BLM 3-18, Chapter 7 Review

1. C

2. C

3. D

4. D

5. C

6. D

7. D

8. A

9. B

10. F

11. C

12. D

13. A

14. E

15. G

16. A cold glass has particles that are moving very slowly. When heated by the hot water, the particles of glass

move faster and slightly farther apart. This increased movement of particles results in thermal expansion of the

glass. When this expansion occurs quickly and unevenly, it can cause the glass to crack.

17. (a) Students’ answers will vary. Items that have a low viscosity include water, milk, juice, and water-based paint.

(b) Students’ answers will vary. Items that have a high viscosity include ketchup, mustard, milkshakes, yogurt, hand

soap, and nacho cheese.

18. When temperature increases, particles in a liquid have more energy and slide past other particles more easily,

increasing the liquid’s ability to flow and decreasing its viscosity. When temperature decreases, liquid particles

have less energy and the viscosity of the liquid increases. The effect of temperature on gases is opposite to the

effect on liquids, because gas particles are already very far apart. When temperature increases, gas particles move

faster and collide with each other more often, increasing internal friction and, therefore, viscosity.

19. When the concentration of a substance is increased, the viscosity is also increased.

20. Small particles can move past each other more easily than large particles can because they take up less space

and have more room to move. Fluids made up of small particles, therefore, have a lower viscosity.