

TEACHING NUMERACY THROUGH CENTERS AND PLAY



Welcome!

CONNECTOR ACTIVITY

Intentions for our session:

Reflect on one of your intentions for learning about math today. Write down a sentence to describe your goal on a Post-It note.



THERE IS MATH EVERYWHERE

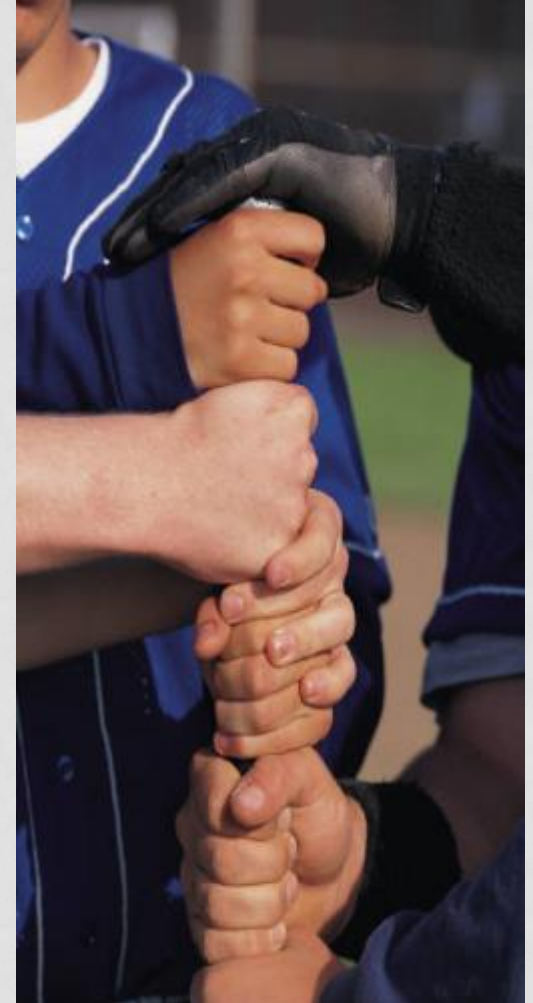
- Do you see any patterns in our intentions?
- How could you group them?
- Which group had the most responses?
- How could we represent the results?
- I hope your intentions are met and exceeded!

OUR LITTLE TEAM

❖ Barbara Chisholm

❖ Lauren Boyles

❖ Nicole Zanotelli



AGENDA

- Connector
- Goals
- Norms
- Overview
- Videos
- Activities
- Action Plan



GOALS

Today we will gain a better understanding of:

- Developmentally appropriate math practice
- Defining standards for TK math
- What early math looks like through video and hands-on experiences
- How to implement math in centers and play

NORMS

- Start and end on time
- Step up or step back
- Show respect for multiple perspectives
- Consider your own perception, values, and beliefs
- Ask questions
- Be present and ready to participate
- Others?



BIG IDEAS ABOUT TK AND THE COMMON CORE CURRICULUM

- What is the Common Core and the Core Curriculum?
- Can it be done in an developmentally appropriate way?
- How does TK fit into the picture?

ALIGNMENT

- > Horizontal and vertical alignment
- > Commitment of time and on-going communication between schools and grade levels
- > Meant to improve the way children experience math as they move from one grade level to the next

WHAT IS THE MATH COMMON CORE?

- Sets National Math standards for content and practices
- Is meant to go deeper with content and provide meaningful and challenging math experiences
- Talking about the math process, discourse, is an essential practice

CORE CURRICULUM

- Common Core does not have a set curriculum
- ‘Core curriculum’ varies by district
- Is defined as a curriculum that is based on the common core standards and practices.

PRESCHOOL LEARNING FOUNDATIONS LEARNING TRAJECTORIES

- CA Preschool Learning Foundations
- The Learning Trajectories, Clements and Sarama

DAP MATH

5 STRATEGIC TEACHING PRACTICES FROM THE ERICSON MATH COLLABORATIVE

- Mathematize the World Around us: use a math lens
- Make Math more than Manipulatives: materials won't explain math. Children need concrete objects along with an explanation of abstract ideas
- Recognize Receptive Understanding: look for nonverbal understandings
- Get math into children's eyes, ears, hands, and feet: kinesthetic and auditory learning!
- Scaffold children to construct their own learning: children are curious and competent problem solvers!
- "Big Ideas of Early Mathematics" The Early Math Collaborative , Erikson Institute, 2014

FINDING OUR WAY: PK AND TK CCSS-M

- SFUSD coaches and teachers developed their own curriculum
- Based on Trajectories and the K Core Curriculum
- Lots of time to rewrite and edits
- 5 Units
- Diagnostic, Formative and Summative Assessment embedded in each unit

KEY FEATURES TO THE UNITS

What do the PK TK units look like?

- Socially interactive
- Student Centered
- Promotes discourse and critical thinking
- Adaptable for Projects, Dual Language, Inclusive Practice

VIDEO



- What was this child showing me?
- What math does this activity get at?
- How is this DAP?

VIDEO

- video

FISTFUL OF COUNTERS

- video

STATIONS

- All activities you do today are part of the PK core curriculum
- Refer to the summary sheets for each activity
- Flexible approach: individual work, small group, partner work, project work, TK, PK, K
- Consider how this could be adapted for PBL, DLLs, and children with learning differences.

DIVIDE OURSELVES TO SIX GROUPS



- Find and read the summary sheet.
- Approach the work as a child would, with one of you standing in as the teacher, facilitating the group.
- As you move to the next station another person should take the teacher role.
- Take notes on your summary sheet.
- If you have time, please share activities that you have done that are similar to the one presented at the table.

HANDS-ON TIME!

NUMBER SENSE ACTIVITIES



- Write your name on your folder and take it with you as you move around the room.
- Please move your personal belongings to the chair or the floor to make space for the centers.
- We have 8 minutes for each station. We will cue for you to move to the next station.

DEBRIEF

- Turn to your partner and share something that stood out for you
- What new understanding will you bring back to your classroom? What will that look like?

ACTION PLAN



- Choose one activity to plan and implement in the classroom.
- Consider what time of day, what grouping, and what materials you will need to prepare ahead of time.
- Use the lesson plan prompts to record your thinking

LESSON PLAN

- Name of activity:
- Grouping:
- Key concepts:
- Key materials:
- Extensions:
- Project Applications:

REFLECTION

*I am going to take
this back and ____.*

What have
you learned
today?

*I was
surprised
by....*

I wonder...



EVALUATIONS

- Please contact us if you have questions about any of the activities

Thank you!

chisholmb@sfusd.edu

boylesl@sfusd.edu

zanotellin@sfusd.edu

