SPTA

N5 Homework

Sci. Notation (B)

Show all working – Calculator allowed.

Marks

1. A sesame seed weighs 3.6×10^{-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. **(2)**

2. 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. **(2)**

3. 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. **(3)**

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. **(2)**

Total Marks: 9