

# Pour and Fill - exploring capacity and volume

Age Groups: Infant, Toddler & Pre-school

## Learning @ Home

### You will need:

Plastic bottles – different shapes and sizes

Plastic Jugs

Plastic Funnels



### Directions:

Collect different size plastic bottles, plastic funnels and jugs.

Have fun pouring water into bottles, whilst playing talk about; filling the bottle to the top;

- “Is it nearly full”?
- “How many little bottles of water does it take to fill this big bottle”?
- “Shall will fill it half full”?

You can add some challenge by marking quantities with a permanent pen marker or coloured tape. For example 250ml on a 500ml bottle.

If you have 2 different shaped bottles that hold the same amount ask your child which one he/she will hold the most water. Help him/her test to see what happens.

### Tip tips:

Playing with water in this way helps children explore capacity and volume.

Talking with your child as they fill up bottles helps them develop understanding of mathematical terms associated with capacity and volume in ways that are meaningful.

Exploring how the volume of water stays the same regardless of the size or shape of a container is an important mathematical concept to develop. This is referred to as conservation of volume; having the ability to understand that redistributing liquid does not affect its volume.

Children are likely to think that a tall narrow bottle contains more liquid than an equal amount in a short fat bottle. Through playing with water and different shaped containers that hold the same amount, children will begin to explore conservation of volume.