

Name: _____

Score: _____

Temperature Conversion

ES1

Example: Convert 36°C into Kelvin.

$$\text{K} = \text{C} + 273.15$$

Using this formula, $\text{K} = 36 + 273.15 = 309.15 \text{ K}$

A) Convert Celsius into Kelvin

1) $75^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

2) $18^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

3) $44^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

4) $68^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

5) $37^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

6) $92^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

7) $26^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

8) $50^{\circ}\text{C} = \underline{\hspace{2cm}} \text{ K}$

Example: Convert 284 K into $^{\circ}\text{C}$.

$$\text{C} = \text{K} - 273.15$$

Using this formula, $\text{C} = 284 - 273.15 = 10.85^{\circ}\text{C}$

B) Convert Kelvin into Celsius

1) $341 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

2) $285 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

3) $356 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

4) $292 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

5) $316 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

6) $353 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

7) $307 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$

8) $360 \text{ K} = \underline{\hspace{2cm}}^{\circ}\text{C}$