

# Exploring Ratios



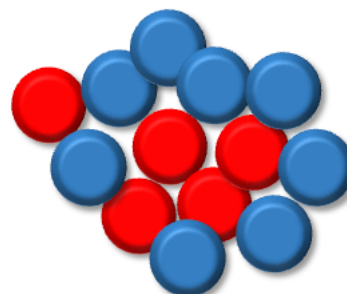
In this tutorial, I'll explore...

- What is a ratio?
- How do I write a ratio?
- How do I read a ratio?
- What are the different types of ratios?



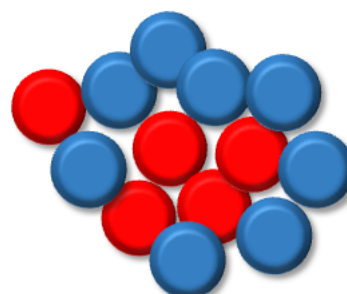
A ratio can be defined as... *a comparison of two or more quantities with the same unit.*

- Using this definition... what comparisons could I make using the group of counters shown here?



I'll do a comparison of red to blue counters.

- How would I choose to write this ratio?
- How would I read my ratio of red counters to blue counters?

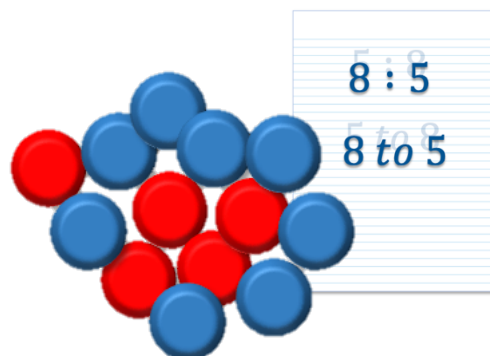


The ratio of red counters to blue counters could be described as a *part-to-part ratio*.

- How would I explain a *part-to-part ratio*?

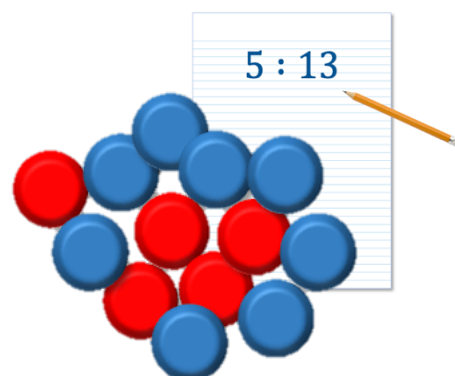
I'll switch the terms in the previous ratio.

- How has switching the terms changed my ratio?
- How do I determine the order of the terms when writing a ratio?



Using the same group of counters...

- How would I explain or describe this ratio?

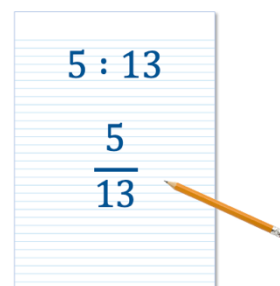


The ratio shown here is a *part-to-whole ratio*.

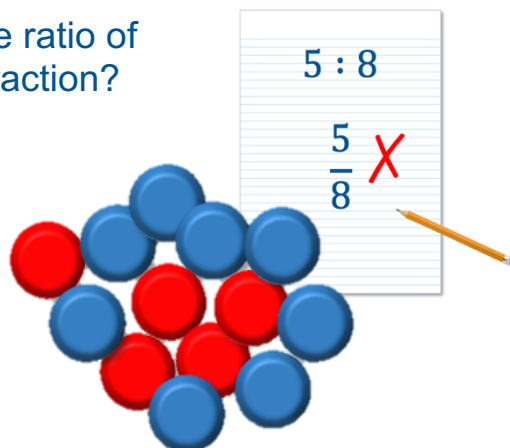
- How would I explain this type of ratio?

A ratio that compares a part of a set to the whole set can be written as a fraction.

- How would I explain why the ratio  $5:13$  can also be written as the fraction  $\frac{5}{13}$ ?



- Why would it be incorrect to write the ratio of red counters to blue counters as a fraction?



I'll add three green counters to the group or set.

- How would I explain writing the ratio of green to red to blue counters?
- How would I describe a ratio that compares three quantities measured with the same unit?
- How would I explain writing a *part-to-whole ratio* for the green counters?



## Exploring Ratios



Which statements do I feel confident explaining and demonstrating?  
Which statements do I not feel confident explaining and demonstrating?

- ✓ I can explain or define a ratio
- ✓ I can explain how I write a ratio
- ✓ I can demonstrate how I read a ratio
- ✓ I can explain and write examples of part-to-part ratios
- ✓ I can explain and write examples of part-to-whole ratios
- ✓ I can explain when a ratio can be written as a fraction
- ✓ I can demonstrate writing a ratio in fraction form