



Welcome Back!

# **C<sup>2</sup>S<sup>2</sup> Mathematics**

## **Session 4**

## **Grade 6**

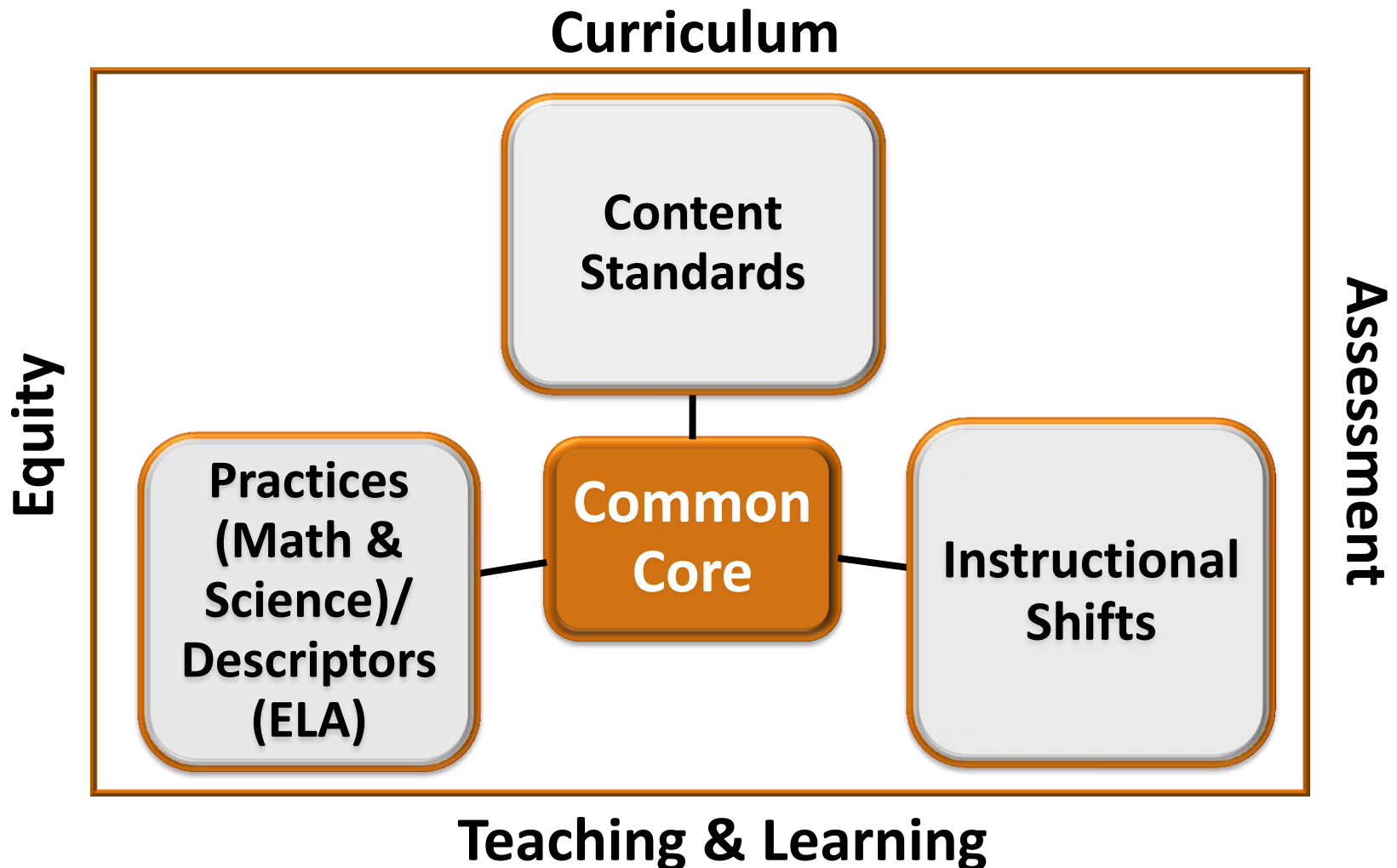


# Check-In

- What is something you are proud of that your students have accomplished this year?

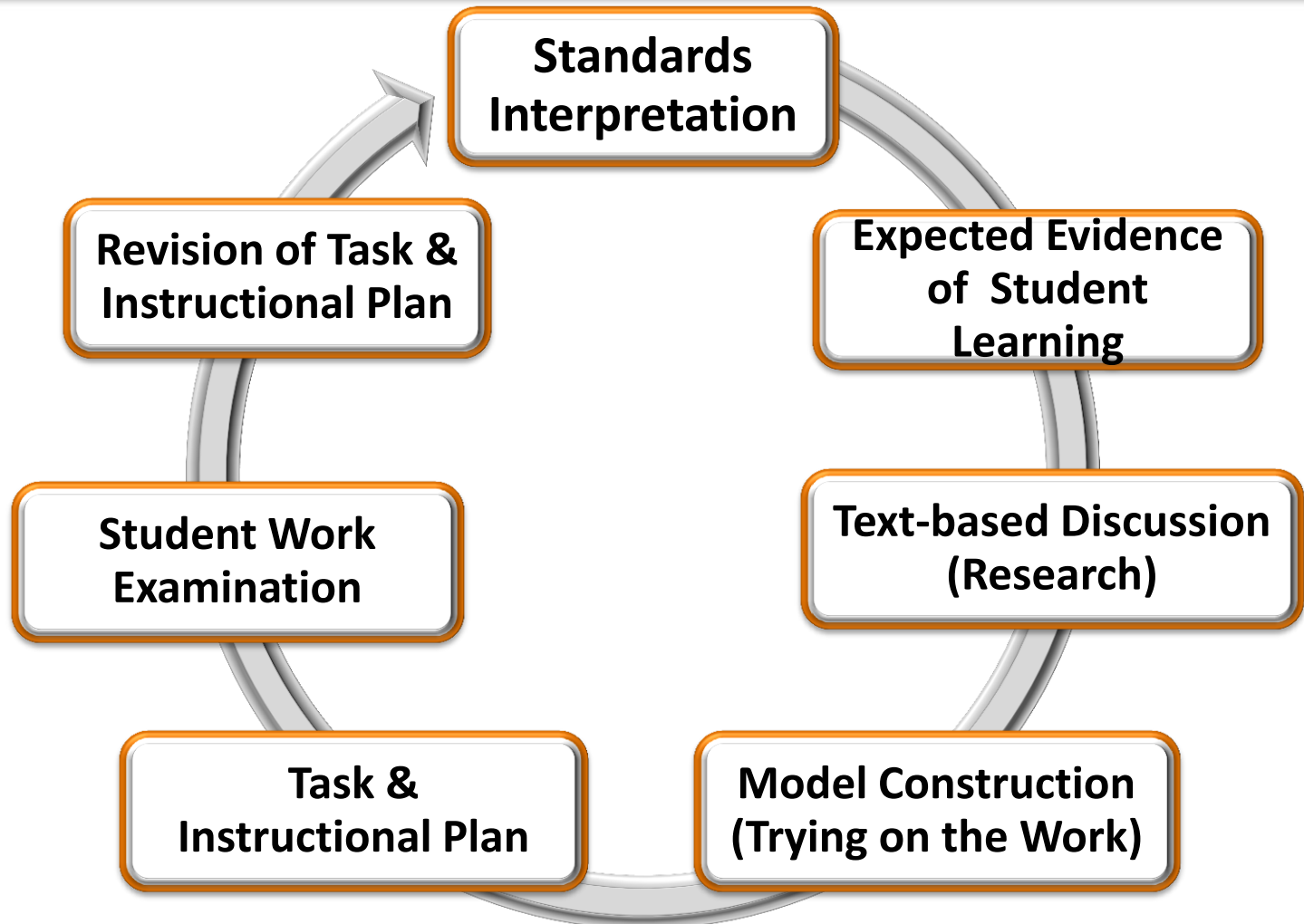


# Common Core Standards Framework





# Inquiry-Based Design Methodology





# Agenda

- Student Work Examination
- Creating a Unit of Study
  - Standards Interpretation (Review of Enduring Understandings)
  - Expected Student Evidence (Knowledge and Application)
  - Guiding Questions

**Break (~10:15am) – 10 minutes**

- Assessments
- Lesson Sequence
- Teacher Post-Assessment

**Lunch (~11:40) – 1 hour**

- Lesson Planning and Presentations



# Rubric for Reviewing Student Work

0	1	2	3
<p><b>Nothing Correct</b></p> <p><b>Or</b></p> <p><b>No Work Done</b></p>	<p>Correct answer with procedure <b>and</b> no conceptual explanation given</p> <p>Or</p> <p>Incomplete work or incorrect answer <b>and</b> some conceptual explanation given</p>	<p>Correct answer with procedure (for example, a written explanation that simply states the procedures used) <b>and</b> some conceptual explanation given</p> <p>Or</p> <p>Incorrect answer (for example, due to a minor computational error) with complete conceptual explanation</p>	<p>Correct answer with a complete and logical conceptual explanation, written in a clear and well-organized way</p>



# Reviewing Student Work

- Use the rubric to look at your own student work.
  - Share with your table
  - What might you revise?
- We will put up student work for a Gallery Walk as you return from break.



# Reflection Question #1

## Using Your Yellow Evaluation Sheet:

- Fold paper in half
- Writing Prompt #1 –

What has been most useful for helping you understand math common core this year?





# Creating a Unit of Study

- **Standards Interpretation**
  - Enduring Understandings
  - Knowledge and Application
- **Guiding Questions**
- **Assessments**
- **Lesson Sequence**
- **Lesson Planning**



# Standards Interpretation

## Grade 6

## Ratios and Proportional Reasoning

6.RP.1,2,3

Understand ratio concepts and use ratio reasoning to solve problems.

Take out and review:

- Standards – 6.RP.1,2,3
- “Understanding the Content Standards Matrix” from Session 3



# Standards Interpretation

## Enduring Understandings:

Your posters from Session 3 had these “Big Ideas/Enduring Understandings”

Ratios & Proportional relationships 6<sup>th</sup> & 7<sup>th</sup> grade

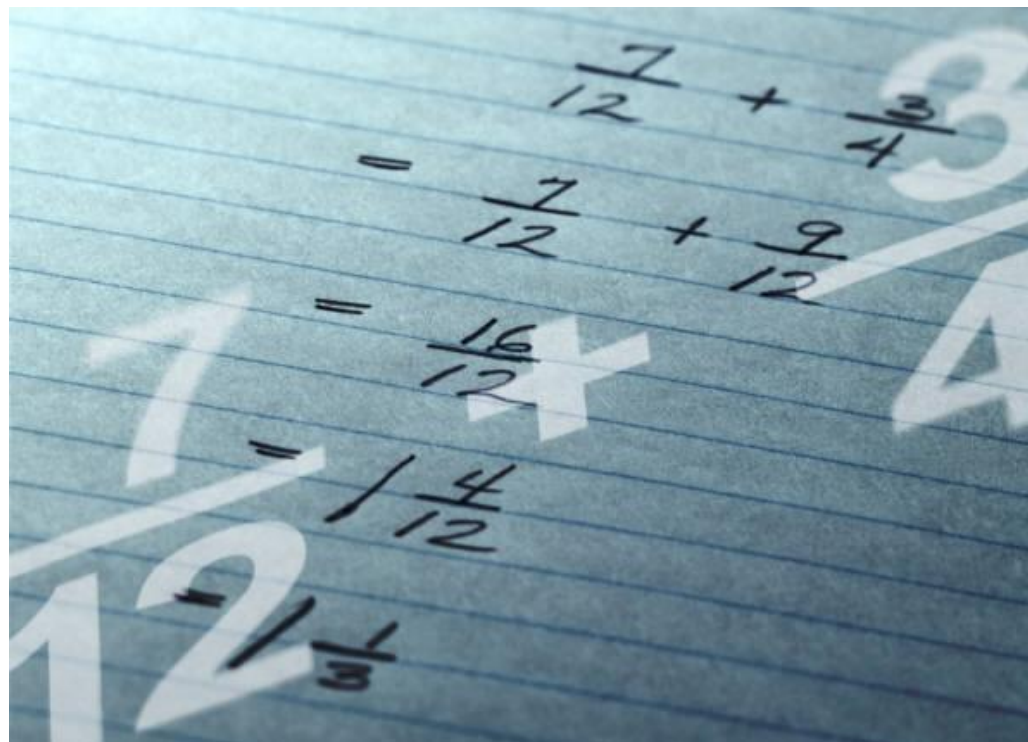
- Applying ratios & proportions in everyday examples, i.e. calculating tips, %, mpg, taxes, & discounts. (IB - ID exchange rates in currency) ... measurement <sup>conversions</sup>
- Understanding, distinguishing ratios vs. rates ... ratios are used when units are the same ... rates ... when units are dissimilar



Sacramento City Unified School District

Putting Children First

# Conceptual Development





# Standards Interpretation

## Knowledge and Application

Your posters from Session 3 had these ideas for “Knowledge and Application”

① Finding unit rates

② Use precise language “for every,” “for each,” “per” ...

• Tape Diagrams.

• Double Number Line.

• Use of mathematical Vocabulary.

\*Easier to understand the relationship between 2 quantities in a ratio when it's been compared for every 1 unit.



# Guiding Questions

These questions will guide student inquiry:

- These are thought provoking questions that recur as students progress through their learning of this topic.
- These are framed to provoke and sustain student interest and inquiry.
- These do not yield a single answer, but produce different plausible responses.

Wiggins and McTighe *Understanding by Design*



Break

10 minutes



# Assessments

## **“Try On” the assessments**

### Formative Interim Assessments (Mid-Unit Checks):

- MARS – 6<sup>th</sup> grade 2002 “Grandpa’s Knitting”
- MARS – 6<sup>th</sup> grade 2001 “Cans of Kola”

### Post Assessment (Culminating Task)

SBAC MAT.06.PT.4.BDBRC.A.280 Claim 4 “Bead Bracelet”





# Types of Lessons

What types of lessons support students conceptual understanding of ratios?

E.g.: “You-We-I” (Phil Daro’s Video)



# Lesson Sequence

## Example

### **Lesson 1: Introduction to ratios**

*Students will know...*

- A ratio compares two related quantities
- Ratios can be represented in multiple formats including *for each, per, to, each, %*. *1/5, etc.*

*Students will be able to...*

- Use ratio and rate language to describe the relationship between two quantities



# Teacher Post-Assessment

## For the Math Common Core grant:

- Make your code (same as Session 1):  
The first 2 letters of your mother's maiden name and one more than your birth date (*day* only)

*Example*

Maiden name: **Gold**

Birthday: March **24**, 1974

**Code = GO25**



# Lunch

1 hour



# Lesson Planning

- In small groups, create a complete lesson plan that fits in the lesson sequence.
- Use the “Lesson Planning Guide” to identify
  - A. the **focus** of your lesson,
  - B. the **evidence** of Math Practices 1, 4, and/or 6, and
  - C. the **learning experiences** that provide for rigor.



# District Website

Download the Lesson Planning Guide

Go to [www.scusd.edu/common-core](http://www.scusd.edu/common-core)

- Professional Development Dates and Materials
  - Mathematics Dates and Materials
    - Focus or Target
      - Today's Date



# Lesson Planning Guide

A. Focus and Coherence

B. Evidence of Math Practices

C. Learning Experiences



## Guidelines for Saving Your Lesson Plan

To save your Lesson Plan document:

- Use the flash drive provided
- Open the 6<sup>th</sup> grade folder
- Save with file name **6.RP.Lesson#**

**Ex: 6.RP.lesson2A**





# Presentations

Share parts of your lesson with the group:

- Focus of the lesson
- Warm-up
- Formative Assessment



# Reflection Question #2

## Using Your Yellow Evaluation:

A. What support would you like to continue your learning of Common Core Math next school year?

**or**

B. Reflect on the CC Math learning this year and complete the following sentence stems:

“I used to think...” and “Now I think...”



# District Website

- Find these units of study on our district website at [www.scusd.edu/common-core](http://www.scusd.edu/common-core)
- They will be available by June 14<sup>th</sup>



# Summer Institute

Sign up for the summer institute:

**Grades 6-8**

**June 24 – 28**

\$500 stipend



# Celebration/Evaluation

Please complete your evaluation

Thank you!!!

