

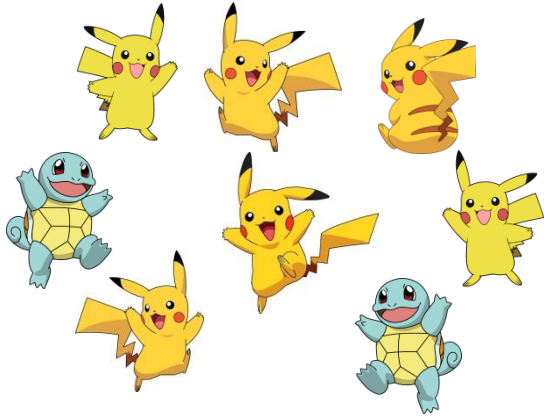
Name: _____

Date: _____

Ratios

A **ratio** is a Comparison of two quantities by division.

A ratio, such as the ratio of Squirtles to Pikachus, can be written in three ways:



$2:6$ $2 \text{ to } 6$ $\frac{2}{6}$

As with fractions, ratios are often expressed in simplest form.

Example #1: Write the ratio in simplest form that compares the number of Squirtles to Pikachus. Then, explain its meaning.

$\frac{2 \div 2}{6 \div 2} = \frac{1}{3}$ "1 to 3"

There's one Squirtle for every 3 Pikachus

Now you try! Write the ratio of PokeBalls to potions in simplest form. Then, explain its meaning.



For every 5 pokeballs there are 3 potions

$\frac{10 \div 2}{6 \div 2} = \frac{5}{3}$
 $10 \div 6$ ✓

Example 2. Several students named their favorite flavor of gum. Write the ratio that compares the number who chose fruit to the total number of students.

Favorite Flavor of Gum	
Flavor	Number of Responses
Peppermint	9
Cinnamon	8
Fruit	3
Spearmint	1

$$\text{Total} = 9 + 8 + 3 + 1 = 21$$

$$\frac{\text{Fruit}}{\text{Total}} = \frac{3 \div 3}{21 \div 3} = \frac{1}{7}$$

"1 to 7"

1 out of every 7 students chose fruit.

3. Monday's yogurt sales are recorded in the table. Write the ratio that compares the sales of strawberry yogurt to the total sales. Then explain its meaning.

Flavor	Number Sold
Peach	3
Blueberry	6
Vanilla	7
Strawberry	8

Strawberry: 8

Total: 3 + 6 + 7 + 8, or 24

$$\begin{array}{l} \text{strawberry yogurt sold} \cdots \rightarrow \frac{8 \div 8}{24 \div 8} = \frac{1}{3} \text{ or } 1 \text{ to } 3 \\ \text{total sold} \cdots \rightarrow \end{array}$$

So, 1 out of every 3 yogurt cups sold were strawberry.

Got It? Do this problem to find out.

b. A pet store sold the animals listed in the table in one week. Write the ratio of cats to pets sold that week. Then explain its meaning.

Pet	Number Sold
Birds	10
Dogs	14
Cats	8

32 pets

$$\frac{8 \div 8}{32 \div 8} = \frac{1}{4}$$

1 out of every 4 pets was a cat

Show your work →

b. _____