

## 5

## Family Letter

**Dear Parent or Guardian:**

Helping students make connections between facts they learn in school and how these facts are used in the real world is essential. In our math class, we strive to make math "realistic." We encounter fractions and percents in a variety of situations, and show students how to apply these to situations they will eventually face.

In **Chapter 5, Fractions, Decimals, and Percents**, your child will learn about prime factorization, greatest common factors, simplifying fractions, writing fractions as decimals, writing fractions and decimals as percents, least common multiple, comparing and ordering rational numbers, and to make an organized list. 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 5 might be tested. You may also wish to log on to **www.msmath2.com** for self-check quizzes and other study help. If you have any questions or comments, feel free to contact me at school.

Sincerely,

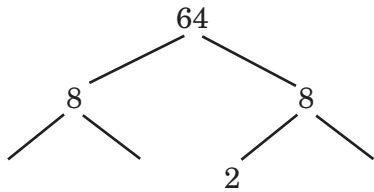
Signature of Parent or Guardian \_\_\_\_\_ Date \_\_\_\_\_

# 5 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 factor tree started below to help you find the prime factorization of 64.



Which shows the prime factorization of 64?

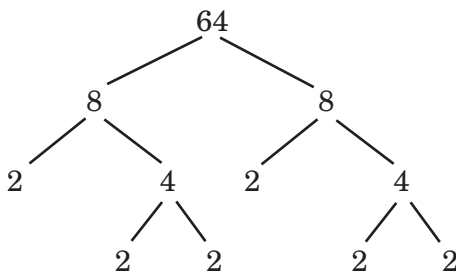
- A  $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$
- B  $2^5$
- C  $64 \div 6$
- D  $2 \cdot 2^3$

Fold here.

### Solution

1. *Hint: Prime factorization is the expression of a number as the product of prime numbers. A prime number is a number that is only divisible by 1 and itself.*

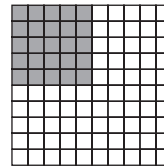
The prime factorization of 64 is shown below.



It can be expressed as  $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$  or  $2^6$ .

The answer is **A**.

2. Twenty-five percent is represented on the grid below.



Which fractions are equivalent to 25%?

- A  $\frac{1}{5}, \frac{2}{10}, \frac{3}{15}$
- B  $\frac{1}{3}, \frac{2}{6}, \frac{3}{9}$
- C  $\frac{1}{8}, \frac{2}{16}, \frac{3}{24}$
- D  $\frac{1}{4}, \frac{2}{8}, \frac{3}{12}$

### Solution

2. *Hint: As shown in the shaded region,*

25% is  $\frac{25}{100}$  or  $\frac{1}{4}$ , so any fraction that is equivalent to 25% should reduce to  $\frac{1}{4}$ .

In options A through C, a reduced fraction other than  $\frac{1}{4}$  is listed, such as  $\frac{1}{5}, \frac{1}{3},$  and  $\frac{1}{8}$ . These options can be eliminated.

Option D contains  $\frac{1}{4}$  and two other

fractions that can be reduced to  $\frac{1}{4}$ , so all of the fractions listed are equivalent to 25%.

The answer is **D**.