1. If a measurement is 3.567 metres long, to 3 significant figures, what is it?
2. A solution contains 25.678 grams of solute. Round to 2 significant figures.
3. A sample weighs 0.005642 kilograms. Convert it to 1 significant figure.
4. What is the volume of a cube measuring 12.345 cm on each side to 4 significant figures?
5. A distance of 234.567 kilometres is rounded to 2 significant figures. What is it?
6. If a marathon is 42.195 kilometres long, to 3 significant figures, what is its length?
7.Convert 0.0009876543 metres to 2 significant figures.
7. A rectangle measures 7.65 metres in length. What is its area to 2 significant figures?
9.A scientific instrument measures 0.0004567 grams. Round to 3 significant figures.
8. If a population is estimated to be $8,975,432$, round it to 4 significant figures.
9. A tank contains 450.23 litres of water. Convert to 3 significant figures.
12.What is the mass of an object that weighs 0.0000456 kilograms, to 2 significant figures?
10. Express the speed of light, 299,792,458 m/s, to 4 significant figures.
11. A sample has a density of $5.6789 \mathrm{~g} / \mathrm{cm}^{3}$. Round to 2 significant figures.
12. A circle has a radius of 1.2345 metres. Find its circumference to 3 significant figures.

## Check your answers

## Answers:

1. 3.57 Metres
2. 26 grams
3. 0.006 kilograms
4. 1840.625 cubic centiMetres
5. 230 kiloMetres
6. 42.2 kiloMetres
7. 0.00099 Metres
8. 49 square Metres
9. 0.000457 grams
10.8.975 million
11.450 litres
10. 0.000046 kilograms
$13.2 .998 \times 10^{\wedge} 8 \mathrm{~m} / \mathrm{s}$
$14.5 .7 \mathrm{~g} / \mathrm{cm}^{3}$
15.7.74 Metres
