

1. 110 g of copper is mixed with 90 g of zinc to make brass for a bracelet.
The density of copper is 9 g/cm^3 .
The density of zinc is 7 g/cm^3 .
What is the density of the brass bracelet? Give your answer correct to 1 decimal place.

2. The density of fruit syrup is 1.38 g/cm^3 .
The density of water is 1.00 g/cm^3 .
 30 cm^3 of fruit syrup is mixed with 200 cm^3 of water to make a drink with a volume of 230 cm^3 .
Work out the density of the drink. Give your answer correct to 2 decimal places.

3. Amir drives 60 km from Peterborough to Leicester.
He drives the first 40 km at an average speed of 60 km/h.
From this point it takes Amir 24 minutes to complete his journey.
What was Amir's average speed for the whole journey?

5. Jodie drives for 24 minutes at a speed of 50 km/h.
She drives at 60 km/h for the next 30 km.
For the last 15 minutes she has to drive at 40 km/h.
What was Jodie's average speed for the whole journey? Give your answer correct to 2 decimal places.

	1 st leg	2 nd leg	3 rd leg	Total
Distance				
Time				
Speed				

4. A bronze statue has a mass of 3 kg. 360 g of tin is mixed with copper to make the bronze for the statue.
The density of copper is 9.0 g/cm³.
The density of tin is 7.3 g/cm³.
What is the density of the statue? Give your answer correct to 1 decimal place.

6. Solder is made of 63% tin and 37% lead.
The density of tin is 7.26 g/cm³.
The density of lead is 11.3 g/cm³.
A piece of solder wire has a diameter of 1.6 mm and is 20 cm long.
Calculate the mass of the piece of solder wire. Give your answer correct to 3 significant figures.

	Tin	Lead	Solder
Mass			
Volume			
Density			

Hint: Volume of a cylinder = $\pi r^2 h$, where r is the radius and h is the height

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	1 st leg	2 nd leg	Total
Distance			60 km
Time			
Speed			

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4. A bronze statue has a mass of 3 kg. 360 g of tin is mixed with copper to make the bronze for the statue. The density of copper is 9.0 g/cm³. The density of tin is 7.3 g/cm³. What is the density of the statue? Give your answer correct to 1 decimal place.

	Tin	Copper	Bronze
Mass			
Volume			
Density			

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	Copper	Zinc	Brass
Mass	110 g	90 g	
Volume			
Density	9 g/cm^3	7 g/cm^3	

- The density of fruit syrup is 1.38 g/cm^3 .
 The density of water is 1.00 g/cm^3 .
 30 cm^3 of fruit syrup is mixed with 200 cm^3 of water to make a drink with a volume of 230 cm^3 .
 Work out the density of the drink. Give your answer correct to 2 decimal places.

	Water	Syrup	Total
Mass			
Volume	200 cm^3	30 cm^3	230 cm^3
Density	1.00 g/cm^3	1.38 g/cm^3	

Combining Compound Measures AMBER

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Volume			
Density			

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