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| Science Focus | States of Matter | Year 4 | Spr 1 and 2 |

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| Key Knowledge |
| **Materials fall into four main categories** | ** Solids  Liquids  Gases** |
| **Solids** | * **Solids stay in one place and can be held.**
* **Most solids keep their shape. They do not flow like liquids. (Some solids like sand or salt can be poured)**
* **Solids always take up the same amount of space. They do not spread out like gases.**
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| **liquids** | * **Liquids can flow or be poured easily. They are not easy to hold.**
* **Liquids change their shape depending on the container they are in.**
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| **Gases** | * **Gases are often invisible.**
* **Gases do not keep their shape. They spread out and change their shape and volume to fill up whatever container they are in.**
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| **What does changes of state mean?** | **What a material changes from one material type to another, we say ‘it has changed state.’** |
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| **Boiling** | **Water boils at exactly 100°C** |
| **Melting** | **Different solids melt at different temperatures** |
| **Freezing**  | **Water freezes at 0 degrees Celcius (0°C)** |
| **Evaporation and Condensation** | **Water can evaporate and condense at any temperature. But, the warmer it is the faster the evaporation takes place** |
| **Possible Experiences** |
| **Experiment with varying melting points of foodstuffs. (Do healthy foods melt quicker/ slower?)****How can we get washing to dry faster?** **Create a solar water still.** |

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| Key Vocabulary |
| **Temperature** | **The measure of warmth or coldness of something.** |
| **Celsius** | **The common scale in the UK for measuring temperature** |
| **Boils** | **To become so hot (100°C) that water bubbles and then turns into a gas.** |
| **Container** | **Something which holds things inside, like a box, jar or tub** |
| Diagrams and Symbols |
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**Greater Depth Thinking**