Multiple choice questions - Volume and surface area of prisms

Year: Year 8 · 10

Question 1 Volume of a cuboid 2 cm by 3 cm by 4 cm?

- ◯ **A.** 9 cm^3
- ◯ **B.** 24 cm^3
- ◯ **C.** 26 cm^3
- ◯ **D.** 52 cm^3

Question 2 Surface area of a cube of side 2 cm?

- ◯ **A.** 8 cm^2
- ◯ **B.** 12 cm^2
- ◯ **C.** 24 cm^2
- ◯ **D.** 16 cm^2

Question 3 Volume of a prism =

- ◯ **A.** area of cross-section x length
- ◯ **B.** base x height
- ◯ **C.** perimeter x length
- ◯ **D.** length x width

Question 4 A prism has cross-section area 12 cm^2 and length 5 cm. Volume?

- ◯ **A.** 17 cm^3
- ◯ **B.** 60 cm^3
- ◯ **C.** 2.4 cm^3
- ◯ **D.** 30 cm^3

Question 5 1 litre equals

- ◯ **A.** 10 cm^3
- ◯ **B.** 100 cm^3
- ◯ **C.** 1000 cm^3
- ◯ **D.** 10 000 cm^3

Question 6 Volume of a cylinder radius 2, height 5 (in terms of π)?

- ◯ **A.** 10π
- ◯ **B.** 20π

- ◯ **C.** 50π
- ◯ **D.** 100π

Question 7 The curved surface area of a cylinder is

- ◯ **A.** $\pi r^2 h$
- ◯ **B.** $2\pi rh$
- ◯ **C.** πrh
- ◯ **D.** $2\pi r^2$

Question 8 A cube has volume 27 cm^3. Its side is

- ◯ **A.** 3 cm
- ◯ **B.** 9 cm
- ◯ **C.** 6 cm
- ◯ **D.** 13.5 cm

Question 9 How many faces does a triangular prism have?

- ◯ **A.** 4
- ◯ **B.** 5
- ◯ **C.** 6
- ◯ **D.** 3

Question 10 1 m^3 in cm^3 is

- ◯ **A.** 100
- ◯ **B.** 1000
- ◯ **C.** 10 000
- ◯ **D.** 1 000 000

Answer grid - Volume and surface area of prisms

Year: Year 8

Question	Answer	Explanation
1	**B**	$2 \times 3 \times 4 = 24$.
2	**C**	6×4.
3	**A**	Prism volume formula.
4	**B**	12×5.
5	**C**	$1 \text{ litre} = 1000 \text{ cm}^3$.
6	**B**	$\pi \times 4 \times 5$.
7	**B**	$2\pi rh$.
8	**A**	$3^3 = 27$.
9	**B**	2 triangles and 3 rectangles.
10	**D**	100^3.