

## 2

**Family Letter****Dear Parent or Guardian:**

Carpenters, architects, chefs, and scientists use fractions and patterns. We also use fractions and patterns to make decisions. For example, we need to know how to multiply fractions if we want to change the number of servings when preparing a recipe. Making the connection between facts learned in the classroom and real-world situations helps students appreciate the mathematical concepts they learn in school.

In **Chapter 2, Algebra: Rational Numbers**, your child will learn about rational numbers and how to compare, order, and compute with fractions and mixed numbers. Your child will also learn to solve equations with rational numbers, and to solve problems by using patterns. Your child will also learn how to compute with powers and exponents and use scientific notation. In the study of this chapter, your child will complete a variety of daily classroom assignments and activities and possibly produce a chapter project.

By signing this letter and returning it with your child, you agree to encourage your child by getting involved. Enclosed is an activity you can do with your child that practices how the math we will be learning in Chapter 2 might be tested. You may also wish to log on to **glencoe.com** for self-check quizzes and other study help. If you have any questions or comments, feel free to contact me at school.

Sincerely,

Signature of Parent or Guardian \_\_\_\_\_ Date \_\_\_\_\_

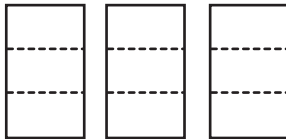
# 2 Family Activity

## State Test Practice

Fold the page along the dashed line. Work each problem on another piece of paper. Then unfold the page to check your work.

1. Use the model below to find the answer to the following multiplication problem.

$$\frac{1}{3} \text{ of } 3$$



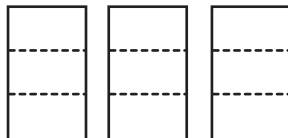
What is the product for  $\frac{1}{3}$  of 3?

- A  $\frac{1}{9}$
- B 1
- C  $\frac{1}{3}$
- D  $\frac{2}{3}$

*Fold here*

### Solution

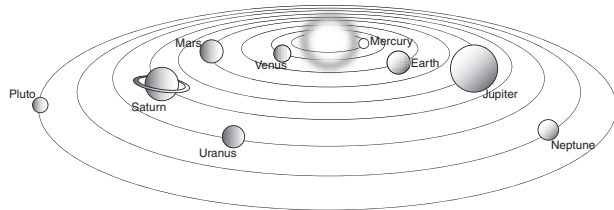
- 1.



$$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{3}{3} \text{ or } 1$$

The answer is **B**.

2. The sun is about 92,000,000 miles from the Earth.



How can this distance be expressed in scientific notation?

- A  $9.2 \times 10^6$
- B  $9.2 \times 10^7$
- C  $9.2 \times 10^8$
- D  $9.2 \times 10^9$

### Solution

2. *Hint: Scientific notation is used to represent very large or very small numbers and is written as the product of a number and a factor of 10. The decimal point is placed after the first non-zero digit and the exponent is the number of spaces that the decimal place is moved to the right (for small numbers) or left (for large numbers).*

In this case, the decimal is moved to the left seven spaces, or

9 2 0 0 0 0 0

so the resulting scientific notation is  $9.2 \times 10^7$ .

The answer is **B**.