

## Chapter 4 Ratio

### Dear Family,

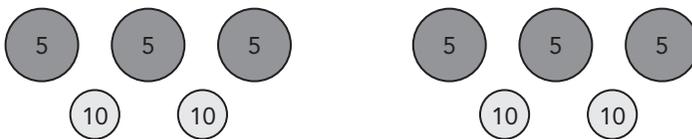
In this chapter, your student will learn about ratios. Some of the skills your student will practice are:

- writing ratios to compare two quantities
- writing ratios as fractions
- using multiplication and division to find equivalent ratios
- solving real-world problems involving ratios

### Activity

Using a ratio to compare two numbers is a simple concept, yet it is central to many real-world situations. Your student can practice working with ratios with this activity.

- Collect 10 nickels and 10 dimes, or use pieces of paper marked "5" and "10." With your student, use the nickels and dimes to model a ratio. Give the ratio of nickels to dimes in simplest form. For example, if you select 6 nickels and 4 dimes, in simplest form the ratio is 3 : 2.



You might find it helpful to separate the coins into two identical groups, each with 3 nickels and 2 dimes, to model the simplest form. Repeat the activity with different ratios.

- For more practice, select some dimes and nickels and give clues to your student, such as "The coins are in the ratio 1 : 2 and their total value is \$.80." Can your student guess which coins you have? Then have your student select the coins and tell you their ratio and their total value, and see if you can guess.

### Vocabulary to Practice

A **ratio** is a way to compare two quantities. The ratio "4 to 9" may be written 4 : 9 or  $\frac{4}{9}$ . The order of the numbers is important, because the ratio 4 to 9 is not the same as 9 to 4.

You can write a ratio in **simplest form** by dividing both terms by their greatest common factor. The simplest form of 12 : 24 is 1 : 2.

You can write **equivalent ratios** by multiplying or dividing both terms by the same number. The ratios 3 : 6 and 12 : 24 are equivalent ratios because their simplest forms are the same.



### Online Resources

For additional Parent Resources [my.hrw.com](http://my.hrw.com)