

SECTION | TEMPERATURE DEPENDS ON PARTICLE MOVEMENT.

4.1 Reinforcing Key Concepts**BIG IDEA** Heat is a flow of energy due to a temperature difference.**KEY CONCEPT** Temperature depends on particle movement.

- 1. All matter is made of moving particles.** Since the kinetic theory of matter states that these particles are constantly in motion, all states of matter must exhibit some kind of motion at all times. Complete the chart below by describing the movement of particles in each of the three states—solid, liquid, and gas.

State of Matter	Motion of Particles
solid	
liquid	
gas	

How does temperature depend on the kinetic energy of particles?

- 2. Temperature can be measured.** Two different scales are used to measure temperature—the Fahrenheit and the Celsius scales. Use the thermometer below to give the equivalent temperature in Fahrenheit or Celsius.

a. $20^{\circ}\text{F} = \underline{\hspace{2cm}}^{\circ}\text{C}$

b. $10^{\circ}\text{C} = \underline{\hspace{2cm}}^{\circ}\text{F}$

c. $65^{\circ}\text{F} = \underline{\hspace{2cm}}^{\circ}\text{C}$

