(3) Comparison of Classroom Items to Students

Kyla Baker · Kindergarten · Mathematics: Measurement - Height

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 heights: tall, small, taller than, smaller than, tallest, and smallest.

Content:

Students are expected to know:

• Terminology specific to height, width, length, mass, and capacity: longer than, shorter than, <u>taller than</u>, <u>smaller</u> <u>than</u>, <u>tallest</u>, wider than, heavier than, lighter than, <u>same as</u>, 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 compare themselves to objects/items or people in the classroom (avoid using people during the demonstration as the shortest/tallest person may feel left out)
- Students can work in pairs if they are struggling to find items
- Teacher can suggest using pieces of furniture in the classroom for items as well (taller = bookshelves; smaller = chairs/benches)

Assessment Tools & Strategies:

 Observation – during the modelling try to address any presented issues with the activity/terminology; 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 having the student show you the item they chose and compare them concretely

Cross-Curricular Connections:

English Language Arts – learning to use math specific vocabulary

Resources/Materials:

- Actual Size by Steve Jenkins
- Whiteboard and Marker
- Premade Worksheet (see below)
- Clipboards
- Pencils

Method:

Prep: Print a class set of the worksheet; put worksheets on clip boards

Lesson:

- 1. Read the book Actual Size by Steve Jenkins ask students which objects in the book are smaller or taller than each other or another object near by (ex. pen)
- 2. Inform students we will be comparing heights of items beginning with yourself as a starting point
- 3. Model the activity: on the whiteboard (or using the worksheet students will be completing) draw a picture of the teacher (yourself) and label it; ask students if they can see something in the classroom that is smaller than the teacher
- 4. Once they have selected something smaller than the teacher draw that item to the right of the first picture and label it
- 5. Repeat the exercise but ask students to find something taller than the teacher, the teacher will draw and label this addition picture
- 6. Repeat the exercise again to find one more smaller item and one more taller item
- Select one of the selected items (the ones now drawn on the whiteboard) and ask students if they can see an item that is the same height as the picture of the item; draw this item in and label it as the same height
- 8. Have students look at the drawings on the board and ask them which item is the smallest and which item is the tallest; label the items accordingly on the board
- 9. Show students the worksheet and have them classify where each item would go to further emphasize how to complete the worksheet (this step is necessary if the pictures were drawn on the whiteboard but is unnecessary if the worksheet was completed as the example)
- 10. Tell students they will be completing the same activity and review the steps: (1) write name (2) draw myself (3) find items that are smaller, taller, smallest, tallest, and the same height
- 11. Students can play with math tubs when they are finished

Name:_____

Comparing Heights

Tallest:	Taller than me:	Same	Smaller than me:	Smallest: