Scientific Notation

N5 Maths Exam Questions

Source: 2019 P2 Q4 N5 Maths	

(1) A sesame seed weighs $3 \cdot 6 \times 10^{-6}$ kilograms.

The weight of a poppy seed is 8% of the weight of a sesame seed.

Calculate the weight of a poppy seed in kilograms.

Give your answer in scientific notation.

Answer: $Weight = 2.88 \times 10^{-7} kg$

Source: 2018 P2 Q11 N5 Maths

(2) Venus and Earth are two planets within our solar system.

Venus   Earth

The volume of Venus is approximately $9 \cdot 3 \times 10^{11}$ cubic kilometres.

This is 85% of the volume of Earth.

Calculate the volume of Earth.

Answer: $Volume = 1.094 \times 10^{12} km^3 \ \ or \ \ 1094117647000 km^3$

(3) A pollen sample weighs 12 grams and contains $1 \cdot 5 \times 10^9$ pollen grains.

Calculate the weight of **one** pollen grain in grams.

Give your answer in scientific notation.

Answer: $Weight = 8 \times 10^{-9} \; grams$

(4)

(a) The Earth is approximately spherical with a radius of 6400 kilometres.

Calculate the volume of the Earth giving your answer in scientific notation, correct to 2 significant figures.

(b) The approximate volume of the Moon is $2 \cdot 2 \times 10^{10}$ cubic kilometres.

Calculate how many times the Earth's volume is greater than the Moon's.

Answer: $(a) \, Volume = 1.1 \times 10^{12} \, km^3$ $(b) \, The \; Earth \; is \; 50 \; times \; greater$

(5) There are 3×10^5 platelets per millilitre of blood.

On average, a person has $5 \cdot 5$ litres of blood.

On average, how many platelets does a person have in their blood?

Give your answer in scientific notation.

Answer: $1.65 \times 10^9 \; platelets$