

Name: \_\_\_\_\_

## Temperature Conversions

**Formulas:**  $x$  = temperature in Fahrenheit,  $y$  = temperature in Celsius,  $z$  = temperature in kelvin

$$y = (x - 32 \text{ } ^\circ\text{F}) \cdot (5 \text{ } ^\circ\text{C}) / (9 \text{ } ^\circ\text{F})$$

$$x = y \cdot (9 \text{ } ^\circ\text{F}) / (5 \text{ } ^\circ\text{C}) + 32 \text{ } ^\circ\text{F}$$

$$z = y + 273.15 \text{ } ^\circ\text{C}$$

$$y = z - 273.15 \text{ K}$$

### Exercises

1.  $37 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ } ^\circ\text{F}$

2.  $20 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ } ^\circ\text{F}$

3.  $72 \text{ } ^\circ\text{F} = \underline{\hspace{2cm}} \text{ } ^\circ\text{C}$

4.  $40 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ } ^\circ\text{F}$

5.  $50 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ } ^\circ\text{F}$

6.  $98.6 \text{ } ^\circ\text{F} = \underline{\hspace{2cm}} \text{ } ^\circ\text{C}$

8.  $77 \text{ K} = \underline{\hspace{2cm}} \text{ } ^\circ\text{C}$

9.  $-70 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ K}$

10.  $-70 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ } ^\circ\text{F}$

10.  $-273.15 \text{ } ^\circ\text{C} = \underline{\hspace{2cm}} \text{ } ^\circ\text{F}$