Scientific Notation

Lesson 27

Scientific Notation Example:

1. Locate the decimal and then move the decimal behind the **first non-zero digit**

95 000 000 000.

All numbers have decimals whether they are written in or not!

9.5 000 000 000

2. Count the number of places we have moved the decimal and this becomes the exponent.

a) If we moved the decimal left, the exponent will be positive
b) If we moved the decimal right, the exponent will be negative

95 000 000 000.

$= 9.5 \times 10^{10}$

Scientific Notation Example:

1. Locate the decimal and then move the decimal behind the **first non-zero digit**

0 . 000 000 035

0 000 000 03.5

All numbers have decimals whether they are written in or not!

2. Count the number of places we have moved the decimal and this becomes the exponent.

a) If we moved the decimal left, the exponent will be positive
b) If we moved the decimal right, the exponent will be negative

0 . 000 000 035

$= 3.5 \times 10^{-8}$