

# Welcome to Sixth Grade Everyday Mathematics

## Lesson 1-1

DATE

TIME

Welcome to *Sixth Grade Everyday Mathematics*. This year you will work with many kinds of numbers: whole numbers, integers, fractions, decimals, and percents. You will also use tools to help you solve problems: tape diagrams, ratio tables, number lines, graphs, 3-D shape nets, algebraic expressions, formulas, and equations.

As you learn new concepts and problem-solving strategies, you will apply them to real-world situations and make connections with material you have already studied. You will practice and review skills through games and Math Boxes. Finally, you will rely on the *Student Reference Book* as a resource for game rules, mathematical content, reference information, data (in the Data Bank section), and conversion charts.

The authors have enjoyed writing this book for you. Our advice is to do lots of problems, ask questions when you do not understand something, keep trying even when a problem is hard, and have fun. We hope you have an exciting, interesting, and successful year.

Look through Unit 1 in your journal, pages 1–52.

- 1 What are some topics that look interesting to you?  
What are you curious to learn more about?

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- 2 What topics are new to you?

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- 3 Find a graph that you like. What does it represent?

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# Defining Statistical Questions

## Lesson 1-1

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1 Use your *Student Reference Book* to find a definition for *data* in two places.

a. Page numbers where you found the definition for *data*: \_\_\_\_\_ and \_\_\_\_\_

b. Definition: \_\_\_\_\_

2 Compare the statements in the two columns below, and use your observations to determine your own definition for a *statistical question*.

### Statistical Questions

How long does it take a typical sixth grader to get ready for school?

How many text messages does a typical sixth grader send in a day?

How much does a typical sixth grader's backpack weigh?

How many hours does a typical sixth grader sleep at night?

How many books did a typical sixth grader read last summer?

How many pencils does a typical sixth grader bring to school?

How many inches do sixth graders grow over the summer?

What size shoe do sixth graders wear?

### Nonstatistical Questions

How long did it take you to get ready for school today?

How many text messages did you send yesterday?

How much does your backpack weigh?

How many hours of sleep did you get last night?

How many books did you read last summer?

How many pencils do you have today?

How many inches did you grow last summer?

What size shoe do you wear?

A **statistical question** is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Exploring the Real-World Data Section

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In your *Student Reference Book*, find the Real-World Data section that begins on page 351.

For Problems 1–6, answer *yes* if it is a statistical question.

If it is not, then find the particular answer to the question.

- 1 Find the United States: State Facts data section. This section starts on page \_\_\_\_\_.
  - a. What is the population of your state? \_\_\_\_\_
  - b. What is the average population of a state in the United States? \_\_\_\_\_
- 2 Find the World data section. This section starts on page \_\_\_\_\_.
  - a. How many square miles are in a typical country in South America? \_\_\_\_\_
  - b. How large is Argentina, in square kilometers? \_\_\_\_\_
- 3 Find the Sports data section. This section starts on page \_\_\_\_\_.
  - a. What is the men's record for the Boston Marathon? \_\_\_\_\_
  - b. What is the average winning time for men in the Boston Marathon? \_\_\_\_\_
- 4 Find the Science and Nature data section. This section starts on page \_\_\_\_\_.
  - a. Which country produced all its electricity with renewable sources in 2013? \_\_\_\_\_
  - b. In 2013, what was a typical percentage of a country's electricity produced with renewable resources? \_\_\_\_\_
- 5 Find the World: Most-Visited Museums data section. This section starts on page \_\_\_\_\_.
  - a. What is the world's most visited museum? \_\_\_\_\_
  - b. How many people visit this museum on a typical day? \_\_\_\_\_
- 6 Find the Science and Nature: Biodiversity data section. This section starts on page \_\_\_\_\_.

Write your own statistical question using data from this section.

\_\_\_\_\_



1 Complete.

- a. \_\_\_\_\_  $\times$  30 = 2,400
- b.  $400 \times$  \_\_\_\_\_ = 160,000
- c.  $90 \times 30 =$  \_\_\_\_\_
- d.  $800 \times 50 =$  \_\_\_\_\_

 SRB  
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2 Sara has 171 baseball cards, Adam has 75, Georgette has 109, Fadia has 19, and Jamal has 125. How many baseball cards do they have all together?

Solution: \_\_\_\_\_

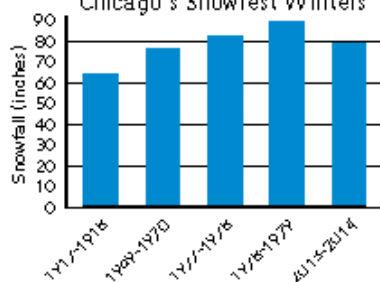
 SRB  
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3 Fill in the circle to tell whether each number sentence is true or false.

- a.  $120 - 30 = 90$   
 True       False
- b.  $1,600 = 800 + 700$   
 True       False
- c.  $8,000 - 3,000 = 5,000$   
 True       False
- d.  $6,000 + 5,000 = 11,000$   
 True       False

 SRB  
118-127

4 **Chicago's Snowiest Winters**



About how many winters are represented in the data set? \_\_\_\_\_

How much snow fell in the least snowy of the winters in the data set?

\_\_\_\_\_

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5 Write each fraction as a mixed number or a whole number.

- a.  $\frac{35}{3} =$  \_\_\_\_\_
- b.  $\frac{19}{11} =$  \_\_\_\_\_
- c.  $\frac{72}{7} =$  \_\_\_\_\_
- d.  $\frac{36}{6} =$  \_\_\_\_\_

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6 Order these fractions from least to greatest.

$$\frac{1}{2}, \frac{1}{3}, \frac{1}{9}, \frac{1}{4}, \frac{1}{20}$$

\_\_\_\_\_

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