

 Notes for parents.**The purpose of the activity is to help your child to:**

- Order containers by capacity.
- Organise three objects by order of size.

**Here is what to do:**

Show your child the picture of three containers. Ask them about how they know which container holds the most. Children of this age often have trouble looking at all three dimensions (length, height, depth) simultaneously in making their decision. Expect answers like, *“This one is taller”* and *“This one is fatter.”* Respond with questions like, *“So if a container is tall then it holds a lot. Is that always right?”* and *“What if a fat container is not very tall. Will that matter?”*

Look around the house for three containers that might provoke your child to think differently. For example, the ice tray in a refrigerator has a large base area but little height while a yoghurt container can be comparatively tall but lack base area. Make sure your child predicts first and justifies their prediction before pouring to check. This makes them attend to important features such as curved versus flat surfaces in considering which container holds most.

**Points to note:**

Capacity is the volume of a liquid or gas that a container holds. The conventional units for capacity include litres and millilitres (thousandths of a litre). At your child’s age we are looking for them to attend to the characteristic (attribute) of capacity by comparing containers directly. By directly we mean fitting one into the other by pouring, as opposed to using units and measuring tools to do this. However you should talk about units if the opportunity occurs. Children often have a sense of the units from everyday experience.

Capacity is three-dimensional and research indicates it does not develop for young children without lots of practical experience. That is why water and sand play is essential in pre-school learning.

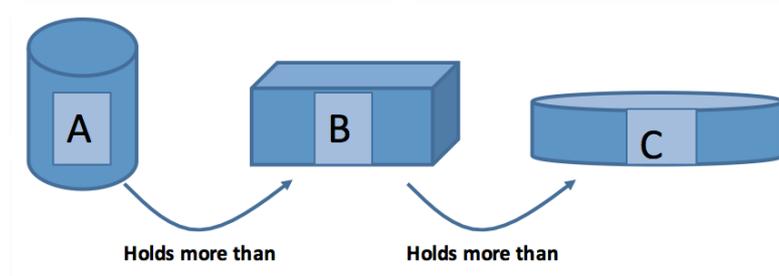


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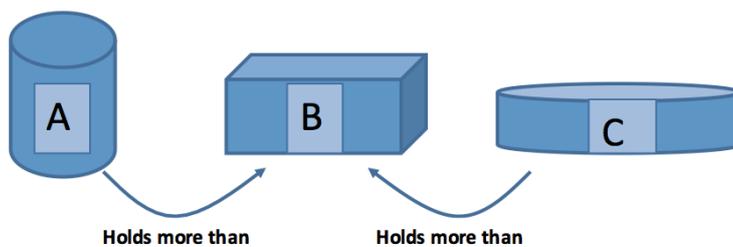
Children often opt for the tallest container in deciding which container holds more. The experience of pouring from one full container into another helps them conserve capacity, i.e. understand that the amount of water does not change as it is poured from one container to another.

The logic involved in comparisons of containers is tricky. Suppose your child pours from one full container to another and there is some water left when the container is full. What does that mean? The 'pour from' container holds more than the 'pour into' container. That means the 'pour into' container holds less.

The logic becomes more complex when three containers are used. Look at this scenario. Understanding that A holds more than C without needing to pour between the two containers is called transitive reasoning, an important development in size comparison.



Consider this scenario. Here you will need to pour between A and C to find which holds more. Why?



# Activity | Which holds more?

Y1

Here are three containers. Just by looking, can you tell which container holds the most water?

How do you know?



Find three different containers from around your house. Make sure they are plastic and look like they hold about the same amount of water.

Which container will hold the most?

Which container will hold the least?

Check by pouring water from one container to another.

