

WATER HERE, WATER THERE, WATER IS EVERYWHERE

Explore capacity as we compare different size containers and measure how much water each can hold.

Big Idea

Children will explore capacity by comparing different sized containers and how much water each can hold.

Standards

<p>IELDS 7.A.ECb Use nonstandard units to measure attributes such as length and capacity</p>	<p>Students will measure capacity using a unit of one pitcher in different containers.</p>
<p>CCSS.MATH.CONTENT.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p>	<p>Students will describe the attribute of capacity for different containers and if they are over, below or at full capacity.</p>
<p>CCSS.MATH.CONTENT.K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.</p>	<p>Students will compare the capacity of different containers to determine which has the highest and which has the lowest capacity.</p>

Materials

- Different sized clear containers
- Pitcher of water
- Blue liquid water color
- Water Table or bins to catch extra water
- Book: Capacity by Henry Pluckrose
- Signs (Same, More, Less)

Setup

Mix a few drops of liquid water color with the pitcher of water to give it a tint so it's easier to see in the containers. Put the different containers in the water table/bins without water.

Directions

1. Begin by reading/showing children the different images of how capacity looks.

2. Take a container and pour water into it keep pouring so that the water runs over at this point ask children if it is at capacity. Some will say yes others will say no. Explain that if water is spilling out we are OVER capacity.
3. Pour in just a little water into a container and show students if the container is not full of water it is UNDER capacity.
4. Hold up another container, "Let's make a prediction do you think this container will hold the water from this container?"
5. Test it: Take a different sized container and pour into the new container. Ask children what they observed "What did you see happen?" "Did the same amount of water hold in a different container?"
6. Encourage children to begin trying the different containers to see if they can fill them to capacity, and if all the containers hold the same amount of water

Investigation Questions: Does this container hold more or less than the other container? How do you know? Is this container at, below, or over capacity? How could we make the container to be at full capacity? What do you think will happen when you move liquid from this container to that container? Which container do you think will have the highest capacity and hold the most water? Which container do you think will have the lowest capacity and hold the least water?