



Strengthen Activities

MISCONCEPTION

Children may struggle to determine how the scale is divided up. This could be due to not applying division facts or miscounting the intervals between two labelled measures.

STRENGTHENING UNDERSTANDING

1. Show children a scale on a container, for example 0–1,000 ml on a jug. Draw the scale horizontally as a number line, as this may be a more familiar orientation for them. Fill the jug to 300 ml and mark this on the number line. Now fill the jug to 750 ml and also mark this on the number line.
2. Ask: *What is the total amount between the two labelled points on the number line?* Encourage children to look at the divisions on the number line. Ask: *What does each division represent?* (For example, 10 ml, 50 ml or 100 ml). *How many millilitres are there between these two points? How can you work this out?* Agree you could count up the divisions (or jumps) between the two measurements, i.e. 10, 20, 30, or 50, 100, 150, etc. *How can we show this amount as a calculation?*
3. Repeat this using different capacity scales from different containers.

ASSESSMENT CHECKPOINT

Can children identify what the divisions on a scale mean, and use them to work out the difference between two amounts?

RESOURCES

Containers marked with capacity scales, number lines

MISCONCEPTION

Children may not understand that capacity is the amount a container holds when full, whereas the amount actually in the container is often not its full capacity.

STRENGTHENING UNDERSTANDING

1. Show children a container. Ask: *What is its capacity?* Part-fill the container with water and ask children again what the capacity is. Empty some of the water out and ask again.
2. Ask: *What is the capacity of this container when it is full? How much water is in the container? How much more will fill it to its capacity?*
3. Repeat with different amounts in the same container and amounts in different containers.

ASSESSMENT CHECKPOINT

Can children correctly identify the volume of liquid of a container when full and when part-filled and say which is the capacity?

RESOURCES

Containers and water

MISCONCEPTION

Children may not consider the number of litres before looking at the number of millilitres. They do not realise that we first look at how many litres there are in each measure, or do not make links to looking at the largest place value first when comparing numbers.

STRENGTHENING UNDERSTANDING

1. Show a container with a scale reading 1 litre. Ask: *How many litres is in this measure? How many millilitres in total?* This will ensure that children focus on litres first.
2. Now show a container with a scale reading 1 litre 400 ml. Ask: *How many litres is in this measure? How many millilitres in total?* Use a place value 1,000 card and exchange the 1 litre for 1,000 ml.
3. Repeat with different amounts for example, 2 litres 350 ml, or 8 litres 215 ml. Check that children are reading the number of litres first and use the place value card to affect the exchange to ml each time.

ASSESSMENT CHECKPOINT

Can children identify from a scale how many litres and how many millilitres are in 6 litres 725 ml?

RESOURCES

Containers with scales, place value cards