Equivalent Ratios

Lesson Overview

In this lesson students use an anticipation guide to activate their knowledge of equivalent ratios prior to reading a textbook selection on equivalent ratios. Students will learn strategies to determine whether two ratios are equivalent.

Standards Addressed

6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g. by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

Disciplinary Literacy Best Practices

Anticipation Guide

Lesson Plan

Time Required: One 30-minute class period

Disciplinary Vocabulary: ratio, unit rates, equivalent fraction, equivalent ratio

Materials Needed:

- Textbook
- Whiteboards
- Various Fraction Manipulatives (such as fraction tiles and fraction circles)

Assessment:

Completed Anticipation Guide

Engage

- Students will complete an anticipation guide to determine prior knowledge and inform students of what they will be learning.
- Task: "Suppose Mark's printing will print 10 copies of a photo for $30. How much would it cost to print 150 copies of a photo at the same rate?"
- Key Question: how do you use equivalent rates/ratios in the real world?

Explore

- Students will use fraction tiles and fraction circles to create examples of equivalent fractions to show equivalent ratios.
- Students will record illustrations of their examples of equivalent ratios created with manipulatives.
- Teacher will model for students the procedure to determine whether two ratios are equivalent.

Explain

- After exploration, students and teacher will practice determining if two ratios are equivalent. Examples: cross products of fractions, simplifying fractions, etc.
- Students will use information from the text and from teacher modeling to revisit the Anticipation Guide.

Extend

- Key Question: What other real-life examples can you think of?

Teacher Biographical Information

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Equivalent Ratios Anticipation Guide

Directions: Read each statement and write if you agree or disagree with each statement. At the end of class you will reexamine the statements and mark your level of agreement. If your opinion changes, use details from the lesson and textbook to justify your changes.

Before Lesson		After Lesson
Agree/Disagree	1. Equivalent ratios express the same relationship between quantities.	Agree/Disagree
Agree/Disagree	2. Addition and subtraction is used to find equivalent ratios.	Agree/Disagree
Agree/Disagree	3. Two ratios are equivalent if they simplify to the same ratio.	Agree/Disagree
Agree/Disagree	4. There are different ways to determine if two ratios are equivalent.	Agree/Disagree
Agree/Disagree	5. A proportion is an equation stating that two ratios or rates are equivalent.	Agree/Disagree
Agree/Disagree	6. If the fractions are equivalent, the ratios are not equivalent.	Agree/Disagree

Did your level of agreement change due to the reading assignment? Why or Why not?

1.

2.

3.

4.

5.

6.