

## Temperature Conversions

- In North America, both the Celsius and Fahrenheit systems are used.

$$\text{Temperature in Celsius} = \frac{5}{9} \times (\text{Temperature in } ^\circ\text{F} - 32)$$

$$\text{Temperature in Fahrenheit} = (1.8 \times \text{Temperature in } ^\circ\text{C}) + 32$$

You decide to vacation in Arizona.  
You fly from Toronto to Scottsdale.

The abbreviation for  
degrees Celsius is  $^\circ\text{C}$ .  
The short form for degrees  
Fahrenheit is  $^\circ\text{F}$ .

1. When you leave Toronto, the thermometer at the airport reads  $-5\text{ }^\circ\text{C}$ . You call your friend in Scottsdale, who asks for the temperature in  $^\circ\text{F}$ . Convert the temperature.
2. When you arrive in Scottsdale, you plan a day trip to the Grand Canyon. The thermometer says that the temperature is  $70\text{ }^\circ\text{F}$  as you head down into the canyon. Convert this to  $^\circ\text{C}$ .
3. **a)** The guide warns you that the temperatures at the inner gorge are 20 to  $25\text{ }^\circ\text{F}$  warmer than what you feel at the top. What is the range of temperatures, in  $^\circ\text{F}$ , at the inner gorge on the day you visit the Grand Canyon?  
  
**b)** Convert this range to  $^\circ\text{C}$ .

