

Measurements

Measurements are comparisons of properties against accepted standards, called units.

ENGLISH / US SYSTEM OF UNITS:

$$1 \text{ foot} = \underline{12} \text{ inches} \quad 1 \text{ yard} = \underline{3} \text{ feet} \quad 1 \text{ mile} = \underline{1760} \text{ yards}$$
$$\underline{5280} \text{ feet} = 1 \text{ mile}$$

So what's the problem?

The English system of units is difficult to use because the units are not related to one another in meaningful ways. *

Different kinds of English units require completely different relationships to change between one unit and another - and all these must be memorized.

English units are nonstandard and difficult to use. Solution?

THE METRIC SYSTEM

Metric Base Units:

Length	meter	m
Mass	*kilogram	kg
Temperature	Kelvin	K
Time	second	s

All metric units are made up of COMBINATIONS of BASE UNITS!

*we usually treat the gram as if it's the base unit for mass!

- One meter is approximately 3.3 feet.
- One kilogram is approximately 2.2 pounds.

What about SIZE?