



ALMOND HILL JUNIOR SCHOOL MEDIUM TERM PLAN

TOPIC TITLE/SUBJECT: Science-States of Matter

YEAR GROUP: 4

TERM Spring

<p><b>Vocabulary</b></p> <p>Liquid, gas, solid, plastic, water, solution, freeze, oxygen, burn, boil, solidify, melt, material, steam, dissolve, wood, metal, carbon dioxide, state, matter, material, weight, mass.</p>	<p><b>Skills</b></p> <p><u>Enquiry and working scientifically skills (LKS2)</u></p> <ul style="list-style-type: none"> <li>Asks relevant questions</li> <li><b>Sets up simple enquiries, comparative and fair tests</b></li> <li><b>Makes systematic and careful observations</b></li> <li>Gather and record data accurately in a variety of ways. Interpreting data.</li> <li><b>Makes statements on findings from enquiries using simple scientific vocabulary, drawings, labelled diagrams etc.</b></li> <li>Report findings both in written and oral form.</li> <li>Use results to draw simple conclusions, making new predictions and raising further questions.</li> <li><b>Identifies difference, similarities or changes related to simple scientific ideas and processes</b></li> </ul>	<p><b>What we already know</b></p> <p>As part of their general knowledge, some children may know some basic concepts about ‘States of Matter’ including...</p> <ul style="list-style-type: none"> <li>Some things melt when they are heated</li> <li>A temperature is a measure of how hot or cold something is</li> <li>Ice lollies are made by freezing a liquid</li> </ul> <p><u>KS1 – Knowledge</u></p> <ul style="list-style-type: none"> <li>Y2/Sp1 - What is a ‘solid’ shape? Solid shapes made from some materials can be changed</li> </ul> <p><u>KS1 – Enquiry/working scientifically skills</u></p> <ul style="list-style-type: none"> <li>Y2/A2 and Sp1– identify and compare materials and their properties</li> </ul> <p><u>KS2 – Knowledge and Skills</u></p> <ul style="list-style-type: none"> <li>Y3/A1 – Sound – Set up simple enquiries, comparative and fair tests. Make systematic and careful observations</li> </ul>
<p><b>Other/Cross Curricular Links</b></p> <p>Speaking &amp; Listening) Discuss what they are learning and to develop their wider skills in spoken language</p> <p>Maths- Data</p>	<p><b>Application/ Outcomes</b></p> <p><u>Investigation</u></p> <p>How does the temperature of water affect the melting rate of a material?</p> <p>Explore melting points of brine, ice and boiling</p> <p>Investigate properties of gases</p> <p><u>Make and observe</u> –water cycle – identifying the parts played by evaporation and condensation.</p> <p><u>Research</u></p> <p>Other knowledge-based outcomes:</p> <ul style="list-style-type: none"> <li>Explain differences between solids, liquids and gases in terms of particles</li> <li>Understand that ice, water and steam are the same material in different states</li> <li>compare and group materials together, according to whether they are solids, liquids or gases</li> </ul> <p><u>Identifying and classifying</u></p> <ul style="list-style-type: none"> <li>Object sort into states of matter</li> </ul>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>There are three states of matter – solid, liquid gas</li> <li>A matter can change state following a change</li> <li>A state of matter is determined by the structure of particles within it.</li> <li>Evaporations and condensation are part of ‘The Water Cycle’</li> <li>Evaporation occurs when water turns into a gas (water vapour)</li> <li>Condensation occurs when water vapour turns into a liquid</li> </ul>
<p><b>Adaptation for SEND:</b> Differentiated worksheets/Images and pictures used to decrease need for writing/Worksheets produced to decrease page organisation need</p>		