



# Heat and Energy Progress Check

Name:

Date:

	Learning Outcomes	✓😊	?😐	✗😞
	<i>I can name the following 7 types of energy: light, heat, electrical, sound, chemical, kinetic, gravitational potential and * elastic potential.</i>			
L2	<i>I can identify and describe some examples of energy transfer and pick out useful energy products and wasted energy products</i>			
	<i>I can state that energy is always conserved, not produced and/or destroyed.</i>			
1	I can state that the unit for energy is a Joule (J).			
2	I can state that heat energy travels from hot to cold.			
3	I can state that temperature is a method of measuring heat energy, and has units (°C).			
4	I can state that heat can be transferred by conduction, convection, or radiation.			
5	I can describe how heat travels through solids by conduction.			
6	I have carried out an experiment to compare the conductivity of different solids.			
7	I can give definitions for the terms "conductor" and "insulator", and can apply these terms to metals and non-metals.			
8	I have carried out an experiment to compare how effective different insulators are.			
9	I can describe how heat travels through liquids and gases by convection.			
10	I can state some everyday examples of convection			
11	I can describe how heat is transferred through a vacuum by radiation			
12	I can state that heat energy from the sun is transferred by radiation.			
13	I have carried out an experiment to show how the colour of a substance affects its capacity to absorb radiated heat.			
14	I can describe the main sources of heat loss in a house, and can suggest ways to reduce heat loss.			
15	I can state that houses lose heat because there is a difference in temperature between the inside			

	and outside.			
16	I can describe the energy transfers in coal and oil fired power stations, and state that lots of energy is lost as heat.			
17	I can describe an efficient energy transfer as one where there is very little energy wasted.			
18	I can state that coal and oil are examples of fossil fuels, which are non-renewable sources of energy.			
19	I can identify the products of combustion of fossil fuels, and have successfully carried out a test for carbon dioxide.			
20	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.			
21	I can describe the effects of global warming, focusing on climate change.			
22	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.			
23	I can describe the energy changes taking place in each source of renewable energy listed above.			
24	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.....