

# More Practice with Ratios

Use the table to answer the following questions.

Favorite Snacks of the 6 <sup>th</sup> Graders	
Ice Cream	12
Takis	6
Candy	9
Fruit	4
Sunflower Seeds	2
Seaweed	5
Cookies	7

Find the following ratios. Don't forget to simplify if necessary.

- candy to seaweed **9 to 5**
- sunflower seeds to cookies \_\_\_\_\_ to \_\_\_\_\_
- Takis to ice cream **6 to 12 which simplifies to 1 to 2**
- candy to cookies and fruit \_\_\_\_\_ to \_\_\_\_\_
- cookies to Takis **7 to 6**
- fruit to candy \_\_\_\_\_ to \_\_\_\_\_
- Takis and fruit to seaweed **10 to 5 which simplifies to 2 to 1**
- ice cream to sunflower seeds \_\_\_\_\_ to \_\_\_\_\_
- candy to total **9 to 45 which simplifies to 1 to 5**
- cookies and ice cream to total \_\_\_\_\_ to \_\_\_\_\_

# Ratio Tables

A \_\_\_\_\_ is a table of values that displays equivalent ratios.

**Example:**

<b>Soda</b>	1	2	3
<b>Juice</b>	3	6	9

The ratios  $\frac{1}{3}$ ,  $\frac{2}{6}$ , and  $\frac{3}{9}$  are equivalent, since each simplifies to a ratio of  $\frac{1}{3}$ .

Equivalent ratios express the same relationship between quantities. In the example above, for every 1 soda, there are 3 juices.

**Examples:**

- To make yellow icing, you mix 6 drops of yellow food coloring with 1 cup of white icing. How much yellow food coloring should you mix with 5 cups of white icing to get the same shade?

Use a ratio table. Since  $1 \times 5 = 5$ , multiply each quantity by 5.

So, add 30 drops of yellow food coloring to 5 cups of icing.

<b>Drops of Yellow</b>	6	30
<b>Cups of Icing</b>	1	5

$\xrightarrow{\times 5}$   
 $\xleftarrow{\times 5}$

- In a recent year, Joey Chestnut won a hot dog eating contest by eating nearly 66 hot dogs in 12 minutes. If he ate at a constant rate, determine about how many hot dogs he ate every two minutes.

Divide each quantity by one or more common factors until you reach a quantity of 2 minutes.

So, Chestnut ate about 11 hot dogs every 2 minutes.

<b>Hot Dogs</b>	66	33	11
<b>Time (min)</b>	12	6	2

$\xrightarrow{\div 2}$   $\xrightarrow{\div 3}$   
 $\xleftarrow{\div 2}$   $\xleftarrow{\div 3}$