



Welcome Back!

C²S² Mathematics

Session 4

Grade 8

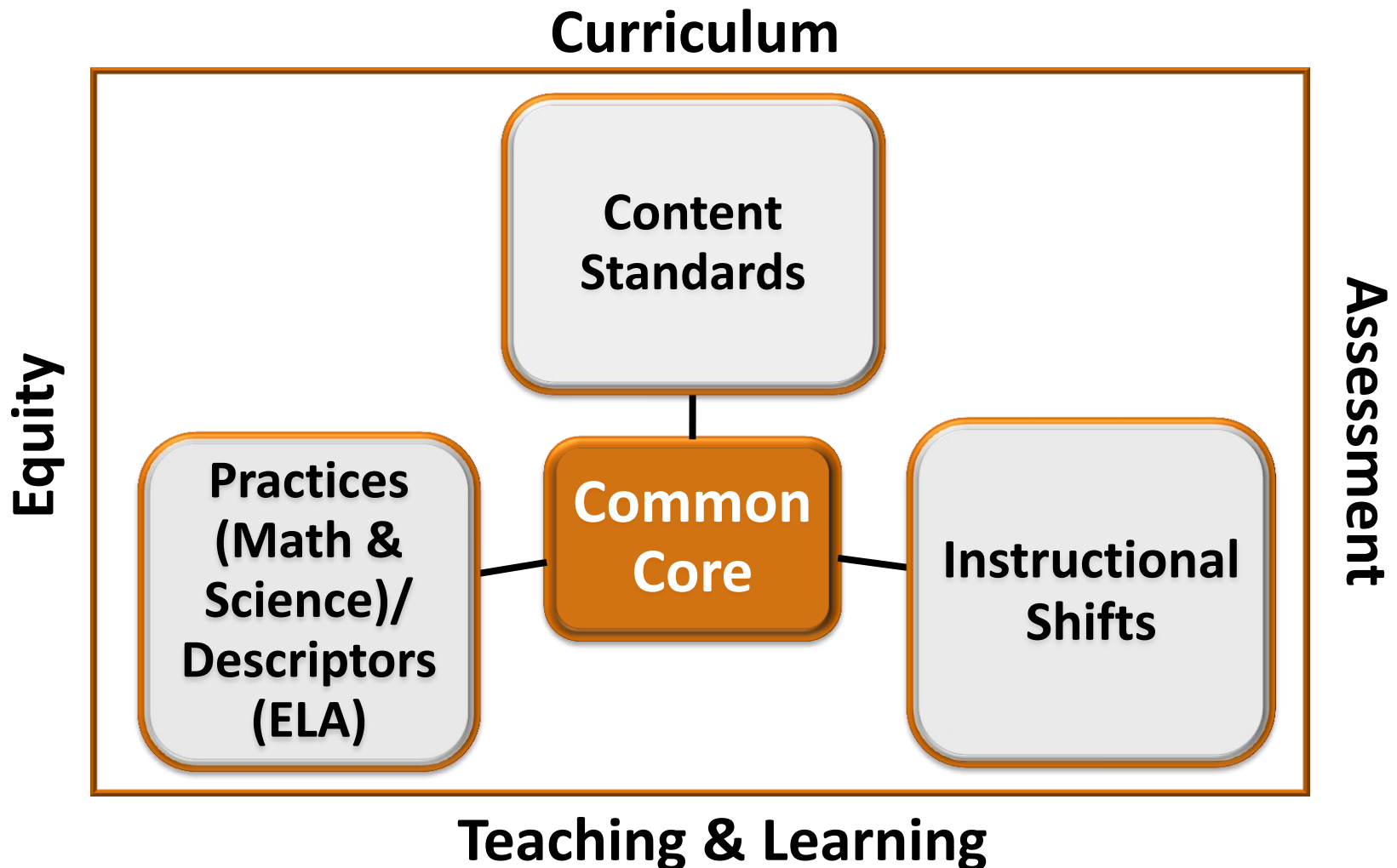


Check-In

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

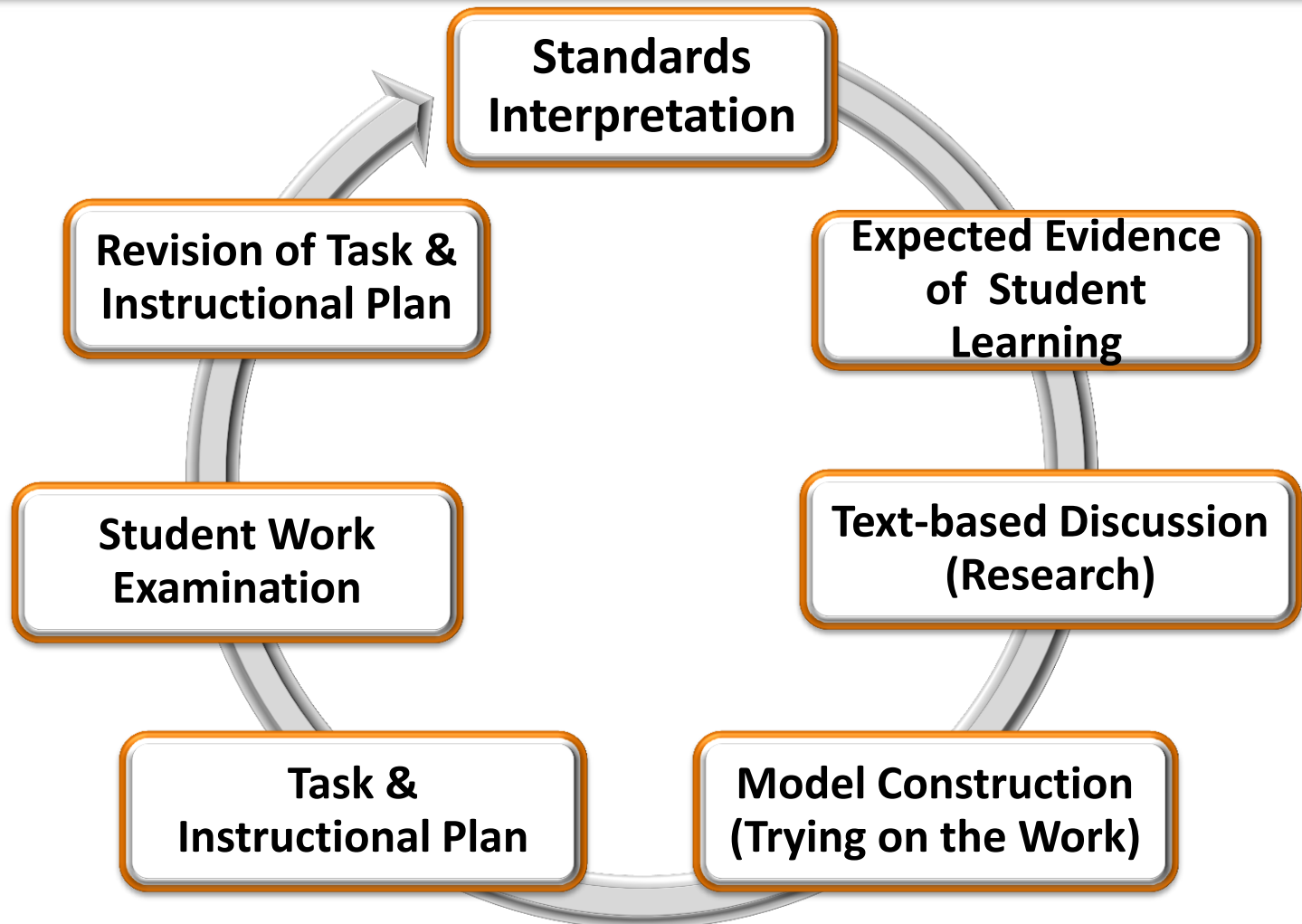


Common Core Standards Framework





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>Nothing Correct</p> <p>Or</p> <p>No Work Done</p>	<p>Correct answer with procedure and no conceptual explanation given</p> <p>Or</p> <p>Incomplete work or incorrect answer and some conceptual explanation given</p>	<p>Correct answer with procedure (for example, a written explanation that simply states the procedures used) and 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 8

Expressions and Equations

8.EE.1,3,4

Work with radicals and integer exponents

Take out and review:

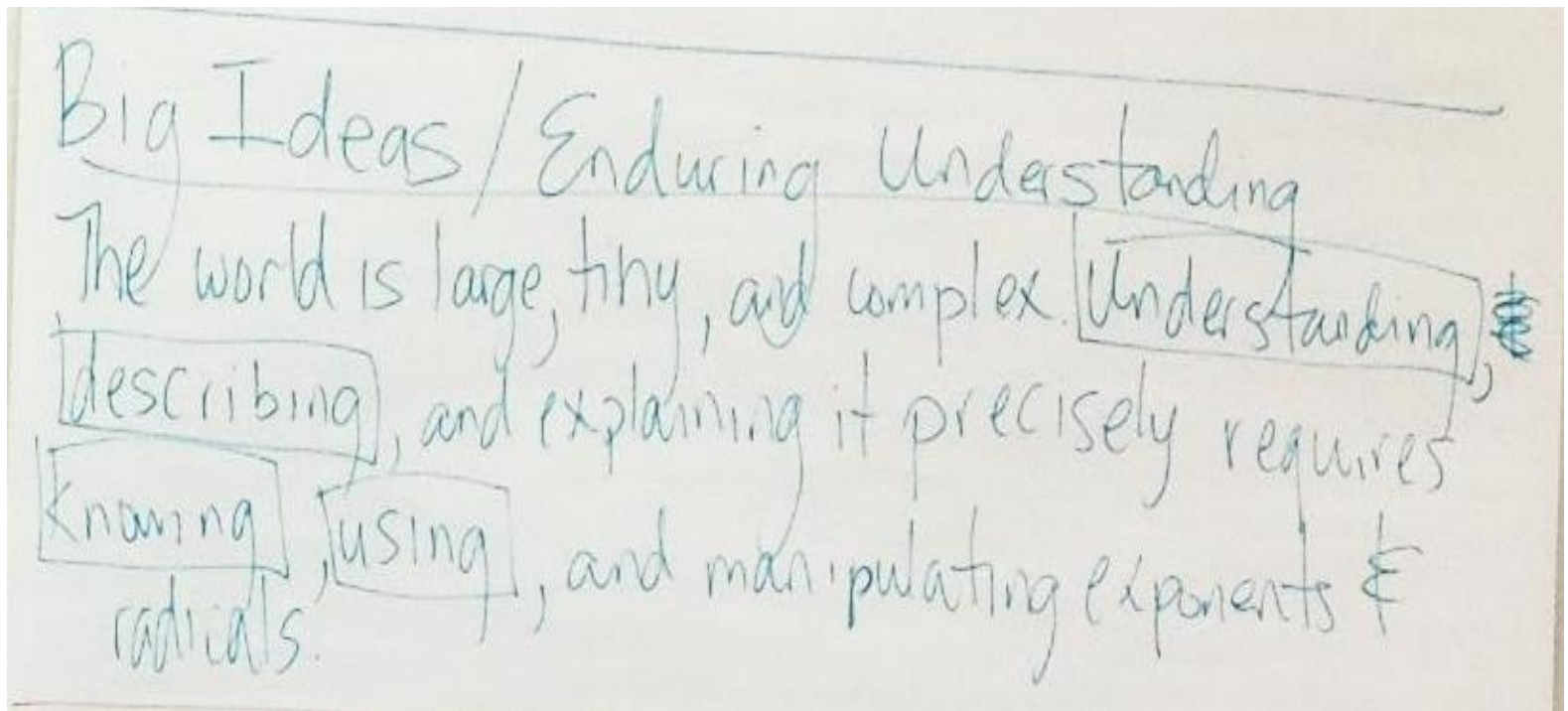
- Standards – 8.EE.1,3,4
- “Understanding the Content Standards Matrix” from Session 3



Standards Interpretation

Enduring Understandings:

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

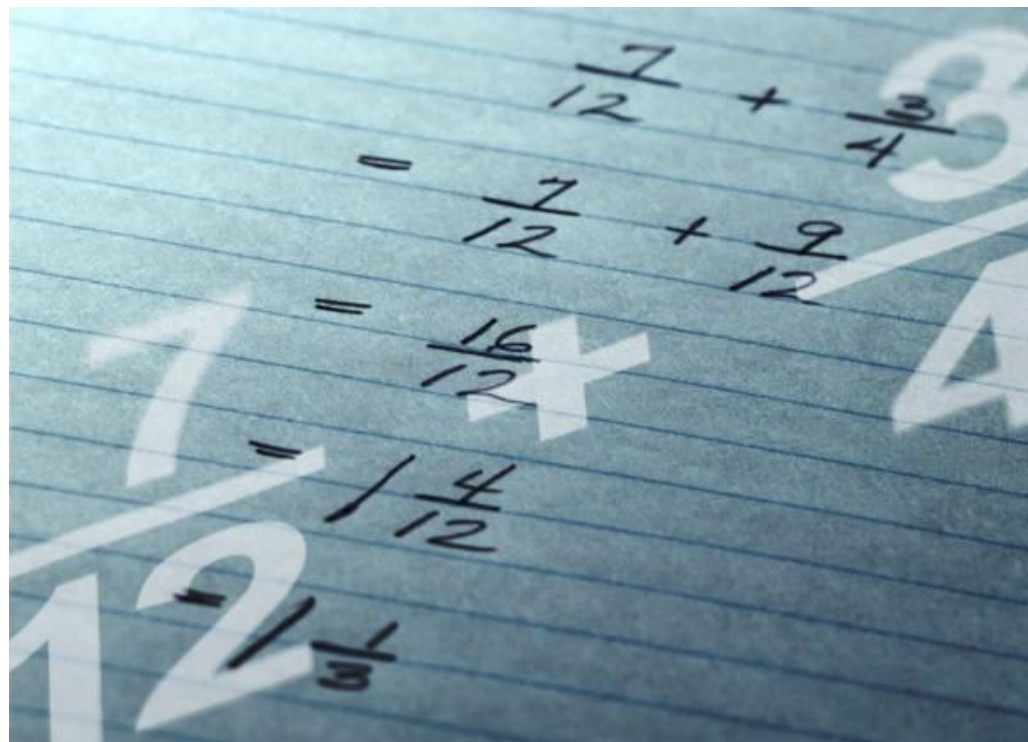




Sacramento City Unified School District

Putting Children First

Conceptual Development





Standards Interpretation

Knowledge and Application

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

Simplify and evaluate radical and integer exp.

Students demonstrate multiple representations of a rational number, approx.

* USE roots and scientific notation to understand and manipulate large & small numbers



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 Assessment (Mid-Unit Check):

- Illustrative Mathematics: 8.EE Extending the Definitions of Exponents, Variation 1

Post Assessment (Culminating Task):

“Blood in the Human Body”



Types of Lessons

What types of lessons support students conceptual understanding of exponents?

E.g.: "You-We-I" (Phil Daro's Video)



Lesson Sequence

Example:

Lesson 1: Definition of an Exponent

Students will know...

- The exponent in an exponential term tells us how many times the base is to be multiplied

Students will be able to...

- Expand, simplify, and evaluate expressions involving exponents.



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

- 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 Plans

To save your Lesson Plan document:

- Use the provided flash drive
- Open the 8th grade folder
- Save with Filename: **8.EE.Lesson#**
Ex. **8.EE.Lesson1A**



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 you've done 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
- They will be available by June 14th



Summer Institute

Sign up for the summer institute:

Grades 6-8

June 24 – 28

\$500 stipend



Celebration/Evaluation

Please complete your evaluation.

Thank you!!!

Raffle