

Source: [KBhPHYS201QuantumWorldBookNotesIndex](#)

## 1 | 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

### 1.0.1 | 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  $c \sim 3 * 10^8 m/s$