

Temperature

Temperature scales: Fahrenheit, Celsius, Kelvin

Going between Fahrenheit (t_F) and Celsius (t_C):

$$t_F = 32 + \frac{9}{5}t_C$$

Going between Celsius and Kelvin (t_K):

$$t_K = 273 + t_C$$

Absolute zero of temperature is at 0 K (or equivalently -273°C)

Homework 20

Problem

A scientist studying volcanoes accidentally drops some of the instruments into lava. One of his instruments is made of silver while the other one is made of steel.

Volcanic lava at eruption has temperature around $1200\text{ }^{\circ}\text{C}$, steel melting point is $2600\text{ }^{\circ}\text{F}$ while silver melting point is 1230 K (Kelvins). Which of the instruments are going to melt in lava?

Picture: no need to print

