

I can...

- 1) Explain the three assumptions of the kinetic theory of matter.
- 2) Use shape and volume to classify matter as solid, liquid, gas, or plasma.
- 3) Differentiate between an amorphous and crystalline solid.
- 4) Use particle behavior to classify matter as solid, liquid, gas, or plasma.
- 5) Explain how a material's temperature and kinetic energy depend on particle motion.
- 6) Use the kinetic theory to explain why most materials expand and contract during temperature changes.
- 7) List and define the six phase changes that occur between solid, liquid, and gas.
- 8) Plot phase change graphs for materials as they are heated or cooled.
- 9) Identify the phases or phase changes associated with the diagonal and horizontal sections of phase change graphs.
- 10) Define density.
- 11) Measure and calculate the density of solids, liquids, and gases.
- 12) Use density to decide if a given object will float in a given fluid.
- 13) Explain how a gas exerts pressure on its container.
- 14) Use Boyle's law to describe how pressure and volume are related.
- 15) Use Archimedes principle to determine the mass change of an object that is displacing a given weight of liquid.
- 16) Explain why an airplane gets lift by using Bernoulli's principle.