

Pre-AP Chemistry I/Chemistry I
Unit #2 and Unit #10—Measurement and States of Matter/Gases

Temperature Conversions

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

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

$$\frac{(\text{--- } ^{\circ}\text{F} - 32)}{1.80} = \text{--- } ^{\circ}\text{C}$$

$$(\text{--- } ^{\circ}\text{C} \times 1.80) + 32 = \text{--- } ^{\circ}\text{F}$$

Convert 45 $^{\circ}\text{C}$ to K.

$$45 ^{\circ}\text{C} + 273.15 \text{ K} = 318.15 \text{ K}$$

Convert 598 K to $^{\circ}\text{C}$

$$598 \text{ K} - 273.15 \text{ K} = 324.860 ^{\circ}\text{C}$$

Convert 45 $^{\circ}\text{F}$ to $^{\circ}\text{C}$

$$\frac{(45 ^{\circ}\text{F} - 32)}{1.80} = 7.222 ^{\circ}\text{C}$$

Convert 92 $^{\circ}\text{C}$ to $^{\circ}\text{F}$

$$(92 ^{\circ}\text{C} \times 1.80) + 32 = 197.600 ^{\circ}\text{F}$$

Convert 893 K to $^{\circ}\text{F}$

$$893 \text{ K} - 273.15 \text{ K} = 619.860 ^{\circ}\text{C}$$

$$(619.860 ^{\circ}\text{C} \times 1.80) + 32 = 1147.73 ^{\circ}\text{F}$$

Convert 76 $^{\circ}\text{F}$ to K

$$\frac{(76 ^{\circ}\text{F} - 32)}{1.80} = 24.444 ^{\circ}\text{C}$$

$$24.444 ^{\circ}\text{C} + 273.15 \text{ K} = 297.594 \text{ K}$$