

Key Equations

11.1 Temperature and Thermal Energy

Celsius to Fahrenheit conversion	$T_{\text{°F}} = \frac{9}{5}T_{\text{°C}} + 32$
Fahrenheit to Celsius conversion	$T_{\text{°C}} = \frac{5}{9}(T_{\text{°F}} - 32)$
Celsius to Kelvin conversion	$T_{\text{K}} = T_{\text{°C}} + 273.15$
Kelvin to Celsius conversion	$T_{\text{°C}} = T_{\text{K}} - 273.15$
Fahrenheit to Kelvin conversion	$T_{\text{K}} = \frac{5}{9}(T_{\text{°F}} - 32) + 273.15$
Kelvin to Fahrenheit conversion	$T_{\text{°F}} = \frac{9}{5}(T_{\text{K}} - 273.15) + 32$

11.2 Heat, Specific Heat, and Heat Transfer

11.3 Phase Change and Latent Heat