Temperature and Density

Temperature

Temperature is a measure of internal energy with higher temperatures means more internal energy then lower temperatures. In chemistry we use Celsius as a more accurate way of measuring temperatures, but there are a few times when Kelvin is used in experiments. It would be extremely rare to be using Fahrenheit in the lab, but it might become necessary to convert between these 3 different temperatures. Looking at the chart below we can clearly see how these 3 differ from one another in accuracy.

Celsius

0°C = Freezing point of water 100°C = Boiling point of water

Fahrenheit

32°F = Freezing point of water 212°F = Boiling point of water

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Conversion formulas

Celsius-to-Fahrenheit: Fahrenheit = 1.8(celcius) +32

Fahrenheit-to Celsius: Celsius = 1.8(Fahrenheit) - 32

Density

Density is a measure of how much mass is contained in a given unit volume. Below is the formula for calculating density.

Mass/Volume = Density