WONDERLEARNERZ PRIMARY ACADEMY â€" OFFICIAL ANSWER KEY & MARKING SCHEME

Capacity and Volume - Worksheet 3 [ANSWER KEY]

Grade 4 | Mathematics | Ch 12: Capacity and Volume | Total Marks: 19 | Time: 30 Minutes

Q1. How many millilitres (mL) are in 4 litres (L)? [1 Mark]

Correct Answer: 4,000 mL

Explanation: 1 litre = 1,000 mL. 4 x 1,000 = 4,000 mL.

Q2. Convert 3000 mL into litres and millilitres: [1 Mark]

Correct Answer: 3 L 0 mL

Explanation: 3000 mL = 3 L and 0 mL.

Q3. Which metric unit is most appropriate for measuring the capacity of a medicine [1 Mark]
dose spoon?

Correct Answer: Millilitres (mL)

Explanation: Small liquid doses (like cough syrup) are measured in millilitres.

Q4. A measuring jug contains 1 litre and 450 mL of orange juice. How many total mL is [1 Mark]
this?

Correct Answer: 1,450 mL

Explanation: 1 L = 1,000 mL. 1,000 + 450 = 1,450 mL.

Q5. At the Greenhouse Plant Irrigation, staff pour 6 cups of water, each holding 500 [1 Mark]
mL. What is the total volume of water poured?

Correct Answer: 3000 mL (3 L)

Explanation: 6 x 500 mL = 3000 mL.

Q6. A watering can holds 6 litres of water. A gardener uses 2 L 400 mL for roses and 1 [1 Mark]
L 800 mL for ferns. How much water remains in the can?

Correct Answer: 1 L 800 mL

Explanation: Total used = 2 L 400 mL + 1 L 800 mL = 4 L 200 mL. Remaining = 6 L - 4 L 200 mL = 1 L 800 mL.

Q7. A bottle contains 2 litres of apple juice. If four children share the juice [1 Mark]
equally, how many millilitres does each child receive?

Correct Answer: 500 mL

Explanation: 2 L = 2,000 mL. 2,000 mL / 4 = 500 mL per child.

Q8. Find the missing capacity: 3 L 250 mL + [?] mL = 4 L [1 Mark]

Correct Answer: 750 mL

Explanation: 4 L = 4,000 mL. 4,000 - 3,250 = 750 mL.

Q9. How many 200 mL cups are needed to completely empty a full 1-litre bottle? [1 Mark]

Correct Answer: 5 cups

Explanation: 1 L = 1,000 mL. 1,000 / 200 = 5 cups.

Q10. A student writes: '2 litres and 5 millilitres in mL is 2,500 mL.' What is the [1 Mark]
student's error?

Correct Answer: 2 L 5 mL is 2,005 mL; 2,500 mL represents 2 L 500 mL

Explanation: 5 mL occupies the ones place, with zeroes in hundreds and tens: 2,000 + 5 = 2,005 mL.

Q11. Sam reads a measuring jug from above looking downward and records 400 mL. At [1 Mark]
exact eye level, the liquid actually sits at 350 mL. What caused Sam's inaccurate reading?

Correct Answer: Parallax error caused by looking from an angle rather than directly at eye level with the liquid meniscus

Explanation: Looking down at an angle causes parallax error, making the liquid level appear higher than it actually is.

Q12. Why does dropping a solid stone into a graduated cylinder filled with water cause [2 Marks]
the water level to rise?
Correct Answer: The solid stone takes up space (volume), displacing an amount of water exactly equal to the stone's own volume
Explanation: Matter takes up space. Submerging an object displaces liquid equal to the object's physical volume.

Q13. A tall, narrow glass and a short, wide bowl both hold exactly 500 mL of juice. [2 Marks]
How is this possible?
Correct Answer: Capacity depends on total interior 3D volume, not simply the height of the container
Explanation: Volume depends on length, width, and height. A wider base compensates for shorter height.

Q14. A teapot holds 1 litre 800 mL of tea. Grandma pours four 250 mL cups of tea for [2 Marks]
guests. How much tea is left in the teapot?
Correct Answer: 800 mL
Explanation: Poured = 4 x 250 mL = 1,000 mL (1 L). Remaining = 1,800 mL - 1,000 mL = 800 mL.

Q15. An aquarium filter pumps 15 litres of water every minute. How many litres of [2 Marks]
water will the filter process in 1 hour?
Correct Answer: 900 litres
Explanation: 1 hour = 60 minutes. 60 x 15 litres = 900 litres.