Unit I7

Strengthen activities

MISCONCEPTION: Children may confuse volume and capacity and may not be able to differentiate between the two.

Answers

Assessment checkpoint:

Explanations may vary; for example:

Volume is the amount of space that an object fills.

Capacity describes how much a container can hold.

MISCONCEPTION: Children may view the estimation process as a form of calculation that provides the actual volume, because it involves counting, and do not realise that it is not exact.

Answers

Assessment checkpoint:

The cube would have the most accurate estimate because the small cubes can make a very similar shape to the large cube due to there being no rounded edges or points. There will be gaps in the estimates made for the other two shapes.

MISCONCEPTION: Children may think that a tall, thin container has a greater capacity than a short, wide one.

Answers

Assessment checkpoint:

Estimates may vary but should be close to:

A: 300 ml, B: 300 ml, C: 175 ml, D: 200 ml

Deepen activities

Answers

Activity 1

Answers will vary. Possible solutions include:

a) Amy can fill the 5 l bucket and pour it all into the 8 l bucket. She can then fill the 5 l bucket again and pour as much as she can into the 8 l bucket until it is full. That will leave 2 l of water in the 5 l bucket.

b) Bilal can fill the 1·5 l tub with water and pour it all into the 5 l tub. If he repeats this twice more, there will be 4·5 l of water in the 5 l tub. If he fills the 1·5 l tub again and pours as much as he can into the 5 l tub until it is full, there will be 1 l left in the 1·5 l tub.

c) You can only make capacities with an even number of litres, as 2 l and 4 l can only give multiples of two litre amounts.

Activity 2

It is false. 10 cm^3 = 10 ml not 1,000 ml.

1 centimetre cubed is the same as 1 ml, so if you have 10 of them, that is the same as 10 ml.

Activity 3

Capacity of container A = 920 ml

Capacity of container C = 460 ml

Children's own questions and answers will vary.