

Math Common Core Summer Institute

Day 2 –

Welcome

Please sit by grade level.



Video

Math Common Core Student Observation Guide

- Based on Phil Daro 5x8 card
- Focus on the students



Video





California Draft Framework

Read

- Cooperative Learning p.11 and
- Student Engagement
 Strategies p.15





As you read:

- Awhat you're already doing
- <u>Underline</u> what you're going to try
 <u>Circle</u> any questions you have



Reflection

On your yellow piece of paper folded in half:

 What strategies have you seen/read about that you could implement next year?



What are the components of a Unit of Study ?

- Enduring Understanding
- -Essential Questions
- Knowledge
- -Application
- –Assessments
- Lesson Plans



Format Example

Ratios and Proportional Relationships 7.RP

LDomain

Analyze proportional relationships and use them to solve real-world and mathematical problems.



Standard

1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/1/4 miles per hour, equivalently 2 miles per hour.

2. Recognize and represent proportional relationships between quantities.

a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.

c. Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.

d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.

3. Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.*

Cluster



Content Standards

Read from the standards

- Grades 6-7: Ratios and Proportions
- Grade 8: Expressions and Equations

What is familiar, new or different in the Common Core Standards?



Content Standards

Whip-Around Protocol

- Everyone at your table gets 1 minute
- Share what you noticed is familiar, new or different



Lesson Plan Rubric

As needed:

- -Ensure standards are addressed
- –Complete sections
- -Make directions more explicit







- Use the rubric to review a lesson
- Revise the lesson as needed
- If time, revise another lesson



- Exchange lessons with a neighboring group
- Use the Tuning Protocol to review each other's lessons
- Revise again, as needed



Tuning Protocol



Rigor – Another Way

Cognitive Rigor Matrix

- How is it similar to Bloom's?
- How is it similar to Hess' DOK?



Rigor – Another Way

Sorting Tasks

- As a table, decide where each task lies on the Cognitive Rigor Matrix
- For tasks that are very low in rigor, how could you change the task to make it more rigorous?
- How are the SMPs and shifts evident in the tasks?





On your yellow piece of paper folded in half:

 When using a lesson plan, what do you find as the most helpful element?



Have a great afternoon!

Be prepared to read tomorrow morning See you at 8:30am!

Suggested homework – CA Draft Framework on Instructional Strategies