NAME _____ DATE _____ PERIOD _____

7 Family Letter

Dear Parent or Guardian:

We can use probability to help us determine how often or how likely something is to occur. For example, we know that when we toss a coin, the probability that it will land faceup is $\frac{1}{2}$ or 50% of the time. Knowing percent and probability can help us make more informed decisions.

In **Chapter 7, Percent and Probability**, your child will learn how decimals, fractions, and percents relate. In addition, your child will learn how to interpret and apply the probability of an event. Finally, your child will learn to estimate with percents. 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 7 might be tested. You may also wish to log on to **www.msmath1.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 _____

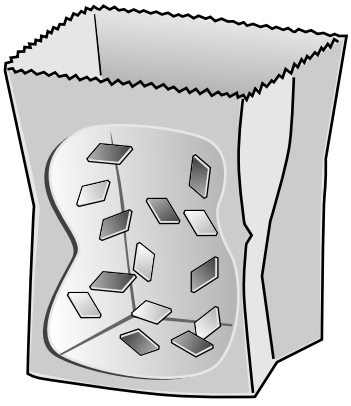
NAME _____ DATE _____ PERIOD _____

7 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. Devon reaches into a bag containing six yellow tiles and 8 green tiles. What is the probability that he will pull out a green tile?



A $\frac{8}{16}$

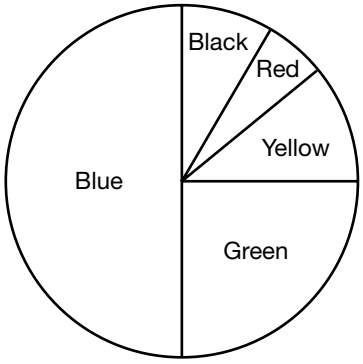
B $\frac{8}{14}$

C $\frac{6}{14}$

D $\frac{6}{8}$

2. A survey was conducted at a local middle school. One hundred students were asked to name their favorite color. Here are the results.

Favorite Colors at Blues Middle School



About what percentage of the students said green is their favorite color?

A 20%

B 25%

C 33%

D 50%

Fold here.

Solution

1. *Hint: The probability of a specific event occurring is the number of times it would be possible for the specific event to occur over the total number of events.*

The bag contains 8 green tiles and 6 yellow tiles, or a total of 14 tiles. The probability of choosing a green one is the number of green tiles (8) over the total number of tiles (14), which can be represented as $\frac{8}{14}$.

The answer is **B**.

Solution

2. Green represents one-fourth of the circle shown in the graph, which means that $\frac{1}{4}$ of the students chose green as their favorite color. One-fourth, or one quarter of the circle is 25%. You can also calculate the percentage from the fraction by either dividing the numerator by the denominator and multiplying by 100% or setting up a ratio for the percentage, in this case:

$$\frac{1}{4} = \frac{?}{100}$$

The answer is **B**.