



ALMOND HILL JUNIOR SCHOOL MEDIUM TERM PLAN

TOPIC TITLE/SUBJECT: Science-States of Matter

YEAR GROUP: 4

TERM Spring 1&2

<p>Vocabulary</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>Skills</p> <p><u>Enquiry and working scientifically skills (LKS2)</u></p> <p>Asks relevant questions</p> <p>Sets up simple enquiries, comparative and fair tests</p> <p>Makes systematic and careful observations</p> <p>Gather and record data accurately in a variety of ways. Interpreting data.</p> <p>Makes statements on findings from enquiries using simple scientific vocabulary, drawings, labelled diagrams etc.</p> <p>Report findings both in written and oral form.</p> <p>Use results to draw simple conclusions, making new predictions and raising further questions.</p> <p>Identifies difference, similarities or changes related to simple scientific ideas and processes</p>	<p>What we already know</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"> • Some things melt when they are heated • A temperature is a measure of how hot or cold something is • Ice lollies are made by freezing a liquid <p><u>KS1 – Knowledge</u></p> <ul style="list-style-type: none"> • Y2/Sp1 - What is a ‘solid’ shape? Solid shapes made from some materials can be changed <p><u>KS1 – Enquiry/working scientifically skills</u></p> <ul style="list-style-type: none"> • Y2/A2 and Sp1– identify and compare materials and their properties <p><u>KS2 – Knowledge and Skills</u></p> <ul style="list-style-type: none"> • Y3/A1 – Sound – Set up simple enquiries, comparative and fair tests. Make systematic and careful observations
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Illustration

States of Matter

Application/ Outcomes

Investigation

How does the temperature of water affect the melting rate of various consumables?

Make and observe – window water cycle – identifying the parts played by evaporation and condensation.

Research

What is an eco-system? Make a mini eco-system

Other knowledge-based outcomes:

- Explain differences between solids, liquids and gases
- Understand that ice, water and steam are the same material in different states
- compare and group materials together, according to whether they are solids, liquids or gases
- **Outdoor learning – evaporating puddles**

Identifying and classifying

- Object sort

Concepts

- There are three states of matter – solid, liquid gas
- A matter can change state following a change
- A state of matter is determined by the structure of particles within it.
- Evaporations and condensation are part of ‘The Water Cycle’
- Evaporation occurs when water turns into a gas (water vapour)
- Condensation occurs when water vapour turns into a liquid

Adaptation for SEND Differentiated worksheets/Images and pictures used to decrease need for writing/Worksheets produced to decrease page organisation need