Heat Mr. Stewart

Physical Science December, 2012

1. What produces heat?
2. Which way does heat always move?
3. What are three forms of heat transfer?
	1.
	2.
4. What is conduction?
5. What causes heat to travel from one end of a piece of metal to the other end?
6. When metal is heated, what gains kinetic energy and transfers it throughout the metal?
7. If metal and wood are at the same temperature, why does metal feel colder?
8. What is convection?
9. What happens when liquid or gas particles are heated?
10. Cooler, denser fluids \_\_\_\_\_\_, while warmer, less dense fluids \_\_\_\_\_\_\_.
11. Why is it windy at the seaside?
12. What is radiation?
13. Why can’t heat from the Sun be transferred by conduction or convection?
14. Which container will have the warmest water after 10 minutes?
15. Which container equal distance from a heater will have the warmest water after 10 minutes?
16. Why does hot air rise and cold air sink?
17. Why are houses painted white in hot countries? Why do runners wear foil blankets?
18. What type of heat is involved in cooking an egg in a pan?
19. What type of heat causes an electric appliance wire to get hot?
20. What is temperature?
21. How is kinetic energy related to producing heat?
22. What is a thermometer?
23. What is the metric scale for measuring temperature?
24. What is the difference between the Celsius and Kelvin temperature scales?
25. What is absolute zero?
26. What is absolute zero on the Celsius scale?
27. What is the difference between an increase and decrease in temperature?
28. What is a calorie?
29. A Joule is what kind of unit?
30. What is specific heat?
31. What is a calorimeter?
32. What is required for a phase change to take place?
33. What expands as they are heated?
34. What happens to water between 0o and 4o C?
35. What is a thermostat?
36. How can a bimetallic strip be used as a switch in a thermostat?
37. What is internal energy?
38. Which is not a method of heat transfer?
39. Particles are closer together in what physical state?
40. How does heat energy reach Earth from the Sun?
41. What is the best surface for reflecting heat radiation?
42. What is the best surface for absorbing heat radiation?