

# EVERYTHING YOU EVER WANTED TO KNOW ABOUT TEMPERATURE

By

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There are five — count them — five temperature scales:

Kelvin (°K) - after William Thompson Kelvin, 1<sup>st</sup> Baron Kelvin, who had cold feet (an occupational hazard of living in Belfast, especially 100 years ago). He did a lot of things, some of which were useful, and in his honour the Kelvin scale of absolute temperature (related to Celsius) was named for him. Things all start at 0° K. and go up from there.

Rankine (°R) - after William John Macquorn Rankine. Rankine was born in Edinburgh, died in Glasgow, and cared about thermodynamics between times. The Rankine scale uses the smaller Fahrenheit degree for measurement - appropriate for a frugal Scot - and is another absolute temperature scale, as if we needed two of them.

Celsius (°C) - formerly, and more appropriately, 'centigrade', but Anders Celsius needed to have something named after him, too, so there you are.

Fahrenheit (°F) - after Daniel Gabriel Fahrenheit, who somehow got the idea that water froze at 32 degrees and boiled at something higher. I don't know what he was on, but I could use some.

Rèaumur (°Rè) - after René-Antoine Ferchault de Rèaumur, who fiddled around with thermometers while waiting for his potage du jour to cool. Well, he had to do something.

All these people are dead, now. This is old news, but good.

THE BASIC AND UNDYING RELATIONSHIP OF ALL THESE SILLY THINGS  
TO EITHER OTHER

$$x \text{ } ^\circ\mathbf{K} = (x-273.15) \text{ } ^\circ\mathbf{C} = (1.25)(x-273.15) \text{ } ^\circ\mathbf{Rè} = (1.8)x - 459.67 \text{ } ^\circ\mathbf{F} = (1.8)x \text{ } ^\circ\mathbf{R}.$$

## Got that?

Most of us only care about Celsius and Fahrenheit scales. The Fahrenheit scale (the one we grew up with) is, of course, as American as pepperoni pizza, Toyota pickups, and the Beatles.