

Unit 1: Ratios and Proportional Relationships

Key Concept: Relationships

Related Concept: Equivalence, Simplification

Global Context: Globalization and Sustainability (*explored through poverty*)

Common Core:

6.RP.1

6.RP.2

6.RP.3

6.NS.4

Statement of Inquiry:

We use proportional relationships to communicate information.

Inquiry questions:

Factual: How we set up and solve ratios and proportional relationships?

Conceptual: How can we use ratios and proportions to convert between fractions, decimals, and percents?

Debatable: To what extent can we use our understanding of proportional relationships to impact global poverty.

Main Content:

- Ratios
- Unit rates
- Proportions
- Converting between fractions, decimals, and percents
- Microlending

Resources:

Glencoe Math: Built to the Common Core, Math Antics, 21st Century Math Projects

Summative Assessment:

Criteria A (knowing and understanding)

- i. Select appropriate mathematics when solving problems in both familiar and unfamiliar situations.
- ii. Apply the selected mathematics successfully when solving problems
- iii. Solve problems correctly in a variety of contexts.

Criteria C (Communicating)

- i. Use appropriate mathematical language in both oral and written explanations
- ii. Use appropriate forms of mathematical representation to present information
- iii. Move between different forms of mathematical representation
- iv. communicate complete, coherent, and concise mathematical lines of reasoning
- v. organize information using a logical structure

ATLs (*goal is how to be a successful student in math class, and explain reasoning for answers*)

Category: Communication **Cluster:** Communication **Skill Indicator:** Reading, writing, and using language to gather and communicate information

Category: Self-management **Cluster:** Organization **Skill Indicator:** managing time and tasks effectively

Category: Thinking **Cluster:** Critical Thinking **Skill Indicator:** Analyzing and evaluating issues and ideas