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| **What? (Key Knowledge)** |
| Grouping Materials |
| Materials fall into four main categories | * Solids
* Liquids
* Gases
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| 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.
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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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| 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
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| **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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