GUIDED MATH

ESSENTIAL QUESTION

- How can I effectively incorporate homogenous or heterogeneous grouped Guided Math groups to improve student engagement and student achievement

RATIONALE FOR USING GUIDED MATH AND MATH JOURNALS

- Increase number of students who score a level 2 and level 3 on the CRCT
- RBES
- Quality Plus Teaching Strategies
- Student engagement
- Increase student achievement
- Meet the needs of all students
- Opportunities for observation, communication and collaboration

SMALL GROUP GUIDED-MATH INSTRUCTION

- Similar to guided reading
- Heterogeneous grouping by interest
- Homogeneous grouping by ability
- Provides scaffolding to support the learning efforts of students
- Encourages exploration and understanding of math concepts in a risk-free learning environment
- Increases teacher knowledge of students

SMALL GROUP GUIDED INSTRUCTION

- **Advantages:**
- Work may be differentiated in procedure, level of difficulty, or by work product
- Enhanced communication
- Encourage use of manipulatives to increase student comprehension
- Students stay focused
- Incorrect understanding easily detected and corrected
- Opportunities for ongoing assessment for learning
- Cooperation among students is encouraged

WHAT ARE THE COMPONENTS OF GUIDED MATH GROUPS?

- Classroom environment of numeracy
- Whole class instruction
- Small group guided instruction
- Assessment for Learning
- Math Centers
- Individual practice
- Math Journals
- Exemplars

CREATING A CLASSROOM ENVIRONMENT OF NUMERACY

Estimation Jar

Exemplars

Calendar

What are some other ways to create this environment?

Math Games

Anchor Charts

Number Talks

Elbow Partners

Turn and Talk

HOW CAN I FORM MY GUIDED MATH GROUPS?

- Heterogeneous
  - Group your students by interest
  - You can group your students by types of pet they have, birthday month, or by favorite sport or activity
- Homogeneous
  - Groups students based on ability using a rubric or pretest
  - Groups should be flexible and change as standards change

NUMBER OF GROUPS

- Number of groups is up to teacher preference
- Options:
  - 2 groups
  - 3 groups
  - 4 groups

HOW CAN I NAME MY GROUPS?

- Coin Names
- Shape Names
- Color Names
- Animal Names
- Kid choice –you can let them get together as a group and pick their name

MORE ON GROUPS IN THE CLASSROOM

4 Groups:

- Math Journals
- Math Tubs
- Teacher
- Seatwork/Anchor Papers

ORGANIZATION AND CLASSROOM SETUP

- Seatwork table with a seatwork bin –4 group folders
- Math Journal table with a math journal bin –4 group folders
- Readily available manipulatives
- Math tub storage and spots around the room
- Area for you and your group

MORE ON ORGANIZATION -FOLDERS

- Left side -green dot- means GO
- Right side -red dot -means STOP
- Any work that is finished, goes on the red side. Any work that is not finished goes on the green side.
- Math Jovrnal Table

MATH JOURNALS

- Support a more complete understanding of concepts
- Reinforce comprehension
- Encourage use of diagrams
- Can be used for documentation of research and experimentation during investigations and to record processes, strategies, and solutions
- Use labels to print prompts or problems
- Differentiate the questions to meet the needs of each student

MODELING AND EXPECTATIONS

- Use a big class math journal, a place where you put your modeled prompts for students to go back and refer to
- Have an anchor chart with student samples and expectations the students can use
- Have strategies posters that the students can use

WRITING IN MATH

"Writing in math class supports learning because it requires students to organize, clarify, and reflect on their ideas—all useful processes for making sense of mathematics."

—Marilyn Burns

WHAT OTHER TYPES OF QUESTIONS CAN I ASK MY STUDENTS?

- Addition or subtraction word problems
- Number study problems
- Place value questions: 33 skittles. How many tens and how many ones? _t_ens +_o_nes =__
- What do you know about _so_ far?
- What do like about _?_
- What did you think about math groups yesterday?
- What do you think about Frank's math thinking during calendar?
- Show any image. Students write about all of the math that they find in the picture.

SEATWORK

- Follow-up work from small group lesson
- Independent work
- Provides practice of current targets or review skills
- Differentiated activities

MATH TUBS/CENTERS

- Students work independently or in pairs
- Procedures and routines must be established and practiced
- Activities should provide opportunities for exploration and practice of mastered skills
- Review of previously taught skills or practice for new targets

WHERE DO I MEET WITH MY GROUPS?

- On the carpet area by the easel
- I have everything near me.
- My kids sit on the little carpets.

MATH WHEEL


Teacher
Seatwork
Nickels
Dimes
Quarters
Pennies
Math Journals
Games

QUESTIONS???