



Math Common Core Summer Institute

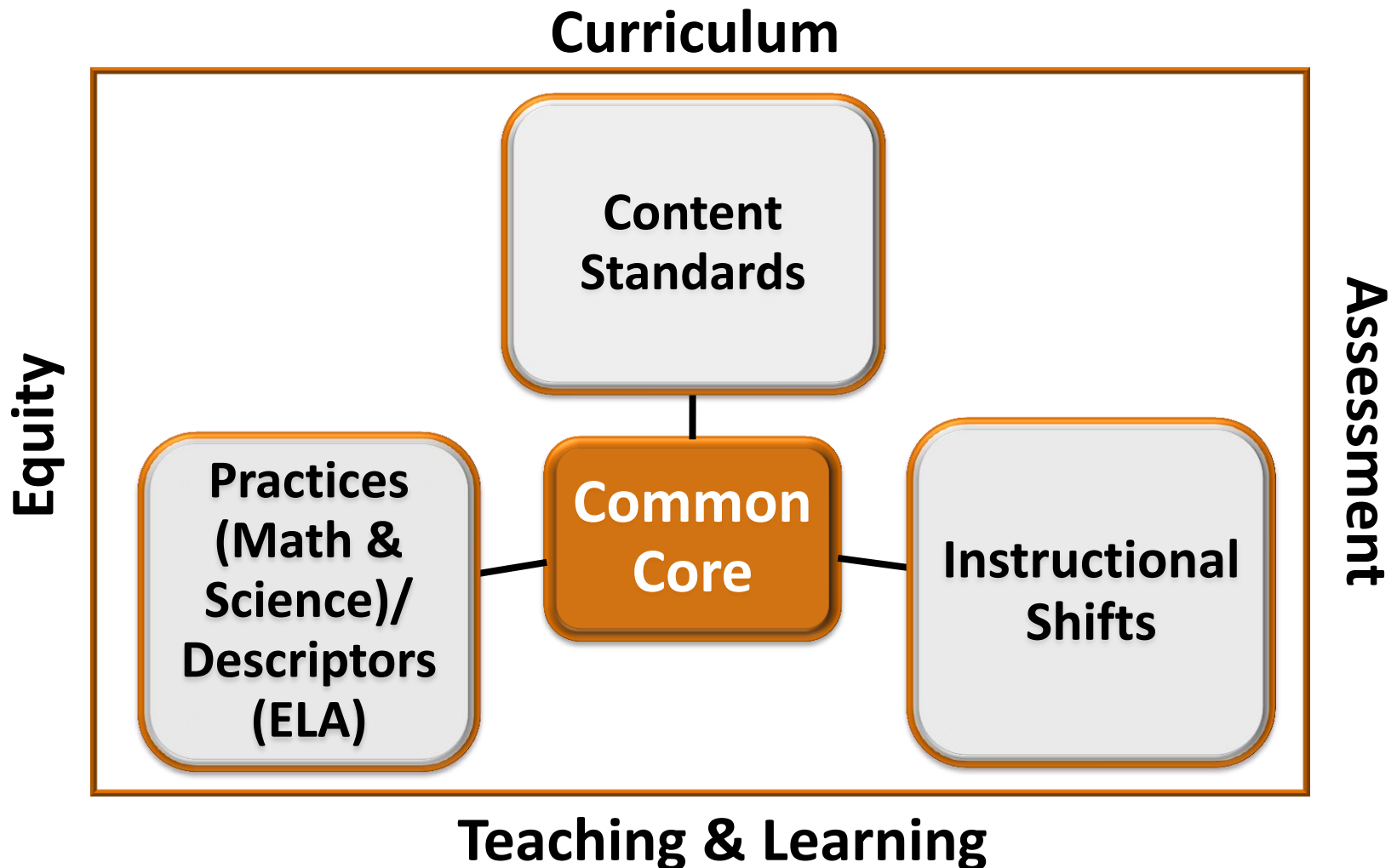
Grades 3-5

Day 1 –

Welcome

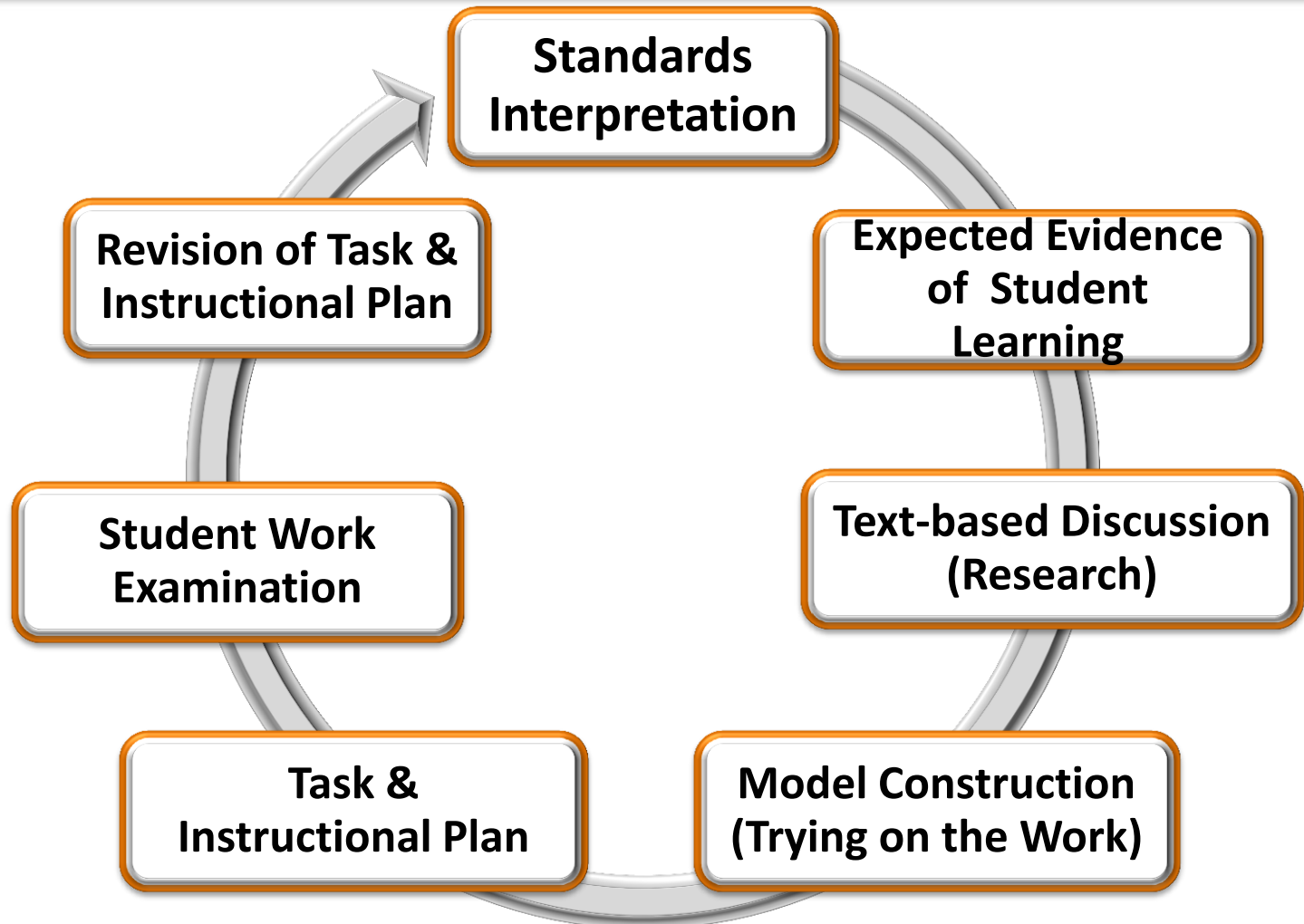


Common Core Standards Framework





Inquiry-Based Design Methodology





Marshmallow Challenge

- Build the tallest freestanding structure
- The entire marshmallow must be on top
- Use as much or as little of the kit
- Break up the spaghetti, string or tape
- The challenge lasts 18 minutes





Agenda

- Standards for Mathematical Practice
 - Marshmallow Challenge
 - Common Core Video

Break (~10:15am) – 10 minutes

- Content Standards
 - Give One, Get One
 - Deep Read
- Instructional Shifts
 - Focus

Lunch (~11:45) – 1 hour

- Coherence
- Rigor
- Smarter Balanced Assessments



Standards for Mathematical Practice

Read SMP's 1, 4, 6

As you read:

- What **Assumptions** does the author of the text hold?
- What do you **Agree** with in the text?
- What parts of the text do you want to **Aspire** to?



Marshmallow Challenge

TED talk



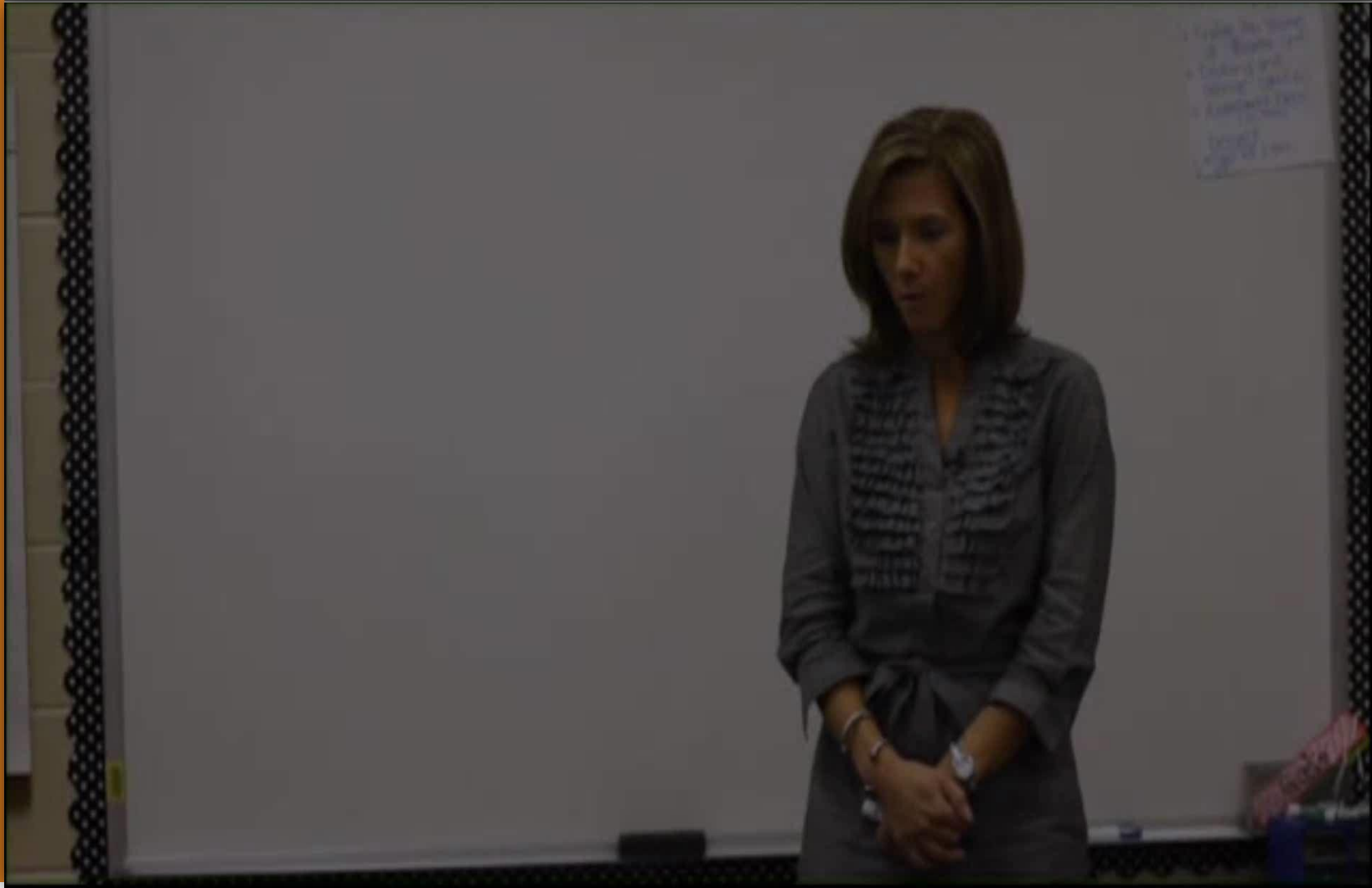
Video

Math Common Core Student Observation Guide

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



Common Core Video





Sacramento City Unified School District

Putting Children First

Common Core Video Debrief





Content Standards

Give one, Get one Protocol

On your own, answer any of the following questions on 3 squares of your grid:

- What do you know about your common core grade level content standards?

OR

- What do you want to know about your common core grade level content standards?



Content Standards

Give one, Get one Protocol

Get up and get moving!

- Find someone with a different color name tag
- Share your knowledge or question
- Fill up all 9 squares of your grid



Format Example

Number and Operations in Base Ten

3.NBT

Domain



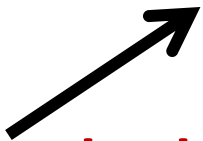
Use place value understanding and properties of operations to perform multi-digit arithmetic.

1. Use place value understanding to round whole numbers to the nearest 10 or 100.
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Cluster



Standard





Content Standards

Read from the standards

– Grades 3-5

Number and Operation - Fraction

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



Content Standards

Suggested homework:

Read “The Progressions for the Common Core” included in your packet



Reflection

On your piece of yellow paper folded in half:

- What are you excited about in the Common Core?
- What are you concerned about in the Common Core?



Lunch

1 hour



Instructional Shifts

Jigsaw

5

- Number 1 – ~~6~~ at your table
- On your own, read the shifts from the shifts handout and the CA draft framework
- Report out to your table what you know about your shift



Instructional Shifts - Focus

- Spending more time on fewer-
- *essential* --concepts
- Negating the issue of “a mile wide and an inch deep”
- Requiring a philosophical shift from content coverage to ***content competency***



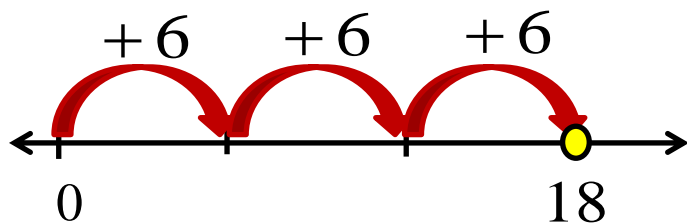
Instructional Shifts - Coherence

- The curriculum has logical progressions from less sophisticated topics into more sophisticated ones.
- Coherence refers to how the standards are organized in and across grade levels.

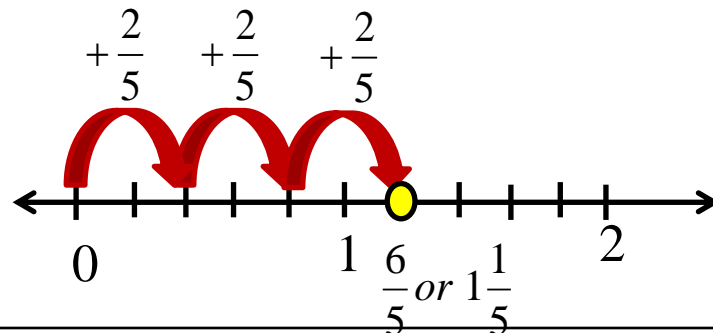


Instructional Shifts - Coherence

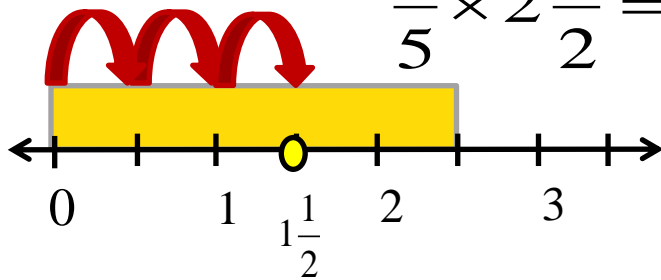
3rd Grade $3 \times 6 = 18$



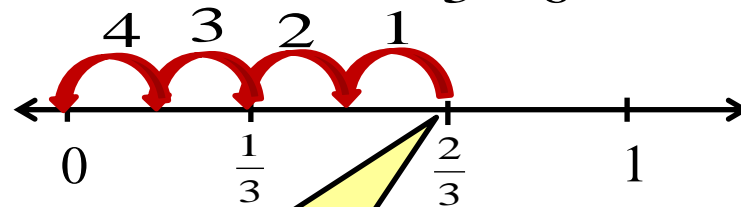
4th Grade $3 \times \frac{2}{5} =$



5th Grade $\frac{3}{5} \times 2\frac{1}{2} =$



6th Grade $\frac{2}{3} \div \frac{1}{6} =$



How many sixths are there in two-thirds?



Instructional Shifts - Rigor

What can I do to make my
classroom instruction more
rigorous?



Instructional Shifts – The Game

⁵~~6~~ “Corners”

- Decide with your partner which shift is represented on your paper strip
- Find the corner corresponding to your shift
- Tape your strip to the poster
- Confirm with others in your corner



Instructional Shifts – The Game

⁵~~6~~ “Corners” – Gallery Walk

Rotate clockwise through each shift.

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Formative Assessments

- What are formative assessments?
- Why do we need formative assessments?



Formative Assessments

Take a look at

~~Complete~~ the following:

From Illustrative Mathematics

3rd – Find 1

4th – Using benchmark fractions to
compare fractions

5th – Jog-a-Thon



Formative Assessments

Discuss at your table

- How do the assessments relate to the shifts?
- How do the assessments require the instruction and the learning to change?
- How does this guide your next steps for instruction?



Reflection

On your half sheet of yellow paper:

- What have you learned that is new today?
- What do you hope to get out of this week?



Have a great afternoon!

See you tomorrow at 8:30am!

**Please sit with grade level
peers**

**Suggested homework – Read The
Progressions!**