

Name _____

Period _____

Date _____

Thermal Energy
Temperature Conversions Worksheet

$$^{\circ}\text{F} = (1.8^{\circ}\text{C}) + 32$$

$$\text{K} = ^{\circ}\text{C} + 273$$

$$^{\circ}\text{C} = \frac{(^{\circ}\text{F} - 32)}{1.8}$$

$$^{\circ}\text{C} = \text{K} - 273$$

GIVEN:	CONVERT TO...
1. 32 °F	Celsius
2. 98.6 °C	Kelvin
3. 22 °C	Fahrenheit
4. 18 °F	Celsius
5. 37 °C	Fahrenheit
6. 6 °C	Fahrenheit
7. 17 °F	Celsius
8. 64 °C	Kelvin
9. 198 K	Celsius
10. 20 °C	Kelvin

GIVEN:	CONVERT TO ...
11. 105 °C	Kelvin
12. 15 °F	Celsius
13. 62 °C	Fahrenheit
14. 73 °C	Kelvin
15. 243 K	Celsius
16. 45 °C	Kelvin
17. 10 °C	Fahrenheit
18. 32 °F	Celsius
19. 380 K	Fahrenheit
20. -40 °C	Fahrenheit

Common Temperatures

	Kelvin	Celsius	Fahrenheit
water boils	21.	22.	23.
body temperature	24.	25.	98.6 °F
room temperature	26.	27.	72 °F
water freezes	28.	29.	30.
absolute zero	0 K	31.	32.

33. Which temperature scale is considered to be the SI or metric scale?

34. Which temperature scale does not use the degree symbol?

35. Which temperature scales are based on the boiling and freezing points of water?

36. Which temperature scale is based on the concept of absolute zero?

37. Which temperature scale is considered to be the English scale?

38. Which temperature scale has the smallest "degree" marking?

39. Which two scales have "degree" markings of the same size?

40. Why can't the Kelvin scale have negative numbers like Celsius and Fahrenheit?