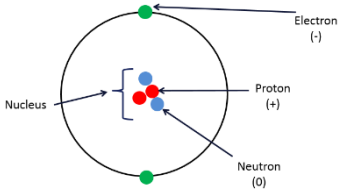

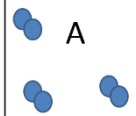
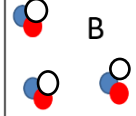
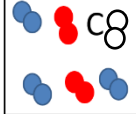

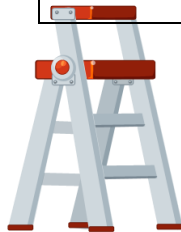















%	I can ...	Prove it!
	<p>Use mass and atomic numbers to calculate the number of electrons, protons, and neutrons in an atom</p> <p>Infer from a drawing of an atom, which kind of element it is</p>	<p>1) Define mass number and atomic number</p> <p>2) Calculate the following 3 things for each of the elements (Lithium, Nitrogen, and Potassium).</p> <p>Number of electrons =                      Number of protons =                      Number of neutrons =</p> <p>3) Which element is this? Justify your answer.</p> 
	<p>Explain why you would choose to use a piece of equipment linking to scale, accuracy and precision</p> <p>Explain how the particles in a substance change as it changes between the three states e.g. as it turns from solid to liquid and then liquid to gas</p> <p>Describe what is found within the nucleus of an atom</p> <p>Use correct symbols for 15 most commonly used elements</p> <p>Link particle arrangement to properties of solids, liquids and gases</p>	<p>1) Would you use a beaker or a measuring cylinder to measure 55ml of milk? Explain your answer.</p> <p>2) Describe the changes that happen to the particle in an ice cube as it melts.</p> <p>3) What is found within the nucleus of an atom of Hydrogen H?  Magnesium, Copper, Helium,</p> <p>4) Write the symbols for Lithium, Sodium, Potassium, Calcium, Iron, Cobalt, Nickel, Carbon, Hydrogen, Nitrogen, Oxygen and Chlorine</p> <p>5) Mr Holmes says a solid can be compressed. Is he correct? Explain your answer in terms of particles.</p>
	<p>Draw a model to show the particles in a solid, liquid and gas</p> <p>Describe the difference between an element, compound and mixture</p> <p>Describe the arrangement, movement and bonding of particles in a solid, liquid and gas</p> <p>Describe 3 risks in a science lab and 3 things we can do to prevent these from causing us harm</p> <p>Link the properties of metals and non-metals to their use</p>	<p>1) Add particles to these diagrams to represent the 3 states.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 60px; height: 60px; margin: 5px;"></div> <div style="border: 1px solid black; width: 60px; height: 60px; margin: 5px;"></div> <div style="border: 1px solid black; width: 60px; height: 60px; margin: 5px;"></div> </div> <p style="text-align: center; margin-top: 5px;">Solid                      Liquid                      Gas</p> <p>2) Which is an element, compound and which is a mixture?</p> <p>A =       B =       C = </p> <p>3) I know that:</p> <p>In a solid the particles are arranged _____. There is _____ movement and flow. They are _____ bonded.</p> <p>In a liquid the particles are arranged _____. There is _____ movement and flow. They are _____ bonded.</p> <p>In a gas the particles are arranged _____. There is _____ movement and flow. They are _____ bonded.</p> <p>4) You are using a Bunsen burner to boil some water. You then add some copper sulphate to it. The copper sulphate has this symbol on it. </p> <p>Name three risks during this experiment and three ways you can prevent causing harm in the science lab.</p> <p>5) Complete the following sentences using a property to justify the material choice.</p> <ul style="list-style-type: none"> <li>• Electrical wires are made of metal because metals.....</li> <li>• Frying pans are made of metal because metals .....</li> <li>• Metal is used in the construction of buildings because metals .....</li> </ul>



%	I can ...	Prove it!								
<p>50%</p>	<p>Choose the appropriate piece of equipment in different scenarios</p> <p>Give an example of an element and a compound and a mixture</p> <p>Describe what is meant by each hazard symbol and give 2 ways we can stay safe in the science lab</p> <p>Define "Evaporation", "Condensation", "Melting" and "Boiling"</p> <p>Choose which Bunsen flame to use in different situations and say why.</p>	<p>1) Which pieces of equipment would you use to melt ice in the science lab? You will need five different pieces of equipment.</p> <p>2) Match the substance to its correct term. Draw only 3 lines</p> <table border="1" data-bbox="1157 498 1787 721"> <tr> <td>Carbon dioxide</td> <td>Element</td> </tr> <tr> <td>Salt water</td> <td>Compound</td> </tr> <tr> <td>Hydrogen</td> <td>Mixture</td> </tr> </table> <p>3) What does this hazard symbol mean? </p> <p>4) Link the words to the correct definition</p> <p>Particles lose energy and start to move slower. Bonds begin to form between particles. <b>Freezing</b></p> <p>Particles get more energy and move faster. All of the bonds between particles break. <b>Melting</b></p> <p>Particles lose energy and stop moving (they just vibrate in a fixed position). Bonds form between the particles and particles align in a regular pattern. <b>Evaporating</b></p> <p>Particles get more energy and move faster. Some of the bonds begin to break. The particles move out of their regular pattern. <b>Condensing</b></p> <p>5) A student chooses the roaring flame on a Bunsen burner to heat up a sample. Why has she chosen this flame?</p>	Carbon dioxide	Element	Salt water	Compound	Hydrogen	Mixture		
Carbon dioxide	Element									
Salt water	Compound									
Hydrogen	Mixture									
<p>40%</p>	<p>Name different pieces of scientific equipment</p> <p>Name the different hazard symbols</p> <p>Give 2 properties of solids, liquids and gases</p>	<p>1) I can name and spell 10 different pieces of scientific equipment I might use in the lab.</p> <p>2) Match the names of the hazards to their symbol. Draw only 4 lines.</p> <table data-bbox="1052 1754 1646 2116"> <tr> <td></td> <td>Oxidising</td> </tr> <tr> <td></td> <td>Harmful</td> </tr> <tr> <td></td> <td>Irritant</td> </tr> <tr> <td></td> <td>Flammable</td> </tr> </table> <p>3) Is a brick a solid, liquid or gas? Give two pieces of evidence to support your answer!</p>		Oxidising		Harmful		Irritant		Flammable
	Oxidising									
	Harmful									
	Irritant									
	Flammable									

**Key Terms:**

- |               |           |               |            |                    |                    |                |         |           |
|---------------|-----------|---------------|------------|--------------------|--------------------|----------------|---------|-----------|
| Hazard        | Corrosive | Irritant      | Flammable  | Toxic              | Oxidising          | Tripod         | Spatula | Stopwatch |
| Bunsen Burner | Gauze     | Conical flask | Beaker     | Measuring cylinder | Heat proof matt    | Safety goggles |         |           |
| Solid         | Liquid    | Gas           | Compressed | Density            | Bonded Arrangement | Motion         | Element |           |
| Compound      | Molecule  | Mixture       | Boiling    | Evaporating        | Condensation       | Freezing       | Melting |           |
|               | Diffusion | Fuel          | Atom       | Electron           | Neutron            | Proton         |         |           |

