

Calculations using Scientific Notation

- 1) The total number of visitors to an exhibition was 2.925×10^7 .

The exhibition was open each day from 5 June to 29 September **inclusive**.

Calculate the average number of visitors per day to the exhibition.

- 2) Large distances in space are measured in light years.
A camera on a space telescope photographs a galaxy, a distance of 50 million light years away.
One light year is approximately 9.46×10^{12} kilometres.
Calculate the distance of the galaxy from the space telescope in kilometres.
Give your answer in scientific notation.

- 3) The annual profit (£) of a company was 3.2×10^9 for the year 1997.
What profit did the company make per second?
Give your answer to **three significant figures**.

- 4) A newspaper report stated:
"Concorde has now flown 7.1×10^7 miles.
This is equivalent to 300 journeys from the earth to the moon."
Calculate the distance from the earth to the moon.
Give your answer in **scientific notation correct to 2 significant figures**.

- 5) The mass of water on the earth's surface is 1.41×10^{18} tonnes.
The total mass of the earth is 5.97×10^{21} tonnes.
Express the mass of water on the earth's surface as a percentage of the total mass of the earth.
Give your answer in **scientific notation**.