(2) Length of Classroom Items

Kyla Baker · Kindergarten · Mathematics: Measurement – Lengths

Core Competencies:

Communication:

- Students will participate in individual and group work to simultaneously share knowledge and gain new skills: I can ask and respond to simple, direct questions.
- Students will compare objects and use applicable language to interpret and present their findings: I can understand and share information about a topic that is important to me.

Thinking:

- Students will utilize items that are novel to them in order to place values upon those items using the prescribed terminology: I get ideas when I play.
- Students will observe objects and compare them using non-standard measurements to evaluate attributes: I can identify criteria that I can use to identify evidence.
- Students will be questioned about the attributes of comparable objects in order to examine them: I can explore materials and actions.

Personal & Social:

- Students will be presented with problems which are attainable: I can show a sense of accomplishment and joy.
- Students will recognize when they are struggling and act accordingly: I can persevere with challenging tasks.
- Students will work with others to solve questions: I can solve problems myself and can identify when to ask for help.

Big Ideas:

• Objects have attributes that can be described, measured, and compared.

Curricular Competencies:

Students will be able to:

• Comparing and identifying lengths: longer than, shorter than, longest, and shortest.

Content:

Students are expected to know:

• Terminology specific to height width, length, mass, and capacity: <u>longer than, longest, shorter than,</u> shortest, taller than, wider than, heavier than, lighter than, same as, holds more, holds less

Incorporation of Aboriginal Education:

First Peoples Principles of Learning:

- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Learning involves patience and time.

Diversification/Differentiation:

- Students can work in pairs or parallel to each other to avoid debilitating challenges
- Quick finishers can be asked to find an additional item which is longer or shorter than the predetermined ones

Assessment Tools & Strategies:

Observation – teacher will circulate and listen to ensure students are using the new vocabulary properly, interrupting when necessary; review completed worksheets and address incorrect answers (preferably when students are handing their worksheets in, if time allows, or pull students away from math tubs to review learning gaps) – do so by gathering the items in question and have the student concretely/verbally review the activity

Cross-Curricular Connections:

English Language Arts – learning to use math specific vocabulary

Resources/Materials:

- Glue sticks
- Crayons
- Students Name Tags
- Chain Links
- Kiva Blocks
- Blank Paper

- Pointer
- Eraser
- Block
- Unifix Cubes
- Best Bug Parade by Stuart J. Murph

Method:

Prep: Select items of varying lengths to have ready at the tables for students to compare (a glue stick, crayon, kiva block, and a chain link), each student will need their own set of items

Lesson:

- 1. Read Best Bug Parade by Stuart J. Murphy
- 2. Model the activity by having several items ready to compare: pointer, marker, unifix cube, block, and eraser
- 3. Ask students to look at the items and review from last lesson which item is longest and shortest teacher will point to/pick up the individual items asking the students which is the longest and shortest
- 4. Order the items from longest to shortest asking the students as you are ordering them which item comes next to emphasis the new vocabulary (ie. We've decided the pointer is the longest but which item is shorter than the pointer? I see the marker is shorter then the pointer but longer than the block etc.)
- 5. Trace the items on the whiteboard (adding details to make the objects resemble the real thing, ie. adding the fingers to the pointer, lid features to the marker etc.) and label the longest and shortest (write the word out as well as using 'L' and 'S' with an arrow); do the same for shortest to longest
- 6. Inform students they will be doing the same activity but with different items (their name tag, a glue stick, a crayon, a kiva block, and a chain link)
- 7. Have most items already out for students but inform them they will need to their name tags for the activity
- 8. Review the steps of the activity: (1) get name tag (2) write name on paper (3) order the items from longest to shortest (4) trace the items (5) label the items as longest and shortest using 'L' and 'S' & and repeat steps 3 to 5 but for shortest to longest
- 9. Hand out/have students help hand out blank pieces of paper to complete the exercise
- 10. Students can play with math tubs once they are finished

^{*}Quick finishers can be asked to find an additional item which is longer or shorter than the predetermined ones

Long or Short?
