Unit 5: Proportional Relationships

Content Area: **Math**
Course(s): **Math**
Time Period: **September**
Length: **3-4 weeks**
Status: **Published**

Enduring Understandings

SWBAT:

- Write and interpret ratios.
- Describe ratio relationships and proportional relationships.
- Represent equivalent ratios.
- Model ratio relationships and proportional relationships to solve real-life problems

Essential Questions

How can we:

- Understand ratios of rational numbers and use ratio tables to represent equivalent ratios
    - Write and interpret ratios involving rational numbers.
    - Use various operations to create tables of equivalent ratios.
    - Use ratio tables to solve ratio problems.

- Understand rates involving fractions and use unit rates to solve problems
    - Find unit rates for rates involving fractions.
    - Use unit rates to solve rate problems

- Determine whether two quantities are in a proportional relationship
    - Determine whether ratios form a proportion.
    - Explain how to determine whether quantities are proportional.
    - Distinguish between proportional and nonproportional situations

- Use proportions to solve ratio problems and make circle graphs
    - Solve proportions using various methods.
    - Find a missing value that makes two ratios equivalent.
    - Use proportions to represent and solve real-life problems.
    - Make circle graphs

- Represent proportional relationships using graph and equations
    - Determine whether quantities are proportional using a graph.
    - Find the unit rate of a proportional relationship using a graph.
    - Create equations to represent proportional relationships

- Solve problems involving scale drawings
    - Find an actual distance in a scale drawing.

- Explain the meaning of scale and scale factor.
- Use a scale drawing to find the actual lengths and areas of real-life objects

Benchmark Assessments

Schoolwide Benchmark assessments:

- Linkit Benchmarks (Form A in September, Form B in January, Form C in June): Linked to NJSLA standards

Additional Benchmarks used in this unit:

- IXL Diagnostic + continued practice during IXL periods

Formative Assessments

Formative Assessments used in this unit:

- Kahoot! Games

- Quizizz Games

- Homework

- Q & A

- Scavenger Hunts

- Coloring Activities

- Task Cards

- Partner Activities

Summative Assessments

Summative assessments for this unit:

- Chapter Test
- Quizzes

Instructional Materials

1. Big Ideas Math: Math & You 6th Grade Textbook
2. Quizizz
3. Kahoot!
4. Scavenger Hunts
5. Task Cards
6. Coloring Activities
7. GimKit

Standards