

**Source:** [KBhPHYS201QuantumWorldBookNotesIndex](#)

## 0.1 | **How to Deal with Large and Small**

- Scientific notation is required to deal with large and small quantities
  - This is required in much of particle physics since particles tend to be very small and fast
- People also tend to create more fitting units for a specific application

### 0.1.1 | **Units**

**Femtometers** are used as a unit of measurement in the atomic world. They're  $10^{15}m$ .

For **speed** we use fractions of the speed of light  $c \sim 3 * 10^8 m/s$

**Volts** are used for charge.

**Particle Masses** can also be expressed in eV units