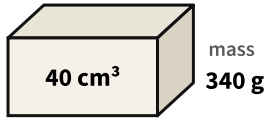
Density

1

A brass weight has a mass of 340 g and a volume of 40 cm³. Find its density.



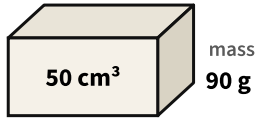
	× 40	
Volume (cm³)	1	40
Mass (g)		340
	÷	

density = 340 ÷ 40 = ____ g/cm³

Answer _____

2

A lump of clay has a mass of 90 g and a volume of 50 cm³. Find its density.



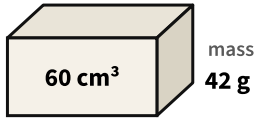
	×	
Volume (cm³)	1	50
Mass (g)		90
	÷	

density = ____ ÷ ____ = ____ g/cm³

Answer _____

3

An oak block has a mass of 42 g and a volume of 60 cm³. Find its density.



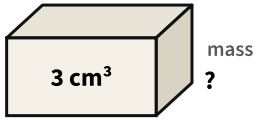
	×	
Volume (cm³)	1	
Mass (g)		
	÷	

density = ____ ÷ ____ = ____ g/cm³

Answer _____

4

A copper coin has a density of 8.9 g/cm³ and a volume of 3 cm³. Find its mass.



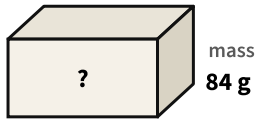
	×	
Volume (cm³)	1	3
Mass (g)	8.9	
	×	

mass = ____ × ____ = ____ g

Answer _____

5

A silver bracelet has a mass of 84 g and a density of 10.5 g/cm³. Find its volume.



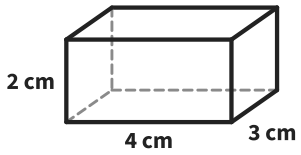
	×	
Volume (cm³)	1	
Mass (g)	10.5	84
	×	

volume = ____ ÷ ____ = ____ cm³

Answer _____

6

A steel block is a cuboid. Steel has a density of 7.8 g/cm³. Find the mass of the block.



volume = _____

Volume (cm³)	1	
Mass (g)		

mass = _____

Answer _____

7

A glass paperweight has a mass of 72 g and a volume of 45 cm³. Jay says its density is 45 ÷ 72 = 0.625 g/cm³.
Explain Jay's mistake, then find the density.

_____

_____

Answer _____

8

A gold ring has a mass of 5.79 g.
Gold has a density of 19.3 g/cm³.
Find the volume of the ring.

_____

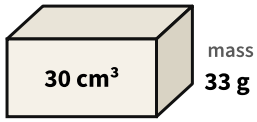
_____

Answer _____

Density *further practice*

9

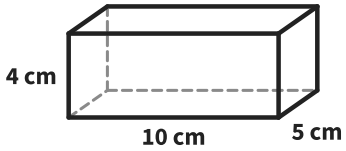
A rubber ball has a mass of 33 g and a volume of 30 cm^3. Find its density.



Answer _____

10

A block of wax is a cuboid with a mass of 180 g. Find its density.



Answer _____

11

Complete the table.

	Mass (g)	Volume (cm^3)	Density (g/cm^3)
Cork	12	50	
Marble		20	2.7
Ice	46		0.92

12

Block A has a mass of 360 g and a volume of 60 cm^3. Block B has a mass of 280 g and a volume of 40 cm^3.
Which block is denser?
Show your working.

Answer _____

13

Water has a density of 1 g/cm^3.
An object floats when it is less dense than water. Which of these float?

	Mass	Volume
Pumice stone	30 g	50 cm^3
Pebble	26 g	10 cm^3
Apple	170 g	200 cm^3

Answer _____

14

Blocks A and B are made of the same metal. Block A has a mass of 64 g and a volume of 8 cm^3.
Block B has a volume of 15 cm^3.
Find the mass of block B.

Answer _____

15

A concrete slab has a volume of 20 000 cm^3. Concrete has a density of 2.4 g/cm^3. Find the mass of the slab in kilograms.

Answer _____

16

A 10 cm^3 block of iron has a mass of 79 g.
Ade says a 100 cm^3 block of iron is denser, because it is heavier.
Is Ade right? Explain.

Answer _____