

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...

$$6 \times 5 = 30 \\ ? = 60 \div 30 \\ ? = 2 \text{ cm}$$

$$? = \sqrt[3]{1000} = 10 \text{ m} \\ (10 \times 10 \times 10 = 1000!)$$

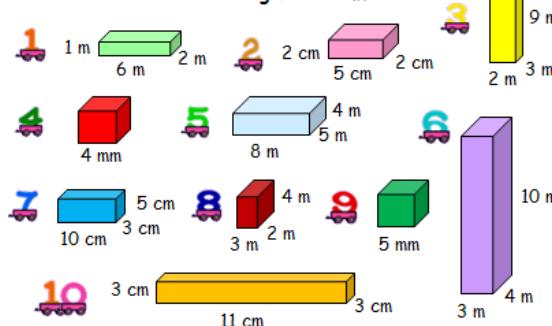
Key Facts/Formulae:

Cuboid:	Cube:	Triangular Prism:
$V = L \times B \times H$	$V = L^3$	$V = A \times L$



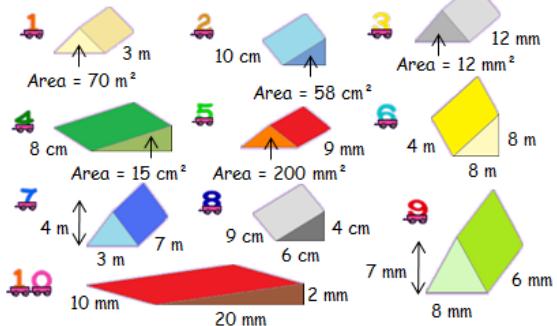
Bronze Questions

Calculate the following volumes...



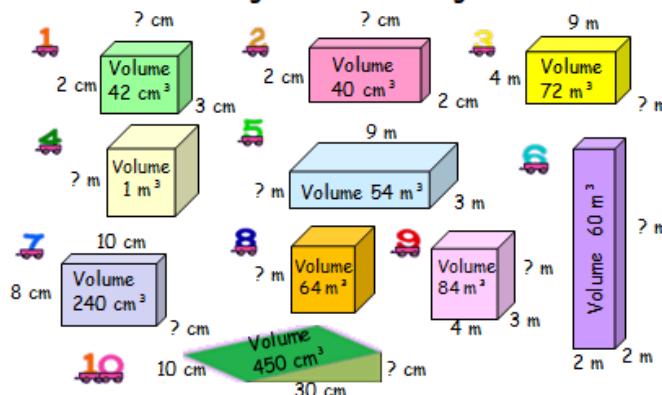
Silver Questions

Calculate the following volumes...



Gold Questions

Calculate the length of the missing sides...



Bronze Answers

- | | | | |
|--|---------------------|--|--------------------|
| | 12 m ³ | | 20 cm ³ |
| | 54 m ³ | | 64 mm ³ |
| | 160 m ³ | | 120 m ³ |
| | 150 cm ³ | | 24 m ³ |
| | 125 mm ³ | | 99 cm ³ |

Silver Answers

- | | | | |
|--|----------------------|--|---------------------|
| | 210 m ³ | | 580 cm ³ |
| | 144 mm ³ | | 120 cm ³ |
| | 1800 mm ³ | | 128 m ³ |
| | 42 m ³ | | 108 cm ³ |
| | 168 mm ³ | | 200 mm ³ |

Gold Answers

- | | | | |
|--|------|--|-------|
| | 7 cm | | 10 cm |
| | 2 m | | 1 m |
| | 2 m | | 15 m |
| | 3 cm | | 4 m |
| | 7 m | | 3 cm |