

Investigations (3rd 9 weeks)

Book: **Collecting, Counting, and Measuring**

Session: **Investigation 3 Measurement Towers**

Pages: 38-47

1. Concept:

- ✓ Students will compare two objects to determine which is longer.

2. CSOs:

- ✓ M.S.K.4.1
- ✓ M.S.K.4.2
- ✓ M.S.K.4.3

3. Technique/Procedure/Introduction/Set:

- ✓ Introduce new vocabulary words: Compare, Longer, Shorter, and Same.
- ✓ Model vocabulary by using various objects that will be used in the activity.
- ✓ Ask a volunteer to choose an object from your collection. Encourage students to find the longest dimension of an object when comparing it to the cube tower. *"Is this box longer than my cube tower?"*
"Can you show us how you would find out?"
"Does someone have a different way?"
- ✓ Show various strategies to compare lengths of objects around the room. *"Who sees something in the collection that is shorter than my cube tower? longer? equal?"* *"How could you compare them to show which is shorter?"* *"Does someone have a different way?"*

- ✓ Children will use interlocking cubes to compare lengths of various objects (EX: flashlight, paper towel roll, pencil. Etc.)

Closure:

- ✓ During a whole group discussion, ask about the various strategies that each student used for comparing lengths. Ask students to comment and compare their results with other students.

Homework:

- ✓ Have students teach the compare length game to someone at home and discuss results during whole group.

4. Today's Math/Assessment:

- ✓ Teacher will observe: Students will estimate, compare and measure objects using non-standard units of measurement and record results.

5. Materials:

Interlocking counting cubes

- ✓ Collection of objects to compare (EX: flashlight, pencils, glue bottle, etc.)

6. Vocabulary:

- ✓ Longer
- ✓ Shorter
- ✓ Same or equal

7. Choice Time:

✓ Measuring Table

Students now work individually on the activity that was introduced. They each make a cube tower with 10 cubes, then use their towers to sort objects into categories of *Longer than my tower* and *Shorter than my tower*.

✓ Grab and Count: Which Has More?

o Students grab two handfuls of cubes, count and build a tower for each handful, and compare the towers to determine which of the two quantities is greater. They record this information on paper "cube strips."

o (pg. 135)

✓ Compare

o Using number cards, players turn up number cards and determine which card has the larger number. The object of this game is to decide which of the two cards shows a larger number. Each player starts with half of the cards in the deck.

8. Extension Activity

A Longer/Shorter Hunt: Students go on a hunt to find things in the classroom that are longer a shorter than a tower of ten. They can place them under spaces labeled "Longer than my tower", and "Shorter than my tower."