

Activity Sheet 4

DOUBLE STANDARDS

We can use a double number line to understand the relationship between the Fahrenheit and Celsius scales.

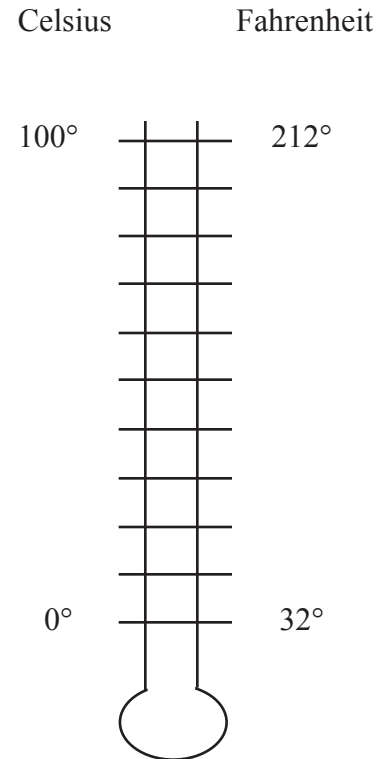
Water freezes at 0°C and boils at 100°C .

Water freezes at 32°F and boils at 212°F .

The difference between the boiling and freezing points on the Celsius scale is 100 degrees; the difference on the Fahrenheit scale is 180 degrees. The ratio of $^{\circ}\text{C}$ to $^{\circ}\text{F}$ is 100:180 or 5:9.

When we change from $^{\circ}\text{F}$ to $^{\circ}\text{C}$, we subtract 32° from the Fahrenheit temperature and then take $\frac{5}{9}$ of it.

To change from $^{\circ}\text{C}$ to $^{\circ}\text{F}$, we take $\frac{9}{5}$ of the Celsius temperature and add 32° .



1. Label the intervals on the thermometer above in degrees for both Fahrenheit and Celsius temperatures.
2. Find the Fahrenheit temperature when the Celsius temperature is 20° .
3. Normal body temperature in $^{\circ}\text{F}$ is 98.6. What would normal body temperature be in $^{\circ}\text{C}$?
4. When the Celsius scale indicates a temperature of 10° , what does the Fahrenheit scale read? Describe the procedure you used to arrive at your solution.