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| **What? (Key Knowledge)** | | | | | | |
| Grouping Materials | | | | | | |
| Materials fall into four main categories | | | | | | * Solids * Liquids * Gases |
| How to spot each type of material | | | | | | |
| 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. | | | | | |
| 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. | | | | | |
| 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 | | | | | |
| Changes of state | | | | | | |
| What does changes of state mean? | | | | | What a material changes from one material type to another, we say ‘it has changed state.’ | |
| What are the changes of state? | | | | | | |
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| At what temperature does each happen? | | | | | | |
| Boiling | | | Water boils at exactly 100°C  (A hot bath is about 40°C) | | | |
| Melting | | | Different solids melt at different temperatures:  Ice melts at 0 degrees Celsius (0°C).  (Chocolate melts at about 35°C) | | | |
| Freezing | | | Water freezes at 0 degrees Celsius (0°C). | | | |
| Evaporation and Condensation | | | Water can evaporate and condense at any temperature. However, the warmer it is the faster the evaporation takes place. | | | |
| Possible Experiences | | | | | | |
| * Investigate changing ice to liquids * Freezing different liquids * Race liquids down a slope * Melt butter or chocolate * Make ice cream | | | | | | |
| **What? (Key Vocabulary)** | | | | | | |
| Spelling | | | | Definition/ Sentence | | |
| temperature | | The measure of warmth or coldness of an object. | | | | |
| 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 that holds things inside, like a box, jar or tub. | | | | |
| **Diagrams and Symbols** | | | | | | |
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