



Heat and Energy Progress Check

Name:

Date:

	Learning Outcomes	✓ 😊	? 😐	✗ 😞
1	I can name the following 7 types of energy: light, heat, electrical, sound, chemical, kinetic, gravitational potential, * elastic potential.			
2	I can classify the 7 types of energy as either stored energy or transferred energy.			
3	I can list food, fuels, and batteries as examples of chemical energy.			
4	I can identify and describe some examples of energy transfer.			
5	I can state that energy is always conserved, not produced and/or destroyed.			
6	I can state that the unit for energy is a Joule (J).			
7	I can state that heat energy travels from hot to cold.			
8	I can state that temperature is a method of measuring heat energy, and has units (°C).			
9	I can state that heat can be transferred by conduction, convection, or radiation.			
10	I can describe how heat travels through solids by conduction.			
11	I have carried out an experiment to compare the conductivity of different solids.			
12	I can give definitions for the terms "conductor" and "insulator", and can apply these terms to metals and non-metals.			
13	I have carried out an experiment to compare how effective different insulators are.			
14	I can describe how heat travels through liquids and gases by convection.			
15	I can state some everyday examples of convection			
16	I can describe how heat is transferred through a vacuum by radiation			
17	I can state that heat energy from the sun is transferred by radiation.			
18	I have carried out an experiment to show how the colour of a substance affects its capacity to absorb radiated heat.			
19	I can describe the main sources of heat loss in a house, and can suggest ways to reduce heat loss.			

20	I can state that the use of electricity is continually increasing, and that most electricity is produced by burning fossil fuels in power stations.			
21	I can describe the energy transfers in coal and oil fired power stations, and state that lots of energy is lost as heat.			
22	I can state that coal and oil are examples of fossil fuels, which are non-renewable sources of energy.			
23	I can identify the products of combustion of fossil fuels, and have successfully carried out a test for carbon dioxide.			
24	I can describe trends in the levels of carbon dioxide and global temperatures over the past 100 years, and can explain why global temperatures have increased.			
25	I can describe the effects of global warming, focusing on climate change.			
26	I can state the following are sources of renewable energy: solar, wind, geothermal, biomass, hydroelectric, tidal, and wave. *I can describe how some of these renewable energy sources work.			
27	I can describe the energy changes taking place in each source of renewable energy listed above.			
28	I can suggest some advantages and some disadvantages of each of the renewable energy sources listed above.			

In this topic I have successfully.....

To make further progress I should.....

Target: In the next topic I will.....

