

# Welcome Back!

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

Session 4
Grade 4



## Check-In

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

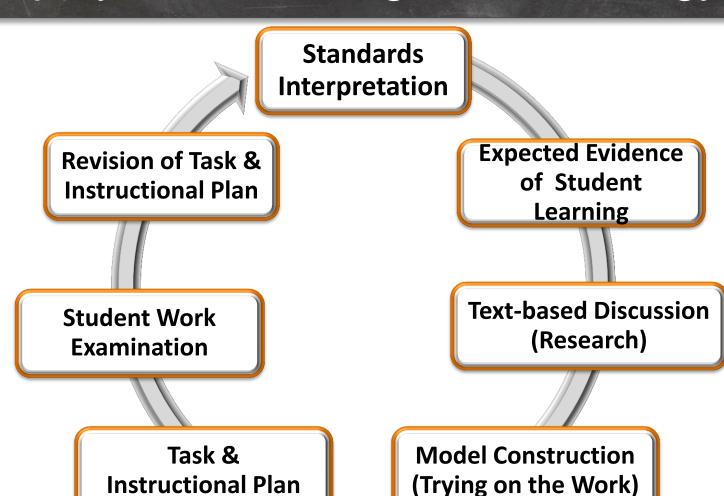
#### Common Core Standards Framework

#### Curriculum Content **Standards** Assessment Equity **Practices** Common (Math & Instructional Core Science)/ **Shifts Descriptors** (ELA)

**Teaching & Learning** 



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

# Reviewing Student Work

- Use the rubric to look at <u>your own</u> 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 4 Number and Operations – Fractions**

4.NF.1,2

Extend understanding of fraction equivalence and ordering.

#### Take out and review:

- Standards 4.NF.1,2
- "Understanding the Content Standards Matrix" from Session 3



# Standards Interpretation

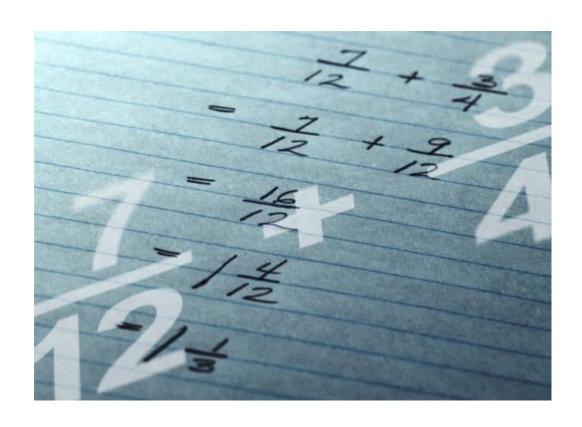
#### **Enduring Understandings:**

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

• Sts. need to understand the analogy of fractions and whole numbers



# Conceptual Development

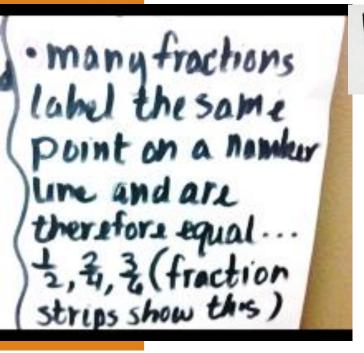




# Standards Interpretation

#### **Knowledge and Application**

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



Demonstrate an understanding of equal fractions and comparing fractions.



# **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

<u>Post-Assessment (Culminating Task):</u> Picking Fractions



## Types of Lessons

What types of lessons support students conceptual understanding of fractions?

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



## Lesson Sequence

#### **Example:**

**Pre-Assessment: Ready for More Fractions** 

#### **Lesson 1: Explore Parts of Whole**

Students will know...

- the size whole matters when expressing relationships with fractions
- the more fractional parts used to make a whole, the smaller the parts
- how many pieces it takes to make a whole and each piece is a unit fraction.

Students will be able to ...

identify, build, read, write, and label fractions



## 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 I, 4, and/or 6, and
  - C. the **learning experiences** that provide for rigor.



### District Website

Download the Lesson Planning Guide

#### Go to <a href="https://www.scusd.edu/common-core">www.scusd.edu/common-core</a>

- 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 4<sup>th</sup> grade folder

Save with file name: 4.NF.Lesson#

Ex: 4.NF.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 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 14<sup>th</sup>



#### Summer Institute

Sign up for the summer institute:

Grades 3-5

July 8 - 12

\$500 stipend



# Celebration/Evaluation

Please complete your evaluation

Thank you!!!