(5) Width of Classroom Objects

Kyla Baker · Kindergarten · Mathematics: Measurement – Width

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 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 widths: thick, thicker, thickest, thin, thinner, thinnest, wider than, narrower than, widest, and narrowest

Content:

Students are expected to know:

- Terminology specific to height width, length, mass, and capacity: longer than, shorter than, 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:

- Having a various number of items to be used to create thick/thin objects lets students choose an item they are familiar with
- Teacher will also have a worksheet prepared for those who are struggling with creating the items concretely or for quick finishers
- Students can reference the picture on the chart paper made during the lesson

Assessment Tools & Strategies:

- Observation: teacher will address any obvious struggles with the new vocabulary; circulate when the students are creating three different thick and thin items and address any remaining learning gaps; review papers as they are handed in and ask which three items were used, resolve learning gaps, and label the items if not done

Cross-Curricular Connections:

Arts Education: manipulating materials
English Language Arts: vocabulary specific to math

Resources/Materials:

- Items or pictures of items which are the same but one is wider and one is narrower
- Kiva Blocks
- Play-Doh
- Blank Paper
- Crayons
- Whiteboard and Marker
- Scissors
- Snap Blocks

Method:

Prep: create pieces of paper that say thick and thin in an opaque container to pull from for the game; color code the terms to help students (ie. thick/wide is written in red and thin/narrow is written in blue; if possible have these colors correspond to colors written on the board of the terms)

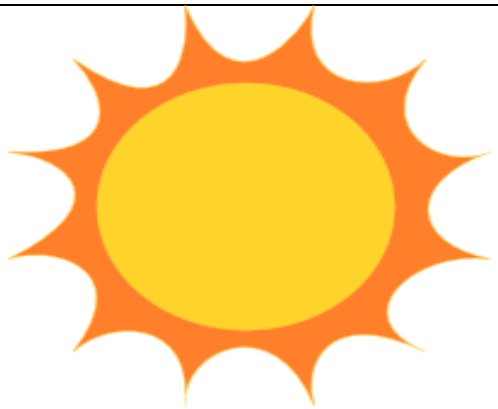
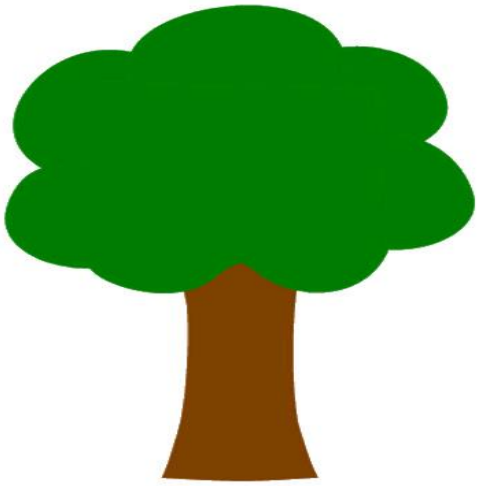
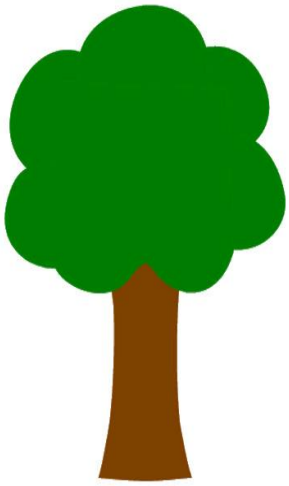
Hook: Tell students you want to play a game with them but first we have to learn some new measurement words; remind students we have looked at lengths and height and now we are going to look at width

Lesson:

1. Inform the students of the topic of thin and thick; ask students if they know what the words mean and introduce the terms wide and narrow if they are not said (write thick and wide on the whiteboard with a corresponding picture and do the same for thin and narrow to hopefully avoid confusion)
2. To further the new words, have students put their hands flat together for thin and create a circle with their hands (all their fingertips touching each other as well as just below the palm of the hand)
3. Repeat the actions a couple more times with the added vocabulary making sure to model the actions along with the students: make your hands thick now just a little thinner; make your hands thin, now thicker than you were before etc. As each action is called out continue to move around that way
4. We an also use our bodies to make ourselves thick and thin: have students stand up and tell them to make themselves as thick as possible (spread arms and legs out with cheeks full of air) and then thin (squeezing their arms and legs as close together as possible, sucking cheeks in like a fish); remind them that we can also use the word wide so ask students what it would look like if they were as wide as possible; repeat for narrow
5. Inform students you want to play a game with these new actions; show students a container and tell them that it has pieces of paper that says thick, thin, wide, and narrow on them; tell them to begin walking around but keep an eye on the teacher as they will be moving too and will be grabbing the pieces of paper out of the container – students must react accordingly to the piece of paper
6. Once the papers are exhausted have students sit down and settle (probably have to pat parts of your body counting to eight to get everyone's attention back – possibly have them take a deep breath to slow them down again)
7. Inform students to use math tub items to create 3 different thick and thin objects (include kiva blocks, play-doh, snap blocks) and records the items used by drawing them on a piece of paper *remind students to clean up their work once they are ready to move on to a different material so other students don't just copy what has been left behind
8. Once students are finished the lesson they can play with math tubs

Name:_____

Thick or Thin?
Wide or Narrow?

 _____	 _____
 _____	 _____
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