Temperatures of Planets: Venus, Earth, Mars



Distance from Sun to Planet in Millions of Miles

The vertical temperature scale is in Kelvin units. A Kelvin temperature equals the Celsius temperature plus 273. Zero on the Kelvin scale corresponds to absolute zero, the theoretical condition where molecular kinetic energy is minimal. The Kelvin scale is used here to help put the planet temperatures in perspective. The text boxes show the important temperatures in both Kelvin and Fahrenheit units.

"703 K" above means 703 Kelvin units, and "806 F" means 806 degrees Fahrenheit.

Solid curved line shows surface temperature for a planet if it has an albedo like Mars and no atmosphere. Diamonds show these temperatures for Venus (orange) and Earth (green).

Actual surface temperatures of planets are shown in circles for Venus (orange), Earth (green), and Mars (blue).

The chart is adapted from one in the book *Is the Temperature Rising*? by S. George Philander in 1998, and most data is from this book.

09-18-2010 rev