



Math Common Core Summer Institute

Day 3 –

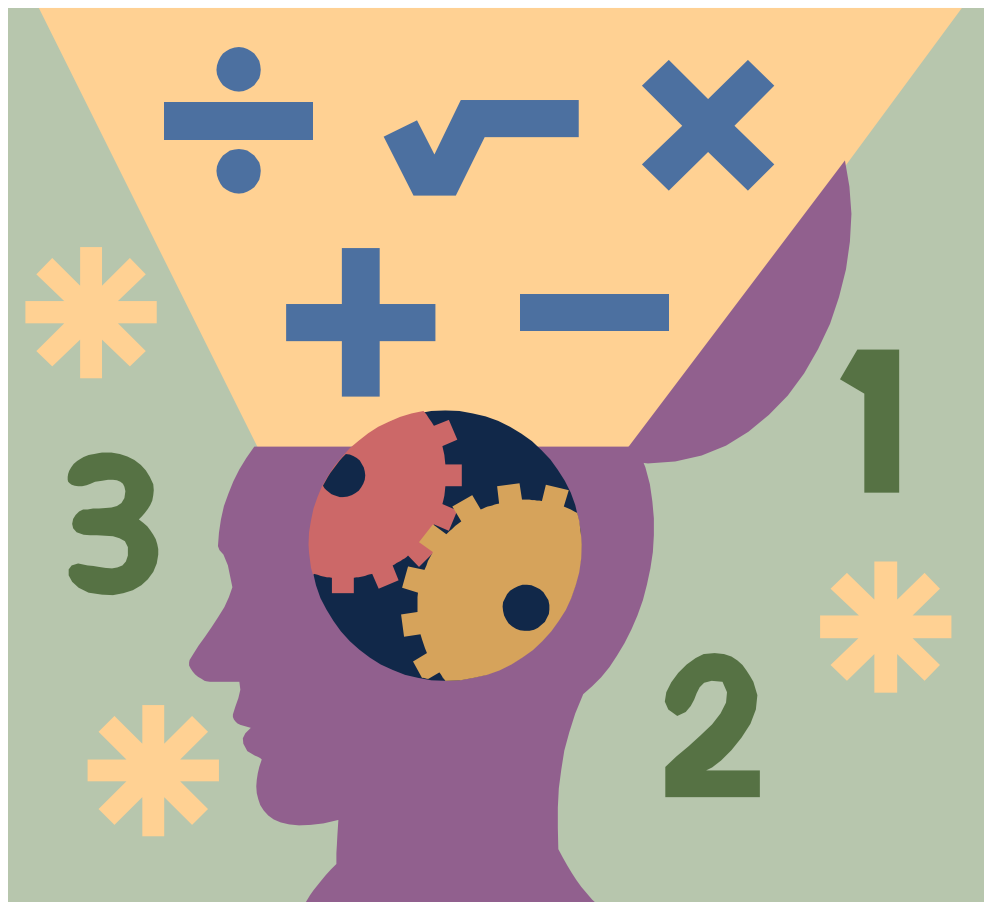
Welcome



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
Domain: Expressions and Equations
- Read The Progressions for Common Core/Expressions and Equations



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**