each pair will play the board at their table against the pair sitting at their table. They will record their score on the scoring slips (Game Attachment-2).

9 minutes per round should be given to each table to play the hand at their table. When the hands are completed and scored the first 'round' is over and we are ready to begin the next round. North/South will remain at the table where they played the first round. This is their 'home table' and they remain at the table until the end of the game. The East/West pair will move to the next higher table. i.e. Pair 1 East/West will move to table 2 and play East/West. Pair 2 East/West will move to table 3 and play East/West. The last pair of East/West players will move to Table 1 and play East/West at that table.

The Duplicate board will move to the next lower number table. (i.e. the board that began at Table 3 will move to Table 2. Table 2's boards will move to Table 1. Table 1's boards will move to the highest numbered Table.) Each table will now play the new boards at their table against the new pair; scoring the results on the 'scoring slips'.

The Director of the game (the teacher) will now pick up the scoring slips from the first round and enter the results on the recap sheet (Game Attachment-3). The Director will also enter the players name on this recap sheet.

If there is an odd number of tables this process continues until every East/West pair has played every board against each North/South pair, or until the time allotted for the game has expired.

If you have more than 45 minutes to play your game, you may play additional boards by placing two boards on each table instead of one board.

The Director/Teacher will then score the game by 'match pointing' the scores. Each North/South pair will receive one 'match point' for every North/South pair they beat by having a higher score. Each East/West pair will receive one 'match point' for every East/West pair they beat by having a higher score. You will a winning for North/South and a winning pair for East/West. The overall winner will be the pair that has the highest score of all the pairs that participated. For a complete explanation of 'match pointing' please see Game Attachment 4.

## Glossary

**Bid** - A call by which a player shares information about his hand with his partner and eventually proposes a contract that his side will win at least as many tricks as his bid specifies.

**Bidding** - The period following the deal, and ending after the third successive pass of any bid.

**Book** - The first six tricks won by a declarer contract - The undertaking by declarer's side to win, at the denomination named, the number of tricks specified in the final bid.

**Contract** - The undertaking by declarer's side to win, at the denomination named, the number of tricks specified in the final bid.

**Dealer** – The player that starts the bidding.

**Declarer** - The player who first bid the suit (or no trump) which became the final bid.

**Distribution** - The manner in which the cards of a suit are dispersed among the four hands of a deal, or the manner in which the number of cards in the four suits are distributed in one hand.

**Dummy** - The declarer's partner after he has placed his cards face up on the table immediately after the opponent to declarer's left has made their opening lead.

**Final Bid** - The last bid in the auction, followed by three consecutive passes. The final bid becomes the contract.

**Finesse** - The attempt to gain power for lower-ranking cards by taking advantage of the favorable position of higher ranking cards.

**Game Contract** - An undertaking of a contract which, if successful, will earn enough points to make the 100 points necessary for a game and award a 300 to 500 point bonus.

**Lead** – The first card played to a trick.

**Opener** – The player that first takes an action other than pass.

**Opening Lead** – The first card played by the person to declarer's left.

**Opponent** - A member of the adverse team at bridge.

**Overcaller** – The player that first takes an action on the side that did not open the bidding.

**Part Score** – A contract that is played below game level.

**Partner** - The player with whom one is paired in a game of bridge.

**Responder** – The partner of the opener.

**Ruffing Value** – The ability of a hand to score more tricks by trumping lower ranking cards in one of partner's suit.

**Shape** – The distribution of a player's hand.

**Spot Cards** – Any card lower ranking than a ten.

**Trick** - Consists of four cards played in rotation after an initial lead of one of the cards by the player whose turn it was to lead.

**Trick-Score** - The value of each trick of fulfilled contracts towards the winning of the game.

**Trump** - The suit named in the final bid, other than No Trump. Such suit is called the 'trump suit' and a card of the trump suit, when played, is a winner over any card of another suit.

**Vulnerable** – a term indicating that the values of premiums and the severity of penalties are greatly increased.

## References for Future Studies

### Computer software

- The American Contract Bridge League (ACBL) has software you can download for free. Go to <http://www.acbl.org>, then click on Free Lesson Software and follow the directions. There is a beginner and also a more advanced program.
- *Learn to Play Bridge!*, on Richard Pavlicek's web site  
Take lessons on line. Go to <http://www.rpbridge.net/>, then click on "Non-Bridge Players". FREE
- There is also commercial software where you can play against the computer or practice conventions like Stayman. Let me know if you are interested.

Note: None of these are specifically designed for children.

### Internet Play

- Bridge Base Online. <http://www.bridgebase.com/>. Free Membership. You can go on the site to play hands in the main bridge club or in tournaments.
- OKbridge. <http://www.okbridge.com/>. Free trial for a week. Membership to use the site is \$99/year.

### Books

- *Bidding-The Club Series*, Audrey Grant. This is the first in the series. If you like it, you can proceed on to the Diamond, Heart and – you guessed it – Spade books in the series.
- *Five Weeks to Winning Bridge*, Alfred Sheinwold. Out of print, but sometimes available on the net. My "bible" when I learned bridge.
- *Adventures in Duplicate Bridge*, revised edition 1993, American Contract Bridge League, Memphis, TN
- Grant, Audrey, *Bidding*, 1990, revised 2004, reprinted 2005, American Contract Bridge League, Memphis, TN
- Grant, Audrey and Rodwell, Eric, *The Joy of Bridge Companion*, 1986, Prentice-Hall Canada, Inc, Scarborough, Ontario
- McMullin, Edith, *Easybridge!*, Edith McMullin, Silver Spring, MD

### Other

The ACBL also has a web site for junior players. <http://www.bridgeiscool.com/> It is directed mostly to high school and college players.

## Sources for Information

Find out about Atlanta Junior Bridge, Teaching Kids Bridge, International and National Opportunities:

Atlanta Junior Bridge - <http://www.atlantajuniorbridge.org/>

Bridge Teachers for Youth - <http://btfy.org/>

Bridge Teachers for Youth Yahoo Group -  
<http://groups.yahoo.com/group/btfy/>

Bridge At Schools – <http://www.bridgeatschools.org/>

American Contract Bridge League -  
<http://www.acbl.org/teachers/schoolBridge.html>

Youth4Bridge - <http://www.youth4bridge.org/>

School Bridge League - <http://www.schoolbridgeleague.org/>

United States Bridge Federation - <http://usbf.org/>

## **BRIDGE AND TEST SCORES**

A Research Report Presented to the

CARLINVILLE LIONS CLUB

January 23, 2007

**PARTICIPANTS:** Lion Chris Shaw, Lion George Banziger, Lion Bill Werner, Bobbie Klaus, Terry Levan, and Peter Genta.

**BACKGROUND:** While I was in North Dakota on a Visiting Professor appointment during the Fall of 2001, Lion Bill Werner taught Bobbie Klaus the basics of how to play bridge. Bobbie set up short bridge lessons as part of her 5<sup>th</sup> grade class math instruction. The students liked the game so well, that they started asking if they could stay in from recess to keep playing.

The “No Child Left Behind” education act was passed by Congress in 2001. It required extensive reporting on test scores. So, Terry Levan was appointed “the data guy” for the Carlinville Community School District. He immediately recognized that the scope of the reporting required the creation of a database and the use of a computer.

Three years later, in 2004, I learned that Terry Levan had written a series of computer programs which allowed for the tracking of student test scores over their entire time in the Carlinville school system. He wrote these programs in his spare time without any financial support from the school district. I asked Terry if we could track the changes in student test scores of the kids who learned to play bridge in Bobbie Klaus’s 2001 5<sup>th</sup> grade class and compare them to the changes of the non-bridge playing kids. He said we could track each student by using student number and could easily compute their changes in test scores in an Excel spread sheet. And, he created the data base to do that.

It turns out that the standardized testing schedule in the Carlinville schools has the kids taking the Iowa Test of Basic Skill, the ITBS, in September of 5<sup>th</sup> grade, April of 6<sup>th</sup> grade and April of 7<sup>th</sup> grade. Thus, the entire 5<sup>th</sup> grade in 2001-02 had been tested before one class of the six classes that year started to learn how to play bridge. They were all tested 20 months later as 6<sup>th</sup> graders and again 32 months later as 7<sup>th</sup> graders.

The 5<sup>th</sup> grade class of 2002-03 did not have the opportunity to learn to play bridge because a new “Everyday Math” math program was started. Bobbie Klaus resumed using bridge as part of her math instruction with the 2003-04 5<sup>th</sup> grade class. This change allowed the tracking of the students of the same teacher over a three year period with the middle year students not learning how to play bridge. This arrangement removed the teacher as a variable in the results to be analyzed.

The happening of all these events in Carlinville created a “researcher’s serendipity.” There was pre-testing of all the students in the 5<sup>th</sup> grade and post-testing at the 20<sup>th</sup> and 30<sup>th</sup> month intervals. There was a large control group that did not learn how to play bridge. There was an experimental group who did learn how to play bridge. There was a standardized testing program in which the same scoring scale was used for all three tests. In fact, the ITBS has five separate subject areas scored separately. This test structure and scoring scale allowed a comparison of the performance of five non-bridge groups of students to one test group of bridge playing students on all five subjects. And, there was a database that could track the scores over the three years to see how much gain the two groups would make.

Putting all of this together, Lion George Banziger, Terry Levan and I put together a grant application and sent it to the Board of Trustees of the Educational Foundation of the American Contract Bridge League. As a member of the Board of Trustees, I was able to present the application, but did not vote on it to avoid a conflict of interest. The grant was approved at the Fall 2004 North American Bridge Championships and the research began in 2005. It continued in 2006 and is scheduled to finish sometime in 2007. A follow-on grant application may be submitted sometime this year.

**METHOD:** The first step in building the data base was to link the student to the teacher by using student number. Six files were constructed using the teacher’s name with the student numbers for each teacher. Students who moved or repeated 5<sup>th</sup> grade had to be deleted from the data base. Thus, the six classes which started with 18 to 20 students in the 5<sup>th</sup> grade ended up with 15 to 20 students who took all three tests over 32 months.

The starting average test scores in the five subjects of the ITBS of each of the six sections and the average score of all 101 students in the six sections of the 2001 5<sup>th</sup> grade class are shown in Table 1 below. The fact that the principal had assigned the students to the six sections to provide about equal ability in each section is reflected in the small spread of average scores. These results provided a solid starting point from which to measure the progress of all of the students and then compare the progress of the bridge playing students to the progress of the students who did not learn to play bridge.

When the students entered 6<sup>th</sup> grade, they were given individual class schedules. This mixing of the experimental and the control groups actually strengthened the validity of the study. Table 2 contains the average scores of the ITBS administered in April 2003 taken by these 6<sup>th</sup> graders using their original 5<sup>th</sup> section assignments. Table 3 shows the 20-month average test score gains by the original 5<sup>th</sup> grade sections.

The same procedures applied to the group when they were 7<sup>th</sup> graders. They also had individual class schedules and took the ITBS exams in April 2004. Table 4 contains the 32-month average ITBS scores. Table 6 contains the 32-month gains by original 5<sup>th</sup> grade sections.

**RESULTS:** Table 1 shows the starting point average test scores for each of the six sections of the 2001-02 5<sup>th</sup> grade class. Table 2 shows the average test scores 20 months later. Table 3 is produced by subtracting Table 1 scores from Table 2 scores and it shows the average 20 month gain in each subject area. Table 4 contains the average test scores 32 months later. Table 5 is produced by subtracting Table 1 scores from Table 4 scores and it shows the average 32 month gain in each subject area.

**TABLE 1**  
**Section Average Standard Test Scores**  
**September 2001 ITBS (Before Bridge)**

SECTION(#)	READING	LANGUAGE	MATH	SCIENCE	SOCIAL STUDIES
<b>BRIDGE (15)</b>	<b>217.07</b>	<b>206.47</b>	<b>211.07</b>	<b>214.47</b>	<b>221.73</b>
<b>NB-1 (18)</b>	<b>210.94</b>	<b>211.06</b>	<b>207.06</b>	<b>214.28</b>	<b>214.22</b>
<b>NB-2 (17)</b>	<b>215.94</b>	<b>211.53</b>	<b>209.59</b>	<b>224.00</b>	<b>223.12</b>
<b>NB-3 (15)</b>	<b>211.87</b>	<b>207.40</b>	<b>208.93</b>	<b>219.33</b>	<b>219.13</b>
<b>NB-4 (16)</b>	<b>220.75</b>	<b>221.75</b>	<b>216.63</b>	<b>230.75</b>	<b>230.50</b>
<b>NB-5 (20)</b>	<b>214.85</b>	<b>213.00</b>	<b>216.30</b>	<b>225.30</b>	<b>219.65</b>
<b>NB AVE (86)</b>	<b>214.83</b>	<b>212.95</b>	<b>211.81</b>	<b>222.70</b>	<b>221.13</b>
<b>CLASS</b>					
<b>AVE. (101)</b>	<b>215</b>	<b>212</b>	<b>212</b>	<b>221</b>	<b>221</b>

**TABLE 2**  
**Section Average Standard Test Scores**  
**April 2003 ITBS (20 Month Later)**

SECTION (#)	READING	LANGUAGE	MATH	SCIENCE	SOCIAL STUDIES
<b>BRIDGE(15)</b>	<b>238.53</b>	<b>231.53</b>	<b>236.27</b>	<b>254.73</b>	<b>264.13</b>
<b>NB-1 (18)</b>	<b>230.67</b>	<b>236.44</b>	<b>227.94</b>	<b>249.11</b>	<b>245.11</b>
<b>NB-2 (17)</b>	<b>241.35</b>	<b>242.06</b>	<b>243.29</b>	<b>258.41</b>	<b>250.00</b>
<b>NB-3 (15)</b>	<b>234.26</b>	<b>224.33</b>	<b>229.00</b>	<b>246.53</b>	<b>246.80</b>
<b>NB-4 (16)</b>	<b>239.94</b>	<b>241.25</b>	<b>239.25</b>	<b>267.81</b>	<b>265.06</b>
<b>NB-5 (20)</b>	<b>239.30</b>	<b>240.40</b>	<b>234.65</b>	<b>253.50</b>	<b>248.00</b>
<b>NB AVE (86)</b>	<b>237.14</b>	<b>237.26</b>	<b>234.83</b>	<b>255.00</b>	<b>250.76</b>
<b>CLASS</b>					
<b>AVE. (101)</b>	<b>237</b>	<b>236</b>	<b>235</b>	<b>255</b>	<b>253</b>

**TABLE 3**  
**20 Month Average Gain by Section**

<b>SECTION(#)</b>	<b>READING</b>	<b>LANGUAGE</b>	<b>MATH</b>	<b>SCIENCE</b>	<b>SOCIAL STUDIES</b>
<b>BRIDGE (15)</b>	<b>21.46</b>	<b>25.06</b>	<b>25.20</b>	<b>40.26</b>	<b>42.40</b>
<b>NB-1 (18)</b>	<b>19.73</b>	<b>25.38</b>	<b>20.88</b>	<b>34.83</b>	<b>30.89</b>
<b>NB-2 (17)</b>	<b>25.41</b>	<b>30.53</b>	<b>33.70</b>	<b>34.41</b>	<b>26.88</b>
<b>NB-3 (15)</b>	<b>22.39</b>	<b>16.93</b>	<b>20.07</b>	<b>27.20</b>	<b>27.67</b>
<b>NB-4 (16)</b>	<b>19.19</b>	<b>19.50</b>	<b>22.62</b>	<b>37.06</b>	<b>34.56</b>
<b>NB-5 (20)</b>	<b>24.45</b>	<b>27.40</b>	<b>18.35</b>	<b>28.20</b>	<b>28.35</b>
<b>NB AVE (86)</b>	<b>22.32</b>	<b>24.30</b>	<b>23.00</b>	<b>32.29</b>	<b>29.63</b>
<b>AVE (101)</b>	<b>22</b>	<b>24</b>	<b>23</b>	<b>34</b>	<b>32</b>

**TABLE 4**  
**Section Average Standard Test Scores**  
**April 2004 (32 months later)**

<b>SECTION(#)</b>	<b>READING</b>	<b>LANGUAGE</b>	<b>MATH</b>	<b>SCIENCE</b>	<b>SOCIAL STUDIES</b>
<b>BRIDGE(15)</b>	<b>257.93</b>	<b>257.53</b>	<b>262.60</b>	<b>266.73</b>	<b>266.87</b>
<b>5 NB AVE (86)</b>	<b>248.70</b>	<b>258.61</b>	<b>253.30</b>	<b>260.21</b>	<b>245.89</b>
<b>NB-1 (18)</b>	<b>243.50</b>	<b>257.11</b>	<b>243.50</b>	<b>257.67</b>	<b>254.11</b>
<b>NB-2 (17)</b>	<b>252.11</b>	<b>263.35</b>	<b>261.65</b>	<b>262.47</b>	<b>261.53</b>
<b>NB-3 (15)</b>	<b>245.20</b>	<b>248.60</b>	<b>249.40</b>	<b>254.93</b>	<b>249.93</b>
<b>NB-4 (16)</b>	<b>252.81</b>	<b>262.56</b>	<b>259.06</b>	<b>269.69</b>	<b>269.63</b>
<b>NB-5 (20)</b>	<b>249.80</b>	<b>260.30</b>	<b>253.35</b>	<b>256.95</b>	<b>254.80</b>
<b>Average (101)</b>	<b>250</b>	<b>258</b>	<b>255</b>	<b>261</b>	<b>259</b>

**TABLE 5**  
**32 Month Average Gain by Section**

<b>SECTION(#)</b>	<b>READING</b>	<b>LANGUAGE</b>	<b>MATH</b>	<b>SCIENCE</b>	<b>SOCIAL STUDIES</b>
<b>BRIDGE(15)</b>	<b>40.86</b>	<b>51.06</b>	<b>51.53</b>	<b>52.26</b>	<b>45.14</b>
<b>5 NB AVE (86)</b>	<b>33.87</b>	<b>45.04</b>	<b>41.48</b>	<b>37.52</b>	<b>36.77</b>
<b>DIFFERENCE</b>	<b>6.99</b>	<b>6.02</b>	<b>10.05</b>	<b>14.74</b>	<b>8.37</b>
<b>NB-1 (18)</b>	<b>32.56</b>	<b>46.05</b>	<b>36.44</b>	<b>43.39</b>	<b>39.89</b>
<b>NB-2(17)</b>	<b>36.17</b>	<b>51.82</b>	<b>52.06</b>	<b>38.47</b>	<b>38.14</b>
<b>NB-3(15)</b>	<b>33.33</b>	<b>41.20</b>	<b>40.47</b>	<b>35.60</b>	<b>30.80</b>
<b>NB-4(16)</b>	<b>32.06</b>	<b>40.81</b>	<b>42.43</b>	<b>38.94</b>	<b>39.13</b>
<b>NB-5(20)</b>	<b>34.95</b>	<b>47.30</b>	<b>37.05</b>	<b>31.65</b>	<b>35.15</b>
<b>Average(101)</b>	<b>35</b>	<b>46</b>	<b>43</b>	<b>40</b>	<b>38</b>

**DISCUSSION:** The 20-month average test score gains show that the bridge playing students did slightly better than their classmates in Math; much better in Science, and very much better in Social Studies, which was the only subject area to be a statistically significant difference. See Table 6.

The 32-month average test score gains show that the bridge playing students were higher in all five subject areas. Language was the only one that was not statistically significant.

Since bridge is a quantitative game, better scores in Math and Science were expected. The higher gains in Reading, Language, and Social Science may be caused by the faster development of inferential reasoning skills. Further research is needed in this area.

**Table 6**  
**Summary of Statistical Analysis of Comparison of Fifth Grade Bridge-Playing and Non-Bridge-Playing Groups on the Iowa Tests of Basic Skills**

	<b>Bridge-Playing Class (1) Average Scores</b>	<b>Non-Bridge-Playing Class (5) Average Scores</b>	<b>One-tailed t-test of Significance<sup>1</sup></b>	<b>Probability of Difference (Level of Significance)</b>
Math				
20-month	25.2	23.0	0.455	0.327
32-month	51.5	41.5	-1.805	0.043*
Science				
20-month	40.3	30.3	1.29	0.107
32-month	52.3	37.5	-1.999	0.030*
Reading				
20-month	21.5	27.2	0.195	0.424
32-month	40.9	33.9	-2.177	0.020*
Language				
20-month	25.1	26.2	0.227	0.411
32-month	51.1	45.1	0.947	0.178
Social Studies				
20-month	42.4	29.6	2.063	0.026*
32-month	45.1	36.8	-1.012	0.163

<sup>1</sup> A one-tailed t-test of significance was used to test the null hypothesis that the bridge-playing group did not score significantly higher on the Iowa tests than the non-bridge-playing group.

**AN ANALYSIS OF STANDARDIZED TEST SCORE GAINS  
FOR THREE 5<sup>TH</sup> GRADE CLASSES OF THE SAME TEACHER**

Christopher C. Shaw, Jr. Ph.D.

This report contains the class average gains on the Iowa Test of Basic Skills for three consecutive 5<sup>th</sup> grade classes taught by the same teacher at the Carlinville, Illinois Intermediate School for the years 2001-2003. The students were tested in September of 5<sup>th</sup> grade, May of 6<sup>th</sup> grade, and May of 7<sup>th</sup> grade. The gains in test scores are shown for both the 20-month interval and the 32-month interval between tests. The 2002 5<sup>th</sup> grade class did not receive bridge lessons as part of their math instruction in the classroom. The 2001 and the 2003 classes learned how to play bridge. The average ability of all three classes was approximately the same when they started 5<sup>th</sup> grade. Thus, the test score gains appear to reflect the impact that learning bridge has on the student's ability to learn in both 6<sup>th</sup> and 7<sup>th</sup> grades. Learning bridge helped student's develop their inferential reasoning skills. These skills were used in all five subject areas of the Iowa Test of Basic Skills.

**20-MONTH AVERAGE TEST SCORE GAINS**

<b>YEAR</b>	<b>READING</b>	<b>MATH</b>	<b>SOCIAL STUDIES</b>	<b>LAN- GUAGE</b>	<b>SCIENCE</b>	
2001-02	21.47	25.20	42.40	25.06	40.27	Bridge
2002-03	17.43	24.26	14.31	30.52	29.79	No Br.
2003-04	28.50	34.95	24.17	32.11	24.67	Bridge

**32-MONTH AVERAGE TEST SCORE GAINS**

2001-02	40.87	51.53	45.13	51.07	52.27	Bridge
2002-03	23.37	36.42	25.15	30.05	36.05	No Br.
2003-04	39.72	45.67	32.50	37.17	45.11	Bridge

The 2001 bridge students had higher test score gains than the 2002 students at the end of 20 months and 32 months in 4 of the 5 subjects. The average Language gain of the 2001 class was lower than the 2002 class and the 2003 class gain was slightly better than 2002.

The 2003 bridge students out gained the 2002 class with the exception of Science at the end of 20 months. Note that they exceeded the gain of the 2002 students by the end of 30 months.

The game of bridge helps to develop inferential skills in both the bidding and the playing of a contract. It is possible that these inferential reasoning skills developed by learning to play bridge are needed more in the 7<sup>th</sup> grade curriculum to perform well on standardized tests. Students who learn how to play bridge start developing inferential reasoning skills. These skills are very difficult to teach to elementary students. They appear to be used in all five subject areas in middle school.