



# Math Common Core Summer Institute

## Grades 3-5

## Day 3 –

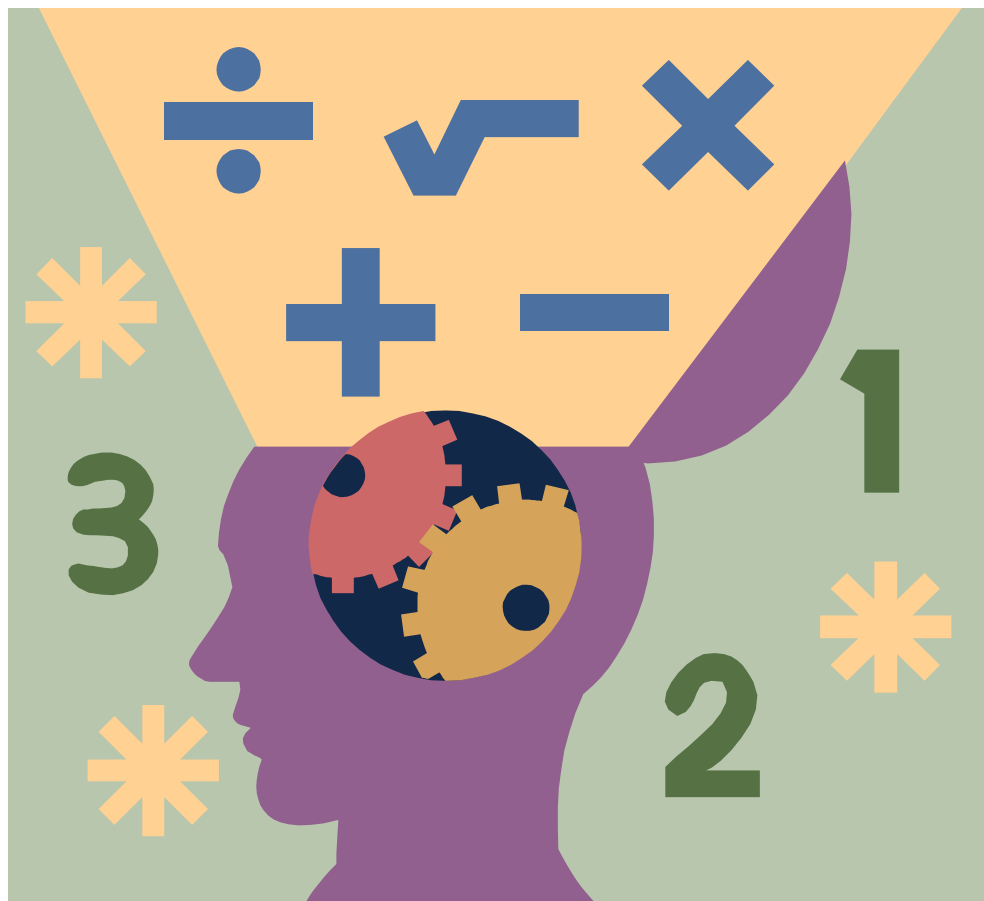
# Welcome



Sacramento City Unified School District

Putting Children First

# Conceptual Development





# Reflection

On a piece of yellow paper folded in half:

What types of errors/misconceptions do you anticipate your students having within your grade level standards?



# Standards Interpretation

- Read your grade level in the Content Standards
  - Gr 3 – Number and Operation in Base Ten**
  - Gr 4/5 – Number and Operation– Fractions**
- Read The Progressions for Common Core
  - Gr 3 – Number and Operation in Base Ten**
  - Gr 4/5 – Number and Operation – Fractions**



# Standards Interpretation

- Silent Sustained Reading Time
- If you would like to discuss with your neighbors as you read, please excuse yourselves to The Bistro



# Standards Interpretation

As you read, make notes of:

- What will students need to know?
- What will students need to be able to do?



# **Lunch**

## ***1 hour***

**When you return you will be  
in separate rooms by grade  
level**



# Creating a Unit of Study

Find your Unit of Study  
with Guiding Questions





# Creating a Unit of Study

## Enduring Understanding(s):

Students will understand that...

- These are specific inferences based on big ideas that have lasting value beyond the classroom.
- They are full-sentence statements that describe specifically what students will understand about the topic, and allow them to transfer their learning to authentic performance tasks.



# Creating a Unit of Study

**Essential Questions:** These questions will guide student inquiry.

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



# Creating a Unit of Study

## Knowledge:

Students will understand/know...

- What key knowledge and concepts will students acquire as a result of this unit?



# Creating a Unit of Study

**Application:** Students will be able to...

- Lower Level: Required grade-level fluencies (word recognition, math facts, computational skills, etc.)
- Higher Level: Students will be able to apply their understanding to authentic problem solving



# Creating a Unit of Study

## Useful Resources

(also Suggested Homework)

- NCTM's *Essential Understanding*
- Van de Walle's *Teaching Student Centered Mathematics*
- The Internet



# Creating a Unit of Study

## Chart Talk

Fold a piece of paper into fourths and label the quadrants with.

- Enduring Understanding
- Essential Questions
- Knowledge
- Application

Brainstorm



# Creating a Unit of Study

## Chart Talk

Silently:

- Add to the charts around the room
- Ask questions on the chart
- Make comments on the chart



# Creating a Unit of Study

## Chart Talk Consensus Building

- Come up with your **top three** entries for Enduring Understanding or Essential Questions
- You may, add to, edit or revise what is on your chart
- Be prepared to present your final choices to the whole group





# Creating a Unit of Study

## Chart Talk Consensus Building

In your group choose a:

- Facilitator
- Recorder
- Timekeeper



# Creating a Unit of Study

## Chart Talk Consensus Building

Present your **top three** Enduring Understandings or Essential Questions



# Card Sorting Activity

1. Take out the pink and green cards.
  - Match the corresponding pink card to the green card.
  - Leave these cards laid out.
2. Take out the purple cards next.
  - Place the purple cards next to the corresponding pink and green cards.
3. Do the same with the yellow cards.
4. Please fill in any blank cards with the correct information.



# Card Sorting Activity

- When you are finished, please discuss how you might make extensions and/or modifications to this task if needed.
- How does this task address student misconceptions and further student understanding?



# Reflection

On the other half of your yellow piece of paper:

- What are the advantages of a sorting activity?
- How does it encourage students to exemplify the SMPs?



**Have a great afternoon!**

**See you tomorrow at  
8:30am!**

**Suggested homework –  
Teaching Student Centered  
Mathematics – Chapter 1**