Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 21

Review Questions, page 315-316

1. A thermometer measures the average internal energy of the particles in a substance

2. 100 degrees celcius. 180 degrees Fahrenheit

4. Hot to cold

5. Thermometer measures the average internal energy of the mercury or alcohol which is in thermal equilibrium with the object to be measured

6. Objects at the same temperature. No energy is transferred.

7. The energy that the particles of a substance has because of their motion.

9. Specific heat capacity is the amount of energy needed to change 1 gram of substance 1 degree. High specific heat means it is hard to change the substances temperature.

10. Low

11. High

12. Weather flows west to east. Pacific Ocean keeps west warm.

13. one metal expands more than the other

17. Ice is less dense than water.

18. Since lakes freeze top down, the layer of ice insulates the water below the ice’s surface

Think and Explain

1. 25 degrees celsius

2. Sauce is mostly water which retains its heat much better than crust

7. 5 cm

9. O will contract, 4 will expand, 6 will expand

10. more likely