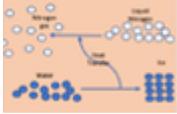
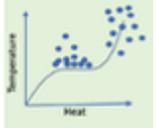
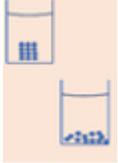


Bloom's Taxonomy – Higher Level Thinking Skills are at the top

<p>Creating and Synthesizing</p>	<p>This where you design, formulate, build, invent, compose, generate, derive, modify, or develop. You are taking two or more scientific processes or ideas and putting them together or taking a process and placing it in a new context.</p>	<p>I have designed experiments to show how temperature changes when adding energy, both when heating a liquid and when a liquid becomes a gas. I have thought about taking away energy and I can suggest that a way over a lake is to freeze the water to make ice and then cars can drive across, rather than driving around. The water can be frozen by using something very cold such as liquid nitrogen. The particles of liquid nitrogen take the energy out of the water particles so that they become closer together and become ice. The kinetic energy from the water particles is transferred to the nitrogen particles so they have enough energy to become a gas.</p>	
<p>Evaluating</p>	<p>This is where you need to support, defend, judge, compare, contrast, argue, justify, support, or convince. You are making a judgement about a process, a practical procedure, or a set of results or points of view.</p>	<p>The data I collected for my graph shows a straight line. This shows a positive correlation between the heat added and the temperature increase. There are a few anomalies (out of place) results. They are 1 degree C away from the line of best fit and I think this is due to the resolution on the thermometer. I could improve by using a digital thermometer that has a resolution of 0.1 degrees C. I only did the experiment once. Next time I will repeat the experiment and average the results. This will lower the error.</p>	
<p>Analysing</p>	<p>This is where you need to break down something into parts, classifying, categorizing, criticizing, simplifying, or finding patterns that link to the scientific process or principle.</p>	<p>I can explain that the graph of a liquid becoming a gas. On the flat part of the graph, energy is being added. The heat energy is transferred into kinetic energy and the liquid particles have enough energy to become a gas. The temperature stays the same as the energy goes into all the particles. When all the particles are gas, the temperature increases.</p>	
<p>Applying</p>	<p>This is where you need to calculate, predict, solve, or determine what might be affected or where we see this in real life. A scientific principle in practice.</p>	<p>When I heat a gas more, it will expand more and make a balloon larger because the particles have more energy so they are moving faster and further apart. The effect of the particles hitting harder and putting more force on the inside of the balloon makes it expand.</p>	

<p>Understanding and Comprehending</p>	<p>This is where you need to describe or explain your own understanding of the science behind the question.</p>	<p>When you heat a solid, it turns into a liquid and fills the container. This is because the particles are moving away from each other in a liquid but stay together in a solid.</p>	
<p>Remembering Knowledge</p>	<p>This is where you write about something that you have learned about Science. It involves writing facts.</p>	<p>The three types of matter are solid, liquid, and agas and examples of these are ice, water, and steam.</p>	