

GCSE Maths - Foundation grade C

Five questions a day

Set 4

No calculators!

Instructions

Complete one set of questions each day.

Write your answers in the boxes and remember to show your working.

Calculators are NOT allowed!

*Once the answers have been
marked, record your progress on
page 8*

Day 1 Products of primes

1. Write 63 as a product of its prime factors.

2. Write 320 as a product of its prime factors.

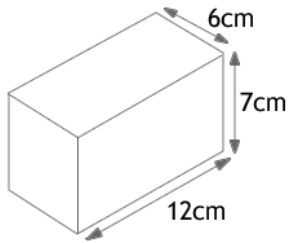
3. Write 45 as a product of its prime factors.

4. Write 93 as a product of its prime factors.

5. Write 100 as a product of its prime factors.

Day 2 Volume

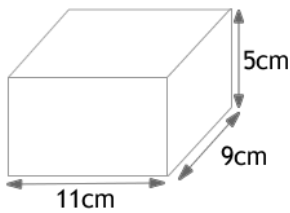
1.



Calculate the volume, stating the units.

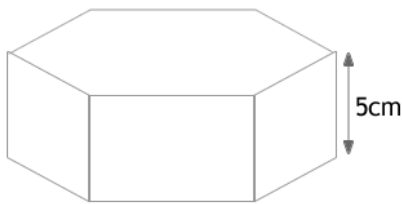
Name this solid.

2.



Calculate the volume, stating the units.

3.

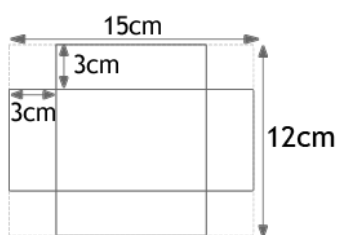


The area of the hexagon is 12cm^2 .

Calculate the volume of the prism.

The diagram shows a hexagonal prism.

4.



Calculate the volume.

This is the net of a cuboid.

5. A fish tank is 60cm long and 40cm wide. It is filled with water to a depth of 30cm.

Find the volume of water in the tank, in litres.

Day 3 Rounding using significant figures

1. Round 125 to 1 significant figure.

2. Round 246 to 1 significant figure.

3. Round 364 to 1 significant figure.

4. Round 205 to 1 significant figure.

5. Round 9345 to 1 significant figure.

Day 4 Ratio

1. 96 sweets are shared between two children in the ratio 5 : 7
Calculate how many sweets each child will receive.

2. Three people share a lottery prize of £2400 in the ratio of 1 : 5 : 6
How much will each person receive.

3. In a school the ratio of girls to boys is 3 : 4
If there are 180 girls, calculate the number of boys.

4. A map has a scale of 1 : 200
If the distance between the two shops is 15cm on the map, calculate the actual distance. (Give your answer in m.)

5. A map has a scale of 1 : 2500
The distance between 2 towns is 250m.
Calculate the distance on the map.

Day 5 Standard form

1. Write 0.0000045 in standard form.

2. Write 35 700 000 000 in standard form.

3. Write 3.7×10^6 in decimal form.

4. Write 8.2×10^{-4} in decimal form.

5. The average distance of the Earth to the Sun is 149 000 000 km.
Write this in standard form.

Progress

Topic	Score	Traffic light	Comment
Products of primes			
Volume			
Rounding using significant figures			
Ratio			
Standard form			

Solutions

Day 1

1. $3 \times 3 \times 7$
2. $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 5$
3. $3 \times 3 \times 5$
4. 3×31
5. $2 \times 2 \times 5 \times 5$

Day 2

1. 504cm^3
2. 495cm^3
3. 60cm^3
4. 540cm^3
5. 72 litres

Day 3

1. 100
2. 200
3. 400
4. 200
5. 9000

Day 4

1. 40 and 56
2. £200, £1000, £1200
3. 240
4. 30m
5. 10cm

Day 5

1. 4.5×10^{-6}
2. 3.57×10^{10}
3. 3700000
4. 0.00082
5. $1.49 \times 10^{-8}\text{km}$