



6th Grade Unit 3: Investigating Rate, Ratio and Proportional Reasoning



Overview:

This third unit of sixth-grade math will focus on teaching students various concepts related to ratios. Students will learn to comprehend and represent ratios using appropriate language to describe relationships. They will create tables of equivalent ratios, compare ratios using these tables, and identify missing values. The unit also covers solving proportion problems, describing rates (including unit rates) in the context of ratio relationships, solving unit rate problems (such as unit price and constant speed), understanding percent as a rate of per 100, and applying ratios to convert within measurement systems for solving real-world problems.

Learning Targets:

In Unit 3, students will:

- Explain the concept of a ratio, represent ratios, and use ratio language to describe a relationship between two quantities.
- Make tables of equivalent ratios relating quantities with whole-number measurements and find missing values in the tables.
- Plot the pairs of table values on the coordinate plane.
- Use tables to compare ratios.
- Solve problems involving proportions using a variety of student-selected strategies.
- Describe the concept of rates and unit rate in the context of a ratio relationship.
- Solve unit rate problems including those involving unit pricing and constant speed.
- Calculate a percent of a quantity as a rate per 100 and solve real-life problems given a percent.
- Use ratios to convert within measurement systems (customary and metric) to solve percent.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

Percent	Proportion	Quantity	Rate
Ratio	Rational Number	Tape Diagram	Unit Rate

Supporting Resources:

<http://ctlslearn.cobbk12.org/>

<https://gavirtual.instructure.com/courses/34329>

[Customary and Metric System](#)

[Ratios](#)

[Proportions](#)

[Percents](#)

[Decimal, Fraction, & Percent Equivalents](#)

[Decimal & Fraction Equivalents](#)

[Rate](#)