

Activity 4A Particle Models



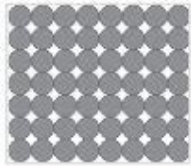

Skill: Use a model to illustrate and explain a scientific idea

- a Using the descriptions of the particles below, identify each state of matter and draw the particle model.

Descriptions	State	Particle model
<p>Particles are far apart and randomly arranged.</p> <p>Particles move quickly in all directions.</p>	Gas	
<p>Particles are packed not so tightly together and are randomly arranged.</p> <p>Particles move around each other.</p>	Liquid	
<p>Particles are closely packed together in a regular pattern.</p> <p>Particles vibrate about fixed positions.</p>	Solid	

In b and c below, draw the particles in their new state in the box provided.
Record the new state of matter and your observations in the table.

b Your teacher will heat some ice over a gas burner.

Original state	New state	Observations
 Solid	 Liquid	Heat from the gas burner melted the ice . the ice changed from a solid to a liquid.

c Your teacher will place a bottle of water in the freezer.

Original state	New state	Observations
 Liquid	 Solid	The liquid water has turned into solid ice.



Name the processes above:

Process in b: Melting

Process in c: Freezing