

## TEMPERATURE SCALES

The two most common temperature scales are the Fahrenheit and Celsius (Centigrade) scales. Two other scales, the Rankin and Kelvin are known as the absolute scales because at their zero points all molecular activity ceases. This point is known as absolute zero. The Rankin scale is the absolute scale of Fahrenheit and the Kelvin scale is the absolute scale of Celsius.

### TEMPERATURE COMPARISONS

	<u>Fahrenheit</u>	<u>Rankin</u>	<u>Celsius</u>	<u>Kelvin</u>
Water boils	212	672	100	373
Body temperature	98.6	558.6	37	310
Water freezes	32	492	0	273
Absolute zero	-460	0	-273.15	0

### Temperature Conversion Formulas

Fahrenheit to Celsius  $C = (F - 32) \times \frac{5}{9}$

Fahrenheit to Kelvin  $K = [(F - 32) \times \frac{5}{9}] + 273$

Fahrenheit to Rankin  $R = F + 460$

Celsius to Fahrenheit  $F = (C \times \frac{9}{5}) + 32$

Celsius to Kelvin  $K = C + 273$

Celsius to Rankin  $R = (C \times \frac{9}{5}) + 492$