

Unit I4: Capacity Lesson I: Measuring capacity (I)



5. First scale: Divide line into two equal parts; mark this interval 100 ml.

Second scale: Divide line into 10 equal parts; mark first interval from bottom as 100 ml.

Third scale: Divide line into 5 equal parts; mark first interval from bottom as 100 ml (or divide line into 10 equal parts and mark second interval from bottom as 100 ml).

Reflect

Look for an explanation of the need to work out what each interval is worth by finding the difference between marked amounts and dividing this by the number of intervals between them.

Lesson 2: Measuring capacity (2)

→ pages 124–126

- **1.** a) Capacities completed as:
 - 1 l 700 ml 1 l 500 ml
 - 0 l 500 ml 1 l 0 ml
 - b) First jug: 1,000 ml 900 ml = 1,900 ml Second jug: 1,000 ml 200 ml = 1,200 ml Third jug: 1,000 ml 700 ml = 1,700 ml
- **2.** A Shaded to the third mark above 1 litre B Shaded to the second mark above 1 litre
 - C Shaded to half-way between 3 and 4 litres



- 4. Jug B was used.
- **5.** Answers will vary but should be in the range of 1 l 100 ml to 1 l 300 ml.

Reflect

Scale showing a litre split into 4 intervals to be labelled: 0 ml, 250 ml, 500 ml, 750 ml and 1,000 ml (or 1 l).

Scale showing a litre split into 5 intervals to be labelled: 0 ml, 200 ml, 400 ml, 600 ml, 800 ml and 1,000 ml (or 1 l).

Lesson 3: Measuring capacity (3)

→ pages 127–129

1. a) 1,100 ml = 1 l and 100 ml





- Answers may vary. Children may choose to use a bar model or a part-whole model.
 3 l 700 ml = 3,700 ml
- **3.** a) 2.270 ml
- b) 3,450 ml
- **4.** a) 400 ml = 0 l 400 ml b) 300 ml = 0 l 300 ml
- 5. Shaded up to half-way between the second and third mark above 1,000 ml.
 1,250 ml = 1 l 250 ml
- **6.** 1 litre and 2 litres written by bold marks on jug. 2,250 ml between second and third mark above 2 litres.

Reflect

Answers will vary. The explanation should include that you need to use the fact that 1 l = 1,000 ml to help you. Children may suggest checking how many thousands of ml there are in the amount; this will give how many litres there are. The rest can be left as ml.



Lesson 4: Comparing capacities

→ pages 130–132

- a) 1 | 200 ml < 2 | 100 ml
 b) 1 | > 900 ml
 c) 500 ml = ¹/₂ l
 d) 2 | 100 ml > 1 | 999 ml
- **2.** 25 l 2 l 250 ml 2,100 ml 300 ml

٦.	D	D	A	C
4.	D	В	А	С

- **5.** A = 1,000 ml C = 1,250 ml D = 1,400 ml B = 1,500 ml
- 6. Jessica should choose bowl C.
- **7.** Reasoning will vary, for example: Container A has a capacity of 2 l and is about $\frac{3}{4}$ full. This means it contains about 1,500 ml or 1.5 l. Container B holds 1.5 l when full, but it is not full, so it contains less than 1.5 litres. Therefore container A has more liquid in it.

Reflect

Answers will vary. Encourage an explanation of converting all the amounts to the same units before comparing, starting from the column with the greatest value first.

Lesson 5: Adding and subtracting capacities

→ pages 133–135

- **1.** a) 450 + 300 = 750 ml
 - The total of the two amounts is 750 ml. b) The total of the two amounts is 2 l.
 - c) 5 l 675 ml
- 2. There is 1 l 750 ml left in the bottle.
- **3.** 4 l = 1 l = 3 l 500 ml - 150 ml = 350 ml There will be 3 l 350 ml left in the large container.
- **4.** James needs 1 l 500 ml more water.
- **5.** There are 550 ml in cylinder C.

Reflect

Answers may vary. Some children may convert 2 l 800 ml to 2,800 ml before adding this to 1,250 ml to get 4,050 ml. Others may convert 1,250 ml to 1 l 250 ml and then add the litres and millilitres separately. This gives 3 l 1,050 ml, which is the same as 4 l 50 ml.

Lesson 6: Problem solving – capacity

→ pages 136–138

- 800 ml (in the bar model) Paolo bought 800 ml of water altogether.
- **2.** 500 ml in each of the 4 parts in the bar model Each glass holds 500 ml of water.

3.	40 l						
	10 l	10 l	10 l	10 l			
		10 l					

Frederica has 30 l of fuel left.

4.	250 ml	250 ml	250 ml	1/2 litre		
	750 ml			500 ml		
	I,250 ml					

The total is 1,250 ml. This is 1 l and 250 ml of milk in total.

- **5.** Alfredo needs to drink 7 more glasses. Jen needs to drink 9 more glasses.
- 6. He needs 2 l and 500 ml more cream.
- 7. You will need 7 l 500 ml.

Reflect

Answers will vary. Encourage children to explain their different steps and the reasons for these steps. Children should consider the need to convert between litres and millilitres.

End of unit check

→ pages 139–140

My journal

4 l					250 ml	
I,000 ml I,000 ml		I,0	00 ml	1,000 ml		250 ml
4,250 ml						
2 <u>2</u> l						
1,000 ml		I,000 ml 50		00 ml		
2,500 ml						
2.750 ml						
5,750 ML						
1,000 ml	1,000	ml	ml I,000		75	0 ml
3,000 ml 75				0 ml		