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

ENGLISH / US SYSTEM OF UNITS:

$$1 \text{ foot} = \underline{12} \text{ inches}$$

$$1 \text{ yard} = \underline{3} \text{ feet}$$

$$1 \text{ mile} = \underline{1760} \text{ yards}$$

$$\underline{5280} \text{ ft} = 1 \text{ mi}$$

So what's the problem? These units don't relate to one another in any meaningful way. To do unit conversions in English, we have to MEMORIZE a separate set of factors for each kind of unit.

English units are nonstandard and difficult to use. Solution?

THE METRIC SYSTEM

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

Metric Base Units:

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

*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?