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|  **States of Matter** | **Working Scientifically** |
| * Can they compare and group materials together, according to whether they are solids, liquids or gases?
* Can they explain what happens to materials when they are heated or cooled?
* Can they measure or research the temperature at which different materials change state in degrees Celsius?
* Can they use measurements to explain changes to the state of water?
* Can they identify the part that evaporation and condensation has in the water cycle?
* Can they associate the rate of evaporation with temperature?
 | **Planning** | **Obtaining and presenting evidence**  | **Considering evidence and evaluating**  |
| * Can they set up a simple fair test to make comparisons?
* Can they plan a fair test and isolate variables, explaining why it was fair and which variables have been isolated?
* Can they suggest improvements and predictions?
* Can they decide which information needs to be collected and decide which is the best way for collecting it?
* Can they use their findings to draw a simple conclusion?
 | * Can they take measurements using different equipment and units of measure and record what they have found in a range of ways?
* Can they make accurate measurements using standard units?
* Can they explain their findings in different ways (display, presentation, writing)?
 | * Can they find any patterns in their evidence or measurements?
* Can they make a prediction based on something they have found out?
* Can they evaluate what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?
* Can they use straightforward scientific evidence to answer questions or to support their findings?
* Can they identify differences, similarities or changes related to simple scientific ideas or processes?
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| **Challenge** |
| * Can they group and classify a variety of materials according to the impact of temperature on them?
* Can they explain what happens over time to materials such as puddles on the playground or washing hanging on a line?
* Can they relate temperature to change of state of materials?
 | * Can they plan and carry out an investigation by controlling variables fairly and accurately?
* Can they use test results to make further predictions and set up further comparative tests?
 | * Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?
 | * Can they report findings from investigations through written explanations and conclusions?
* Can they use a graph or diagram to answer scientific questions?
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