**Heat Transfer Study Guide (6.P.3.1)**

**Part 1- Name the type of heat transfer**

1. \_\_\_\_\_\_\_\_\_\_\_- heat moving between 2 objects where molecules are touching.

2. \_\_\_\_\_\_\_\_\_\_\_- method of moving heat where warm things rise and cool things sink.

3. \_\_\_\_\_\_\_\_\_\_\_- heat energy that travels in waves through the air.

**Part 2- Fill in the blanks with true or false**

4. \_\_\_\_\_\_\_\_ warm air sinks

5. \_\_\_\_\_\_\_\_ cool air rises

6. \_\_\_\_\_\_\_\_ when air warms up, the air molecules move slower

7. \_\_\_\_\_\_\_\_ when air cools down, the air molecules move faster

8. \_\_\_\_\_\_\_\_ higher temperature means faster moving molecules

9. \_\_\_\_\_\_\_\_ lower temperature means slower moving molecules

10. \_\_\_\_\_\_\_\_ plate tectonics can be explained by convection currents

11. \_\_\_\_\_\_\_\_ ocean currents are caused by conduction

12. \_\_\_\_\_\_\_\_ heat equilibrium is when a colder object gains heat as a warmer object transfer its heat to the colder object. The two objects will meet at a temperature somewhere in between the two temperatures

**Part 3- Use the acronym to name the different types of energy**

**Part 4 - Read the following examples. Decide if the heat transfers are conduction, convection, or radiation. Write “Co” for conduction, a “Cv” for convection and “R” for radiation.**

13. \_\_\_\_\_\_ burning hand on a hot stove

14. \_\_\_\_\_\_hot air balloon rising

15. \_\_\_\_\_\_ feeling the warmth of a fire

16. \_\_\_\_\_\_hot car in summer time

17. \_\_\_\_\_\_ spoon heating up in soup

18. \_\_\_\_\_\_lava lamp

19. \_\_\_\_\_\_\_ sun warming Earth’s surface

20. \_\_\_\_\_\_\_ grabbing a cold can of soda

21. \_\_\_\_\_\_\_ pasta traveling in circle in hot water

22. \_\_\_\_\_\_\_ low pressure forming