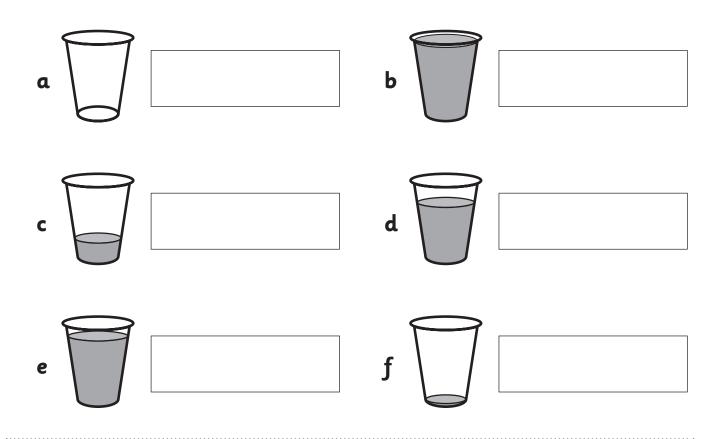
## Volume and capacity – capacity of containers

When we find out how much a container can hold, we are measuring capacity.

**1** How would you describe how full these containers are? There are some ideas on the help strip below.



**2** What sort of container do you think could be filled with 5 cups of water? Draw it.

in the second	full	empty	half	between	quarter
dia.	a bit	three quarters		nearly	

# Volume and capacity — capacity of containers

You will need: a partner a spoon a cup a bucket sand or water a lunchbox

#### What to do:

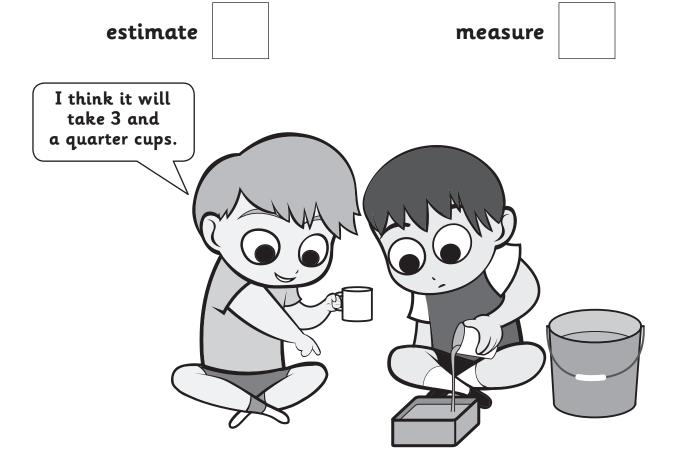
a How many spoonfuls of water or sand will fill your cup?



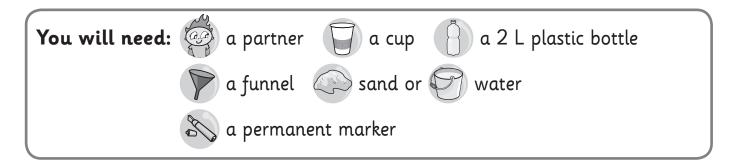
**b** How many cups of water or sand will fill your lunchbox?



c How many lunchboxes of water or sand will fill your bucket?



## Volume and capacity – capacity of containers



#### What to do:

**a** Can you see the markers on the side of the jug? These tell us how full the jug is and help us if we need a set amount. Can you think of a time we would use them?

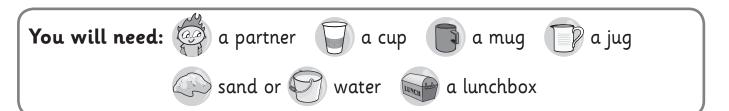


**b** You are going to make your own specially marked container. Pour cups of water or sand into the plastic bottle until the bottle is full. Use a funnel if you have one to make it easier. Each time you pour a cupful in, mark the side of the bottle.

### What to do next:

- **a** Pour 2 cups of water or sand out of the bottle. How will you know you have done this correctly?
- **b** How much is left in the bottle? Show how you know.
- **c** Take turns telling each other how much to pour out of the bottle until it's all gone. Check each other's decisions.

## Volume and capacity – compare and order

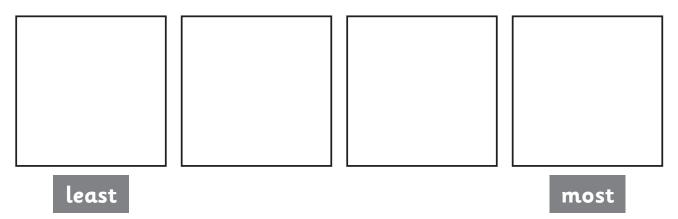


#### What to do:

a Order your containers from the one that holds the least to the one that holds the most. How will you prove this?



**b** Draw the containers in order in the boxes below and explain how you worked it out.



## Volume and capacity – compare and order

You will need: a partner cups lunchboxes sand or water jugs or bottles

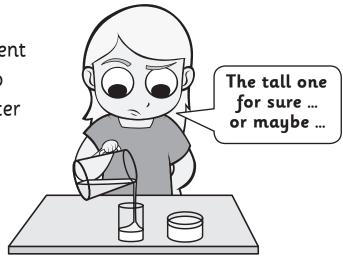
#### What to do:

a Fill a container with sand or water. Can you find a different shaped container with the same or nearly the same capacity? Draw the two containers in the box below.

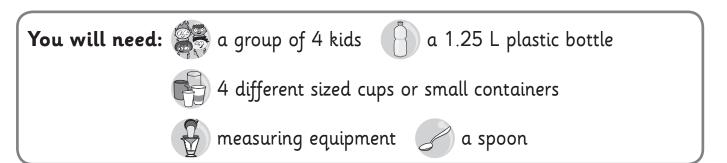
**b** Would you have expected that they had the same capacity? Why or why not?

#### What to do next:

Take turns giving each other 2 different shaped containers. Ask each other to predict which one will have the greater capacity. Measure them and see.

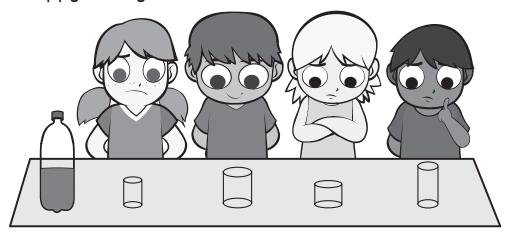


### Volume and capacity – compare and order



#### What to do:

Half fill the plastic bottle with water. Choose a cup to be your own. Now, find a way to share the water out between the 4 cups so that each of you has a fair share. How will you know you have done it? Are you all happy with your share?



### What to do next:

- **a** For this activity you will need water, a spoon and a cup. Half fill the cup using the spoon. How many spoonfuls of water did it take?
- **b** Can you work out how many spoonfuls in a whole cup? Do you have to keep filling spoonful by spoonful or is there a different way to work it out?

### Volume and capacity - volume

When we find out how much space a container or object takes up, we are measuring volume. The more space an object takes up, the more volume it has.

One way of measuring volume is to fill it and count how many objects are in it.

cubes **You will need:** 🧭 a partner lunchboxes What to do: a Estimate how many cubes it will take to fill your lunchbox. Write your estimate. estimate **b** Do you think your lunchbox has a greater or smaller volume than your partner's lunchbox? Write why you think so. Fill your lunchbox with cubes. measure **d** Whose lunchbox had greater volume? Did this surprise you? What to do next: Estimate the volume of a tote tray in cubes. estimate measure