

Outcome 4 - Volume of a Cube, Cuboid & Triangular Prism

Bronze examples

Examples...
Calculate the volume of...

$$V = 6 \times 4 \times 2 = 48 \text{ m}^3$$

$$V = 3 \times 3 \times 3 = 27 \text{ cm}^3$$

Silver examples

Examples...
Calculate the volume of...

$$\text{Area} = 90 \text{ cm}^2$$

$$\text{Volume} = 90 \times 80 = 7200 \text{ cm}^3$$

$$\text{Area} = 5 \times 4 \div 2 = 10 \text{ m}^2$$

$$\text{Volume} = 10 \times 8 = 80 \text{ m}^3$$

Gold examples

Examples... Calculate the lengths of the missing sides...

$$6 \times 5 = 30$$

$$? = 60 \div 30$$

$$? = 2 \text{ cm}$$

$$? = \sqrt[3]{1000} = 10 \text{ m}$$

$$(10 \times 10 \times 10 = 1000!)$$

Key Facts/Formulae:

Cuboid:

$$V = L \times B \times H$$

Cube:

$$V = L^3$$

Triangular Prism:

$$V = A \times L$$



Bronze Questions

Calculate the following volumes...

Silver Questions

Calculate the following volumes...

Gold Questions

Calculate the length of the missing sides...

Bronze Answers

 1	12 m ³	 2	20 cm ³
 3	54 m ³	 4	64 mm ³
 5	160 m ³	 6	120 m ³
 7	150 cm ³	 8	24 m ³
 9	125 mm ³	 10	99 cm ³

Silver Answers

 1	210 m ³	 2	580 cm ³
 3	144 mm ³	 4	120 cm ³
 5	1800 mm ³	 6	128 m ³
 7	42 m ³	 8	108 cm ³
 9	168 mm ³	 10	200 mm ³

Gold Answers

 1	7 cm	 2	10 cm
 3	2 m	 4	1 m
 5	2 m	 6	15 m
 7	3 cm	 8	4 m
 9	7 m	 10	3 cm