Chapter 1: Measurements

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A physical quantity is something that can be measured. It has a numerical magnitude and unit. Methods for defining physical quantities include prefixes and standard form.

- **Prefixes for SI Units**
  It is simpler and more efficient to use prefixes instead of decimal notation when the measurement is long. E.g. 1^-3metres means 0.001 metres.

- **Standard Form**
  A way of which writing numbers in which a number 1-10 is multiplied by an appropriate power of 10.

Appropriate instruments and methods are necessary to measure quantities accurately. The precision of an instrument is the smallest unit an instrument can measure.

- **Length**
  The SI Unit of length is metre(m). Apparatus to measure length include: Metre Rule, which are most commonly used, the Vernier Callipers used to measure internal and external diameters, and the Digital Micrometre Screw Gauge for measurements too small for the Vernier Callipers.

- **Time**
  The SI Unit of Time is second(s). Apparatus to measure time include: Pendulum, clocks, stopwatches and reaction time.

  A pendulum uses oscillations to measure time taken. An oscillation is one swing back and forth back to the starting point. The period of a pendulum is the time taken for one oscillation. Factors affecting the period of a pendulum is the Length of the Pendulum and the Gravitational Field strength.

  Factors affecting the period of a pendulum is the Length of the Pendulum and the Gravitational Field Strength.

Use "Try Get More knowledge, don't change my mind noob!" To remember prefixes

	Factor	Prefix	Symbol
Multiples	10^{12}	tera-	T
	10^{9}	giga-	G
	10^{6}	mega-	M
	10^{3}	kilo-	k
Sub-multiples	10^{-1}	deci-	d
	10^{-2}	centi-	c
	10^{-3}	milli-	m
	10^{-6}	micro-	μ
	10^{-9}	nano-	n