Scientific Notation

1. (a) The diameter of a sodium atom is 0. 000 000 3 millimetres.
        Write this in Scientific Notation.
    (b) Loch Ness has volume 7.443×10^9 cubic metres. Write this
        as an ordinary number.

2. (a) The population of India is approximately 1.13×10^9.
        Write this population as an ordinary number.

    (b) India has an area of 329 000 square kilometres.
        Write this number in Scientific Notation.

3. A lake has an estimated volume of 3.66×10^5 litres of water. A sample of one litre
    of water from the lake contains 40 000 bacteria. If this sample is representative of
    the whole lake, how many bacteria are in the lake.

4. The Amazon rainforest has an area of approximately
    3.4 million square kilometres.

    (a) Write this number out in full.
    (b) Express the area in Scientific Notation.
    (c) It is estimated that 5% of the rainforest will be
        cut down this year.
        Calculate the area of forest that will be cut down
        this year.

5. A satellite orbiting the Earth travels at a speed of 3.1×10^3 kmph.
    How far will the satellite travel in one week?