

Lesson 6

Skills:

- ❖ Write a research report using a writing process.
- ❖ Learn about baseball and famous players: Lou Gehrig, Ted Williams.
- ❖ Define words using a dictionary.
- ❖ Use comparative and superlative adjectives.
- ❖ Learn the symptoms and effects of Lou Gehrig's disease.
- ❖ Read and write decimal numbers.
- ❖ Use the Associative Property of Addition.
- ❖ Recall multiplication facts.
- ❖ Use a calculator to compute batting averages.
- ❖ Round decimal numbers to the nearest thousandth.
- ❖ Develop eye-hand coordination: catching a ball with the non-dominant hand.

Materials:

- ❖ Bean bag
- ❖ Tennis ball, Nerf ball, baseball
- ❖ Baseball glove
- ❖ Dice (five)
- ❖ Calculator
- ❖ Index cards
- ❖ Flashcards: multiplication
- ❖ *Great Moments in Baseball History*, by Matt Christopher
- ❖ Worksheets 6, 6a

Language Arts/Social Studies/Science:

- ❖ Have the child read "September 28, 1960: Ted Williams, The Greatest Hitter's Last At Bat" in *Great Moments in Baseball History*.
- ❖ Teach the child to properly use comparative and superlative adjectives. Adjectives can be used to compare objects.
 - The comparative form of an adjective is used to compare two objects. The comparative form is usually made by adding the suffix *-er* to the adjective. For example: The dog is nicer than the cat. Have the child compare two objects using the comparative form of the adjective *large*. When the adjective ends in *y*, follow the spelling rules to make the comparative form. For example: The dog is friendlier than the cat.
 - The superlative form of an adjective is used to compare more than two objects. The superlative form is usually made by adding the suffix *-est* to the adjective. For example: The black dog is the nicest dog. Have the child compare more than two objects using the superlative form of the adjective *large*. When the adjective ends in *y*, follow the spelling rules to make the superlative form. For example: The dog is the friendliest dog.
- ❖ Worksheet 6, part A: Have the child use a dictionary and write a definition of each word. Have the child write each vocabulary word on an index card. Then write the word and its definition on another index card. Do not write on the other side of the index cards.

consecutive

consecutive:
in a row

- *humble*: modest, having a low estimate of one's importance
- *statistics*: data, numbers, information
- *dedicated*: committed
- *despite*: without being affected by, even with

- *consecutive: in a row*
 - *diagnose: identify by symptoms*
 - *degenerative: progressive loss of function*
 - *incurable: untreatable*
 - *fatal: causing death*
 - *neuromuscular: relating to nerves and muscles*
 - *progressively: steadily, in stages*
 - *paralysis: the loss of the ability to move or feel*
 - *deteriorate: worsen*
 - *inherited: passed on through your family*
 - *slurred: unclear or mumbled speech*
- ❖ Worksheet 6, part B: Have the child read about Lou Gehrig and then answer the questions on a sheet of paper.
- Answers:*
1. *An RBI is a run batted in. It credits a batter for making a play that allows a run to be scored.*
 2. *A grand slam scores four runs.*
 3. *$23 \times 4 = 92$; 92 runs*
 4. *Lou played 2,130 consecutive games.*
 5. *A player earns the Triple Crown when he leads a league in three statistical categories in the same season: batting average, home runs, and runs batted in.*
 6. *Lou Gehrig was diagnosed with ALS, or Lou Gehrig's disease.*
- ❖ Worksheet 6, part C: Have the child read each sentence and circle the correct word.
- Answers:*
1. *quietest*
 2. *noisy, noisier*
 3. *heavier*
 4. *fastest*
 5. *windy*
 6. *dirtier*
 7. *driest*
 8. *lazy*
- ❖ Worksheet 6, part D: Have the child write sentences using the comparative and superlative forms of the given words. Check the child's sentences for correct spelling and punctuation.
- ❖ Help your child organize the information for his report. Have him write his information in categories.
- The first category becomes the introduction. The first paragraph should introduce the topic in an interesting way. What is the most important idea? This becomes the topic sentence or main idea. It tells the reader what you will be writing about. What details should be used in this paragraph?
 - The second category becomes the body of the report. This includes all the information to describe or explain the topic. The body of the report may be more than one paragraph.
 - The third category becomes the conclusion. It should restate the topic sentence and give any final facts your child would like to include in support of that statement.
- ❖ Play vocabulary memory using the index cards with vocabulary words.
- Lay the cards face down in even rows.
 - Player one turns over two cards. Have the child read the cards.
 - If the cards are matching a word and its definition, set them aside.
 - If the cards do not match, put them back face down.
 - Player two does the same.
 - When all of the cards have been matched, count to see which player has more matches.
 - * Include additional sets of words and definitions to make the game more challenging.
 - * Have the child arrange the vocabulary words in alphabetical order.
 - Save the index cards to use for other activities.

- ❖ Discuss Lou Gehrig’s disease. Research to find other well-known people who have been diagnosed with ALS. How has it affected their careers and personal lives? Have they helped to further awareness and to promote medical research to find a cure for ALS?

Math/Social Studies:

- ❖ Have the child roll five dice to practice mental math. Have the child use the Associative Property of Addition to group numbers that add easily. For example, the child rolls a one, five, four, five, and six. Group the fives together for a sum of ten. Group the four and six together for a sum of ten. Ten plus ten plus one equals twenty-one.
- ❖ Place value also includes decimal numbers. These are part of a whole number.

Hundreds	Tens	Ones	tenths	hundredths	thousandths
5	3	1	.	8	9
				4	

- Place values to the left of the decimal are whole numbers. Place values to the right of the decimal point are parts of a whole number. The first place value to the right of the decimal is the tenths place. The second place value to the right of the decimal is the hundredths place. The third place value to the right of the decimal is the thousandths place. Notice that decimal place values end in “ths.” When decimal numbers are written or spoken, it helps to distinguish between the place values. The decimal is read as the word “and.” The number 531.894 is read as “five hundred thirty-one and eight hundred ninety-four thousandths.” Decimal place values are given the label of the last place value to the right.
- ❖ Have the child make a chart with six columns on a sheet of paper. Make the top row three inches wide and the remaining rows one inch wide.
 - Have him write the place value names and a decimal point on his chart.

hundreds	tens	ones	tenths	hundredths	thousandths
			.		

- From right to left, have the child name the place values in his chart: thousandths, hundredths, tenths, ones, tens, hundreds.
- Have the child use the index cards zero through nine (0, 1, 2, 3, 4, 5, 6, 7, 8, 9) from Lesson 25 to make numbers. Set the index card with “0” aside. Have the child turn the remaining index cards face down, and randomly choose cards.
 - ◆ Choose one card. Place it in the tenths place, and place the zero in the ones place.
- * When there is no whole number before the decimal, it is common practice to write a zero to hold the place value and draw attention to the decimal.
 - Read the number. For example: 0.8 is read “eight tenths.”
 - ◆ Choose two cards. Turn the cards over, and write the digits in the chart. Write one digit in the tenths place and one digit in the hundredths place.
 - Read the number. For example: 0.79 is read “seventy-nine hundredths.”
 - ◆ Choose three cards. Turn the cards over, and write the digits in the chart. Arrange the numbers in any order. Write one digit in the tenths place, one digit in the hundredths place, and one digit in the thousandths place.
 - Read the number. For example: 0.524 is read “five hundred twenty-four thousandths.”
 - ◆ Choose four cards. Turn the cards over, and write the digits in the chart. Arrange the numbers in any order. Write one digit in the ones place, one digit in the tenths place, one digit in the hundredths place, and one digit in the thousandths place.
 - Read the number. For example: 3.927 is read “three **and** nine hundred twenty-seven thousandths.”
 - ◆ Have the child continue to randomly choose various numbers of cards. Make numbers, write them in the chart, and read them aloud.

- ❖ Play a flashcard game to review multiplication facts.
 - The goal of the game is to get a dozen cards in a row. They must be in numerical order by their answer. Players review multiplication facts as well as practice ordering numbers from least to greatest.
 - Put all of the multiplication flashcards in a pile.
 - Each player takes a turn drawing a flashcard, naming the answer, and placing it in front of him.
 - When the second flashcard is drawn, place it in the correct position in relationship to the other flashcard. For example, 4×3 would be placed to the left of 5×6 because twelve is less than thirty.
 - Continue to take turns drawing flashcards and building a row of numbers.
 - If a player draws a flashcard with the same answer as a flashcard in his row, place the flashcard on top of it.
 - When a player has twelve cards in a row, he wins.
 - Challenge: Make a longer row.

- ❖ Worksheet 6a, part A: Have the child read the numbers aloud and then write them in word form.

* Remember: When there is no whole number before the decimal, it is common practice to write a zero to hold the place value and draw attention to the decimal.

Answers:

- 1) *six tenths*
- 2) *twenty-three hundredths*
- 3) *seven hundred fifty-four thousandths*
- 4) *nine hundredths*
- 5) *ten and three hundred fifty-six thousandths*
- 6) *twelve and five tenths*
- 7) *three hundred ninety-eight and seven hundred sixty-eight thousandths*
- 8) *four thousand, seven hundred two and fifty-nine hundredths*

- ❖ Worksheet 6a, part B: Have the child use digits to write each of the decimal numbers.

Answers:

- 1) *1.3*
- 2) *.7*
- 3) *.07*
- 4) *4.6*
- 5) *28.172*
- 6) *189.12*
- 7) *36,904.8*
- 8) *17,481,026.04*
- 9) *832,519.8*
- 10) *512,608,011.04*

- ❖ Worksheet 6a, part C: Have the child read about batting averages. Review rounding rules. Rounding a decimal number follows the same rules as rounding whole numbers. If the digit to the right of the decimal place being rounded is five or greater, round up. If the digit is less than five, round down.

Answers:

<i>Player one</i>	$141 \div 425 = .3317$	<i>Batting average: .332</i>
<i>Player two</i>	$134 \div 407 = .3292$	<i>Batting average: .329</i>
<i>Player three</i>	$126 \div 416 = .3028$	<i>Batting average: .303</i>
<i>Player four</i>	$132 \div 422 = .3127$	<i>Batting average: .313</i>
<i>Player five</i>	$128 \div 405 = .3160$	<i>Batting average: .316</i>
<i>Player six</i>	$138 \div 448 = .3080$	<i>Batting average: .308</i>
<i>Player seven</i>	$140 \div 440 = .3181$	<i>Batting average: .318</i>
<i>Player eight</i>	$113 \div 373 = .3029$	<i>Batting average: .303</i>
<i>Player nine</i>	$144 \div 442 = .3257$	<i>Batting average: .326</i>
<i>Player ten</i>	$122 \div 397 = .3073$	<i>Batting average: .307</i>

- ❖ Worksheet 6a, part D: Have the child use a calculator to calculate batting averages.

Physical Education/Science:

- ❖ Fielding the ball requires instincts and quick reactions. Players catch the baseball with their non-dominant hand, and it is usually less coordinated than the dominant hand. Many times a player will need to move toward a ball to catch it.
- ❖ Have the child practice catching with his non-dominant hand.
 - Toss a bean bag back and forth with the child, and have him catch it barehanded with only his glove hand. This forces the child to pinch his thumb and fingers together mimicking what the hand will have to do when catching with a glove.
 - He should stand in an athletic stance with his knees slightly bent.
 - Try to toss the bean bag as close to the child as possible so he doesn't need to move toward the ball.
 - His eyes should watch the bean bag all the way into his hand.
 - He should not duck, close his eyes, or move out of the way of the bean bag.
 - As the child improves, play catch with a tennis or Nerf ball.
- ❖ Have the child practice catching a baseball with a baseball glove.
 - The child gets directly in front of the ball with his whole body.
 - His eyes should watch the ball all the way into his glove.
 - As the ball is caught, squeeze the webbing so the ball stays in the glove.
- ❖ Have the child catch balls overhand and underhand.

name _____



Part A: Read the words. Use a dictionary, and write a definition for the word. Write each vocabulary word on an index card. Then write the word and its definition on another index card. Do not write on the other side of the index cards.

humble	statistics	dedicated	despite	consecutive
diagnose	degenerative	incurable	fatal	neuromuscular
progressively	paralysis	deteriorate	inherited	slurred

Part B: Read about Lou Gehrig. Then answer the questions on a sheet of paper.

Talented yet humble, Lou Gehrig admitted he wasn't always in the spotlight or headlines. He said, "I always knew that as long as I was following Babe to the plate I could have gone up there and stood on my head. No one would have noticed the difference."

However, Lou set many records during his career with the Yankees. In 1931, he earned 184 RBIs, the highest single-season total in American League history. An RBI, or run batted in, credits a batter for making a play that allows a run to be scored. Babe Ruth wasn't the only Yankee who could knock a baseball out of the park. On June 3, 1932, Lou was the first American League player ever to hit four home runs in a single game. Not only did he hit home runs, he hit grand slams. When the bases are loaded, or occupied by other players who have batted, a grand slam home run sends all of the players home. This is the most possible runs scored in one play. How many runs does a grand slam score? Lou hit twenty-three grand slams during his career. In baseball, a player earns the Triple Crown when he leads a league in three statistical categories in the same season: batting average, home runs, and runs batted in (RBI). Lou was awarded the Triple Crown in 1934 when he led the American League in batting average (.363), home runs (49), and runs batted in (165).

Lou was dedicated and played despite injuries for 2,130 consecutive games. He earned the nickname "Iron Horse," but in 1939 it came to a halt. On May 2 as Yankee captain, Lou took the team lineup card to the umpires as usual. But his name was not on the roster. The game announcer sadly announced, "Ladies and gentlemen, Lou Gehrig's consecutive streak of 2,130 games played has ended." Doctors at the Mayo Clinic had diagnosed Lou with a very rare form of degenerative disease: amyotrophic lateral sclerosis (ALS), which is now called Lou Gehrig's disease. There was no chance he would ever play baseball again.

ALS, Lou Gehrig's Disease, is an incurable, fatal, neuromuscular disease. Muscles progressively weaken, and eventually it results in paralysis. The disease attacks the nerve cells in the brain and spinal cord. The motor neurons no longer send signals for the brain to initiate and control muscle movement, so they gradually weaken and deteriorate. Sometimes the disease is inherited, but doctors are not sure of the cause in most cases. Symptoms of ALS are weakness in the legs or feet which causes difficulty walking, tripping, and falling. A person's hands may also become weak and clumsy, and at times his speech may be slurred.

Lou Gehrig was elected to Hall of Fame in 1939, and the New York Yankees retired his No. 4 jersey. He has the honor of being the first player in Major League Baseball history to have his number retired.

Lou Gehrig is remembered as one of the most talented baseball players of all time. More than that, he is remembered for his kind heart and winning attitude.

1. What is an RBI?
2. How many runs does a grand slam score?
3. Lou hit twenty-three grand slams during his career. How many points did the grand slams score for his team?
4. In how many consecutive games did Lou play?
5. How does a player earn the Triple Crown in baseball?
6. Why did Lou Gehrig retire from baseball?

Part C: Read each sentence. Circle the correct word.

1. Bob is the _____ member of the baseball team.
quiet quieter quietest
2. The crowd was incredibly _____ when Babe Ruth hit the home run. They were _____ than when the team won the game yesterday.
noisy noisier noisiest
3. There are two pitchers on the team, and John is the _____ one.
heavy heavier heaviest
4. The infield players had a race and the second baseman was the _____ runner.
fast faster fastest
5. It was so _____ in the outfield, the baseball flew over the fence.
windy windier windiest
6. If your uniform gets any _____, the number won't be visible.
dirty dirtier dirtiest
7. Yesterday was the _____ day of the month.
dry drier driest
8. The player was _____ and refused to practice.
lazy lazier laziest

Part D: Write a sentence using the correct form of the given word.

1. scary (comparative form) _____

2. snowy (superlative form) _____

name _____



Part A: Read the numbers aloud. Then write them in word form.

Hundreds	Tens	Ones	tenths	hundredths	thousandths
5	3	1	• 8	9	4

- 1) 0.6 _____
- 2) 0.23 _____
- 3) 0.754 _____
- 4) 0.09 _____
- 5) 10.356 _____
- 6) 12.5 _____
- 7) 398.768 _____
- 8) 4,702.59 _____

Part B: Use digits to write each of the decimal numbers.

- 1) one and three tenths _____
- 2) seven tenths _____
- 3) seven hundredths _____
- 4) four and six tenths _____
- 5) twenty-eight and one hundred seventy-two thousandths _____
- 6) one hundred eighty-nine and twelve hundredths _____
- 7) thirty-six thousand, nine hundred four and eight tenths _____
- 8) seventeen million, four hundred eighty-one thousand, twenty-six and four hundredths

- 9) eight hundred thirty-two thousand, five hundred nineteen and eight tenths

- 10) five hundred twelve million, six hundred eight thousand, eleven and four hundredths

Part C: Read about batting averages.

Batting averages are one of the most familiar stats. It gives a quick assessment of a player's hitting ability. To calculate a batting average, divide the number of hits a player gets by the number of at bats. The batting average will be a decimal number. It is written with three decimal places. If the answer has digits in more than three decimal places, round it to the thousandths place. Follow the rounding rules. If the digit to the right of the thousandths place is five or greater, round up. If the digit is less than five, round down.

Player A had 134 hits and was at bat 381 times. Calculate his batting average.

$134 \div 381 = .3517$ Seven is greater than five, so the one will round up to two.

Player A's batting average: .352

The decimal number is read "three hundred fifty-two thousandths." However, the decimal is ignored when batting statistics are read aloud.

Part D: Use a calculator to calculate batting averages.

	Number of Hits	Number of at Bats	Batting Average: number of hits \div number of at bats
Player one	141	425	
Player two	134	407	
Player three	126	416	
Player four	132	422	
Player five	128	405	
Player six	138	448	
Player seven	140	440	
Player eight	113	373	
Player nine	144	442	
Player ten	122	397	