Name: _____

Absolute and Relative Error

There are 2 ways to represent our error: absolute and relative error.

Absolute error is the actual value of the error including the proper units.

Ex. In 0.94±0.2s, 0.2s is the **absolute error.**

A general representation of the absolute error in a property (y), is:

OR

Where the Greek letters Δ (uppercase "delta") and δ (lowercase "delta") represents absolute uncertainty.

Relative error is the relative error of your absolute uncertainty compared to your actual value.

The general representation of relative error in a property (y), is:

Ex. The relative error of 0.94±0.2s, 0.2s can be calculated as:

Example 1: Calculate the relative error of 100.0 ± 0.6cm

Example: Calculate the absolute error of 0.0055kg ± 2%