

Investigations

Book: Bigger, Taller, Heavier, Smaller – Investigation 2

Session: 3-4

Page: 44-47

1. Concept:

- Comparing the capacity of containers
- Describing capacities that can't be measured exactly in whole units
- Observing relationships among shapes
- Developing vocabulary

2. CSOs:

- MA.0.1.4.2 select appropriate units and tools to measure and compare two objects or events according to volume.

3. Technique/Procedure/Introduction/Set:

- Explain to students that they will be participating in Choice Time. Remind students of rules during this time. Recall the two activities of Choice Time, “Which Holds More Sand?” and “Block Puzzles”.
- Students then participate in Choice Time. Observe the students as they complete the two activities.
- After Choice Time, discuss the results that the students found from the two activities as a class.
- Have students recall “Which Holds More Sand?”. Have them explain the method they used to figure out which container held more sand. Have students self-reflect on the activities.

Closure:

- Review the findings for each experiment. Review the vocabulary. Explain the in the next few days we will continue to work comparing containers.

Homework:

- No homework. There is an extension activity. Read Math Counts: Capacity by Henry Pluckrose. Talk about the capacity of containers

around the house/classroom. For example, which would have a bigger capacity: a bathtub or a sink?

- Students could create their own block puzzles.

4. Today's Math/Assessment:

- Today's Math page 163 "Which Holds the Most?"
- Teacher Observations
- Student sheet 5
- Student sheets 6-9

5. Materials:

- Pattern blocks (1 bucket per 6-8 students)
- Student sheet 5 (1 per student)
- Student Sheets 6-9 (1 of each per student)
- Tubs of sand
- Small containers of similar sizes
- 1 cup per person (for measuring)
- Newspaper to cover surfaces (optional)
- Chart paper
- Paper pattern blocks and glue, or pattern block stickers, or crayons (optional)

6. Vocabulary: fraction, experiment, estimate, data, range, capacity, leveling, heaping, set, hexagon, trapezoid, parallelogram, square, diamond, triangle, more, less, empty, full