Scientific Notation questions in context

Examples:

1. The mass of an oxygen atom is 2.7×10^{-23} grams. The mass of an electron at rest is approx. 30 000 times smaller than this. Calculate the mass of an electron at rest. Give your answer in scientific notation.

$$2.7 \times 10^{-23} \div 30000$$

$$= 9 \times 10^{-28}$$

Scientific Notation questions in context

A pollen sample weighs 12 grams
and contains 1.5×10^9 pollen grains.

$$1.5 \times 10^9 \text{ grains} = 12 \text{ grams}$$

$$1 \text{ grain} = \frac{12}{1.5 \times 10^9}$$

$$= 0.000000008$$

$$= 8 \times 10^{-9}$$

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

Give your answer in scientific notation.   2