

Name: _____ Date: _____

Temperature Conversion Worksheet Answers

Fahrenheit		Celsius	Comments
212°	=	100°	Water boils
200°	=	93°	
100°	=	38°	
80°	=	27°	
70°	=	21°	
68°	=	20°	Typical room temperature
50°	=	10°	
32°	=	0°	Water freezes

You can convert a temperature from **Celsius to Fahrenheit** in 3 steps:

1. Take your Celsius temperature _____ and multiply it by 9.

$$\underline{\hspace{2cm}} \times 9 = \underline{\hspace{2cm}}$$

2. Take the answer from step one and divide it by 5.

$$\underline{\hspace{2cm}} \div 5 = \underline{\hspace{2cm}}$$

3. Take the answer from step two and add 32 to it.

$$\underline{\hspace{2cm}} + 32 = \underline{\hspace{2cm}}$$

Example: Let's convert 20° Celsius to Fahrenheit:

$$20^\circ \text{ Celsius} \times 9 = 180$$

$$180 \div 5 = 36$$

$$36 + 32 = 68^\circ \text{ Fahrenheit}$$

To convert from Celsius to Fahrenheit:

$$T_F = \frac{9}{5}T_C + 32$$

You can convert a temperature from **Fahrenheit to Celsius** in 3 steps:

1. Take your Fahrenheit temperature _____ and subtract 32 from it.

$$\underline{\hspace{2cm}} - 32 = \underline{\hspace{2cm}}$$

2. Take the answer from step one and multiply it by 5.

$$\underline{\hspace{2cm}} \times 5 = \underline{\hspace{2cm}}$$

Take the answer from step two and divide it by 9.

$$\underline{\hspace{2cm}} \div 9 = \underline{\hspace{2cm}}$$

Example: Let's convert 200° Fahrenheit to Celsius:

$$200^\circ \text{ Fahrenheit} - 32 = 168$$

$$168 \times 5 = 840$$

$$840 \div 9 = 93^\circ \text{ Celsius}$$

To convert from Fahrenheit to Celsius:

$$T_C = \frac{5}{9}(T_F - 32)$$

Now, convert the temperature units to finish the above table.