

# Lesson 24

## Skills:

- Write a research report using a writing process: prewriting.
- Use a chart to classify words.
- Learn about a famous baseball player: Jackie Robinson.
- Apply the Associative Property and Commutative Property of Addition.
- Multiply two-digit numbers.
- Use a bar graph and line graph to record information and solve problems.
- Write numbers in expanded form and word form.
- Measure reaction time.

## Materials:

- ❖ Index cards
- ❖ Dice
- ❖ Calculator
- ❖ Ruler
- ❖ *Baseball Science*, by James Bow
- ❖ *Jackie Robinson American Hero*, by Sharon Robinson
- ❖ *Baseball Superstars (2016)*, by K. C. Kelley
- ❖ Worksheets 24, 24a

## Language Arts/Social Studies:

- ❖ Have the child read *Jackie Robinson American Hero*. Discuss Jackie's struggles and accomplishments.
- ❖ Have the child read *Baseball Superstars*.
  - As he reads about each player, have him write at least one interesting fact about the player. Make a diagram of a baseball field, and record the player's name and fact in the location where he plays. For example:  
Nolan Arenado: third base, three Gold Glove Awards



- The book includes multiple players for some of the positions. There is not a player listed for catcher or second base. Have your child research online or in additional books and select a player for each of these other positions.
- ❖ Teach the child to write a research report about a baseball player. In the first unit he wrote a short imaginative story. In this unit he will write a three-page report using a writing process. Step one of a

writing process is prewriting. Have him select a player that interests him and begin to gather details about the topic. He may organize his details in a writing web or chart. His details do not need to be written as complete sentences. They can be short phrases or one-word answers. He should not copy another writer's sentences exactly. Ask questions to help the child select a player. "Is there a player that interests you? Did you read about a baseball team that interests you? What part of the game of baseball would you like to learn more about?" If he needs more ideas before selecting a topic, search books or online resources for other great baseball players.

- ❖ Worksheet 24, part A: Have the child read the words. Then have him make a chart on a sheet of paper and organize the words according to the number of syllables.

Answers:

<u>one syllable</u>	<u>two syllables</u>	<u>three syllables</u>	<u>four syllables</u>	<u>five syllables</u>	<u>six syllables</u>
league	approached	excellent	professional		responsibility
	courage	prejudice			
	athlete	attended			
		racism			
		restrictions			
		remainder			

- ❖ Worksheet 24, part B: Have the child read about Jackie Robinson and then answer the questions on a sheet of paper.

Answers:

1. Atlanta is the capital of Georgia.
2. Facing prejudice means that others have an opinion of you that is not based on reason or experience. They "pre-judge" you based on what you look like, sound like, or many other reasons.
3. Jackie played shortstop.
4. Answers will vary.
5. Number 42 has been retired in honor of Jackie Robinson.
6. Jackie Robinson Day is a tribute to Jackie Robinson and his accomplishments. All the players wear his number 42 on that day.

- ❖ Worksheet 24, part C: Have the child write six compound words from part B.

Answers: baseball, football, basketball, lifetime, shortstop, ballplayer

- ❖ Play Spelling Baseball.

- Designate a first, second, third, and home base in the room. You may also draw a baseball diamond on a sheet of paper and use a coin to represent the player.
- The child comes to "bat." He advances around the bases by spelling words. Simple words earn a single base. More difficult words earn a double, triple, or home run. Divide the sight words and words from worksheets within this unit into four categories: single, double, triple, and home run.
- Have your child choose the number of bases he would like to earn.
- Say a word from the corresponding category. If he spells it correctly, he advances to that base.
- Continue to choose base hits and spell words.
- Each time the child crosses home plate he earns a run.
- If he is not able to spell the word correctly, he receives an "out." After three "outs" his turn is over.
- See how many runs the child can score before he is out.
- Play nine innings. Keep track of his score each inning.

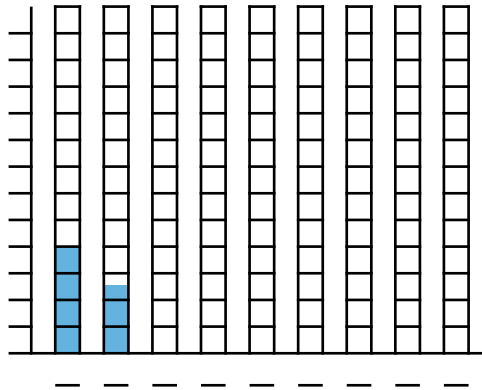
	Inning 1	Inning 2	Inning 3	Inning 4	Inning 5	Inning 6	Inning 7	Inning 8	Inning 9
Tallies									
Total Number of Runs									

- The information is used in math to create a graph.

# Math:

- ❖ Review the Commutative Property of Addition.
  - Ask the child, “What is  $8 + 5$ ?” (13) “What is  $5 + 8$ ?” (13)
  - What do you notice about the addition facts? (*It doesn’t matter which order you add the numbers. The sum is the same.*)
  - The word *commutative* comes from the word *commute* which means “to move around.” Think about someone who commutes to work. He will drive or move around to get to where work is located. The Commutative Property of Addition lets us move numbers around and change their order when we add them. A property in math is a general rule that describes something about numbers.
- ❖ Review the Associative Property of Addition.
  - Have the child write the numerals 0-10 on index cards.
  - Show the child the 4, 2, and 8 cards.
  - Ask him to add the numbers:  $4 + 2 + 8 =$ . When there are three numbers to add, we add two of them and get the sum. Then the third number is added to the sum of the first two.
    - ◆ For example: Add  $4 + 2$ . (6)
    - ◆ Now add  $6 + 8$ . (14)
    - ◆ So  $4 + 2 + 8 = 14$ .
  - The Commutative Property of Addition says we can change the order of the numbers we are adding.
    - ◆ Add  $2 + 8 + 4$ .
    - ◆ Add  $2 + 8$ . (10)
    - ◆ Add  $10 + 4$ . (14)
    - ◆ So  $2 + 8 + 4 = 14$ .
  - Ask the child, “Did you get the same sum when you changed the order of the numbers?” (yes)  
“Which order was easier to add?” (*Answers will vary, but many children prefer making groups of ten, then adding the third number.*)
  - Continue to show the child three number cards at a time. Ask him to add the three numbers. Remind him that when there are three numbers to add, we group two numbers together and add. Then the third number is added to the sum of the first two. Allow him to continue to add three numbers until he is comfortable with the process of grouping.
  - The word *associative* comes from the word *associate* which means “to group or link things together.” Think of when you associate with your friends at church. You stand in a group. The Associative Property of Addition lets us group numbers together to add.
    - ◆ When we added  $4 + 2 + 8$ , we grouped the  $4 + 2$  together. In written math problems, we show this with parentheses.  $(4 + 2) + 8 = 14$ .
    - ◆ When we added  $4 + 2 + 8$  the second time, we used the Commutative Property of Addition to change the order of the numbers. Then we used the Associative Property of Addition to group them together.  $(2 + 8) + 4 = 14$ .
    - ◆ We can also add  $4 + (2 + 8)$  without using the Commutative Property of Addition. We add the numbers in the parentheses first, and then add the remaining addend.
- ❖ Play a game to practice addition problems with three addends. Use the Commutative Property and Associative Property of Addition.
  - Have the child roll three dice. One of the dice should include the numerals 7, 8, 9.
  - Have him read the number of dots shown on each die.
  - Use these numbers to create an addition problem.
  - Have the child use the Commutative Property and Associative Property of Addition to move and group the numbers. Remind him that when there are three numbers to add, we group two numbers together and add. Then the third number is added to the sum of the first two.
  - Allow him to continue to roll the dice and add three numbers until he is comfortable with the process of adding three numbers.
  - For written practice, the child may write the addition problems on a piece of paper.

- ❖ Worksheet 24a, part A: Have the child make a bar graph.
  - Have the child label the top of the bar graph with a title such as “Spelling Baseball.”
  - Label the left side with a title such as “Numbers of Runs Each Inning.”
  - Number the left side of the bar graph. He will need to decide how to number the graph: by ones or twos.
  - Label the bottom with “Innings.”
  - Write the inning numbers on the small lines under the bar graph.
  - Color the correct number of boxes on the bar graph to represent the number of runs in each inning. If the graph is numbered by twos, odd-numbered data will be shown by coloring half of a box.



- ❖ Worksheet 24a, part B: Have the child multiply. Then have him roll dice and create numbers to multiply. Allow him to check his answers with a calculator.

Answers:

- |        |        |        |        |        |
|--------|--------|--------|--------|--------|
| 1) 270 | 2) 161 | 3) 272 | 4) 258 | 5) 432 |
| 6) 111 | 7) 160 | 8) 425 | 9) 259 | 10) 90 |

- ❖ Worksheet 24a, part C: Have the child write the numbers in expanded form and word form.

Answers:

- 1)  $3,000 + 700 + 40 + 2$ ; three thousand, seven hundred forty-two
- 2)  $5,000 + 900 + 30 + 4$ ; five thousand, nine hundred thirty-four
- 3)  $4,000 + 200 + 6$ ; four thousand, two hundred six
- 4)  $8,000 + 500 + 30$ ; eight thousand, five hundred thirty

## Physical Education/Science:

- ❖ Read *Baseball Science* pages 4-7.
- ❖ Test the child’s reaction time.
  - Hold a ruler vertically above your child’s dominant hand.
  - He should be ready to catch the ruler when you drop it, but do not give him warning.
  - As it drops, have him catch the ruler. Then measure how far down the ruler he made the catch.
  - This is a measure of his reaction time. The book states the average reaction time is about 8-12 inches on the ruler or 0.2-0.25 seconds.
  - How does your child’s reaction time compare to the average?
  - Have him make nine more attempts and record each measurement. How do the measurements change? Does he react quicker with more practice, or does it slow because his muscles fatigue?
  - Have him make ten attempts with his non-dominant hand and record each measurement. How does his non-dominant hand reaction time differ from his dominant hand?
- ❖ Have him create a line graph to display the reaction times of each hand. Use graph paper and two different colors to graph the measurements.

name \_\_\_\_\_



Part A: Read the words. Make a chart on a sheet of paper, and organize the words according to the number of syllables.

responsibility    approached    excellent    racism    restrictions    courage  
professional    prejudice    attended    league    remainder    athlete

Part B: Read about Jackie Robinson. Then answer the questions on a sheet of paper.

Jack Roosevelt Robinson was born on January 31, 1919 in Cairo, Georgia. Jackie was the youngest of five children, and his father left the family shortly after he was born. Jackie never saw him again. His mother Millie was left with the responsibility of raising the children alone. Her baby grew up to be the first African-American to play in Major League Baseball.

Jackie loved to play sports. In high school, he played football, baseball, tennis, track, and basketball. Jackie attended college at UCLA where he starred in track, baseball, football, and basketball. He was the first athlete at UCLA to earn varsity letters in all four sports. He also won the NCAA Championship in the long jump.

Jackie faced prejudice and racism during his lifetime. There were restrictions on seating in buses and restaurants, and black players did not play on all-white Major League Baseball teams. Jackie began to play professional baseball for the Kansas City Monarchs. The Monarchs were part of the Negro Baseball League. He was an excellent shortstop.

While Jackie was playing for the Monarchs, he was approached by the general manager of the Brooklyn Dodgers. They wanted him to join their team and help the Dodgers win the pennant. When he approached Jackie, the manager warned Jackie that he would face racism if he played for the Dodgers. He said to Jackie, "I'm looking for a ballplayer with guts enough not to fight back."



Jackie Robinson Kansas City Monarchs



Jackie Robinson Brooklyn Dodgers

Jackie showed the courage to not fight back, and he focused on playing baseball. That year the Dodgers won the pennant, and Jackie was named Rookie of the Year. In Major League Baseball, a pennant, or flag, signifies that the team is the league champion and wins the right to play in the World Series against the champion of the other league. Over the next ten years, Jackie Robinson was one of the best baseball players in the major leagues. In 1962, he was elected to the Baseball Hall of Fame.

In 1997, on the 50th anniversary of Jackie's first game in the major leagues, Major League Baseball retired his uniform number 42 across all major league teams. He was the first professional athlete in any sport to be so honored. When Baseball Commissioner Bud Selig announced that number 42 was being retired, there were thirteen major leaguers wearing the number. They were told they could continue wearing the number for the remainder of their major league careers. Major League Baseball also adopted a new annual tradition called "Jackie Robinson Day", for the first time on April 15, 2004. On this day, every player on every team wears number 42. It is a tribute to a man who stood strong and helped to pave the way for other African-American players to join the major leagues.



1. Jackie was born in Georgia. What is Georgia's capital city?
2. What does it mean to face prejudice?
3. What position did Jackie play on the baseball team?
4. Do you think it takes courage to not fight back when you are teased? Why or why not?
5. Why are no baseball players allowed to choose number 42 as their jersey number?
6. What is Jackie Robinson Day?

**Part C: Write six compound words from part B.**

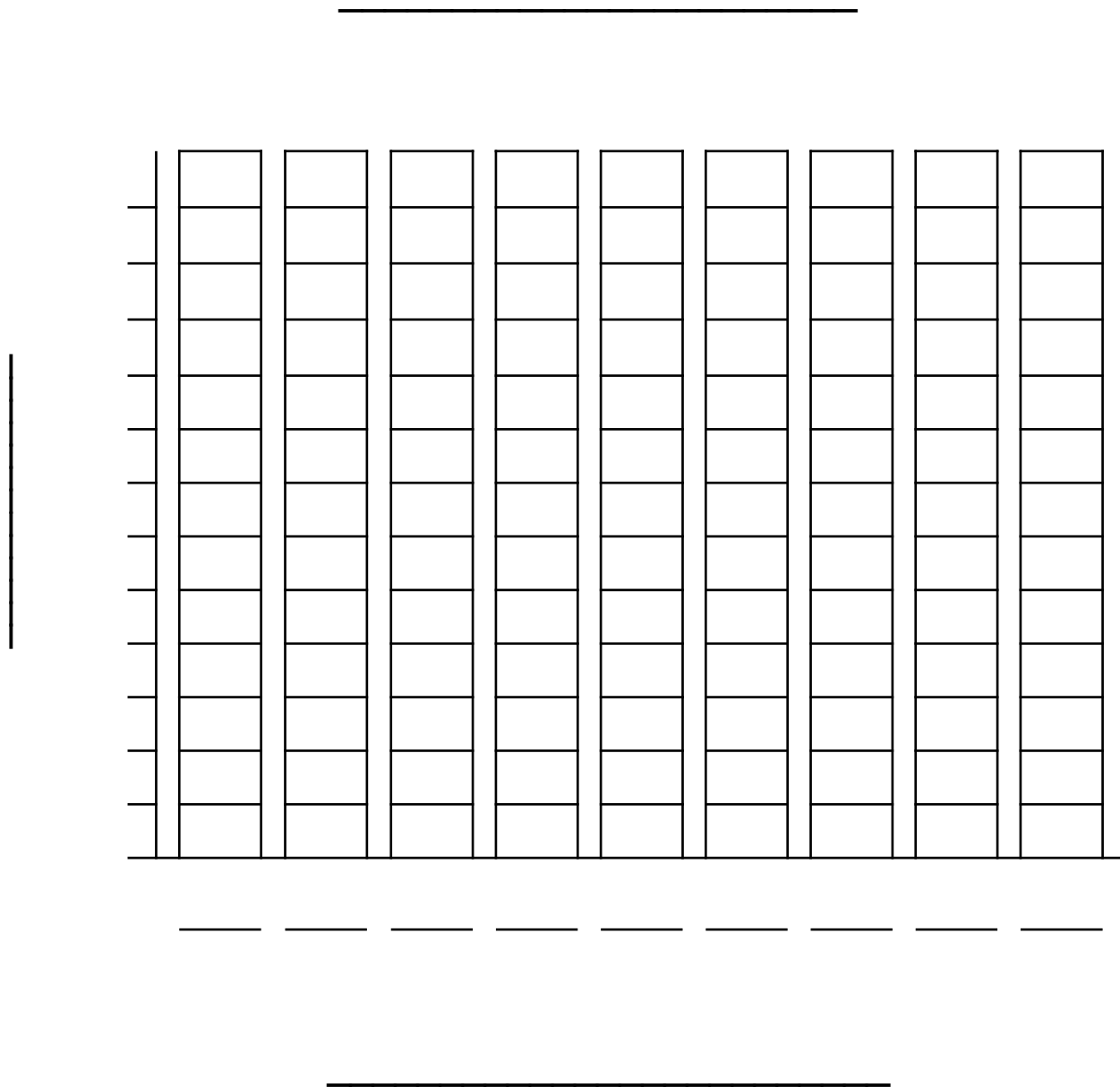
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

name \_\_\_\_\_



Part A: Use the information in the chart of Spelling Baseball scores to create a bar graph.

- Label the top of the bar graph with a title.
- Label the left side.
- Number up the left side of the graph. Decide how to number the graph: by ones or twos.
- Label the bottom of the graph.
- Write the inning numbers on the small lines under the bar graph.
- Color the correct number of boxes on the bar graph to represent the number of runs in each inning.



## Part B: Multiply.

$$\begin{array}{r} 1) \ 45 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \ 23 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \ 34 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \ 43 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \ 54 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \ 37 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \ 40 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \ 85 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \ 37 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \ 18 \\ \times 5 \\ \hline \end{array}$$

Roll dice, and create numbers to multiply. Check your answers with a calculator.

11)

x

12)

x

13)

x

14)

x

15)

x

## Part C: Write the numbers in expanded form and word form.

1. 3,742

• Write the number in expanded form: \_\_\_\_\_

• Write the number in word form: \_\_\_\_\_

2. 5,934

• Write the number in expanded form: \_\_\_\_\_

• Write the number in word form: \_\_\_\_\_

3. 4,206

• Write the number in expanded form: \_\_\_\_\_

• Write the number in word form: \_\_\_\_\_

4. 8,530

• Write the number in expanded form: \_\_\_\_\_

• Write the number in word form: \_\_\_\_\_