

Pg. 140 #1-5

- 1.** All forms of matter have both mass and volume.
- 2.** A solid has a definite form and volume because a strong force holds the particles of the substance together. A liquid, which is a fluid, takes on the shape of the container it is in because a weaker force holds the particles of the substance farther apart than in a solid.
- 3.** The space between particles of gas is much larger than between particles of liquid of the same substance.
- 4.** If heat is added to a substance, the particles in that substance begin to vibrate, or move faster, possibly even breaking apart from each other. The spaces between the particles become larger. The force of attraction between particles weakens.
- 5.** Melting water refers to the change of state from solid (ice) to liquid (water). The melting point of water is the temperature at which this occurs: 0°C .