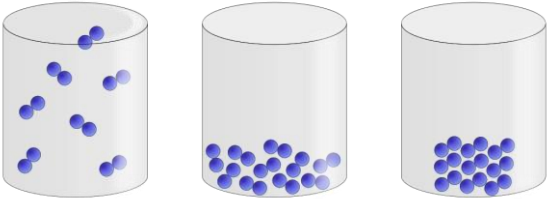
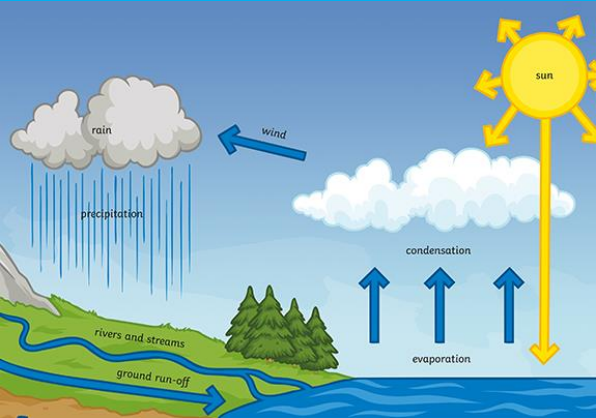


# Year 4: Science States of Matter Knowledge Mat

| Subject Specific Vocabulary |   | States of Matter  | Important knowledge   |  |  |
|-----------------------------|---|---|---|--|--|
| <b>solid</b>                | The state of something whose particles do not move freely. It has a fixed shape.  |  <p style="text-align: center;">Gas      Liquid      Solid</p>  | <ul style="list-style-type: none"> <li><input type="checkbox"/> I know how to compare and group materials together, according to whether they are solids, liquids or gases.</li> <li><input type="checkbox"/> I know about changes in state e.g. solid to liquid or liquid to gas.</li> </ul> |  |  |
| <b>liquid</b>               | The state of something whose particles move freely whilst maintaining some relationship to each other so that it's volume remains constant but it's shape changes dependent upon the container. |   |   |  |  |
| <b>gas</b>                  | The state of something whose particles move freely of each other.   |   |   |  |  |
| <b>state of matter</b>      | A phrase used to describe the physical properties of something: solid, gas or liquid.   | <h2 style="background-color: #92d050; padding: 10px; border: 1px solid black;">The Water Cycle</h2>  | <ul style="list-style-type: none"> <li><input type="checkbox"/> I know that some materials change state when they are heated or cooled.</li> <li><input type="checkbox"/> I know the temperature at which changes of state happen in degrees Celsius (°C).</li> </ul>                         |  |  |
| <b>particle</b>             | Tiny bits of matter that make up everything in the universe.  |   |   |  |  |
| <b>compressed</b>           | Pressing something into a smaller space.  |   |   |  |  |
| <b>vapour</b>               | Tiny particles of liquid or solid help in a gas.  |   |   |  |  |
| <b>precipitation</b>        | Water that falls to the earth as hail, mist, rain, sleet, or snow.  |   |   |  |  |
| <b>condensation</b>         | A process which causes a substance to change from a gaseous state to a liquid state.  |   |   |  |  |
| <b>evaporation</b>          | A process which causes a substance to change from a liquid state to a gaseous state.  |   |   |  |  |
|                             |   |   |   |  | <ul style="list-style-type: none"> <li><input type="checkbox"/> I know about evaporation in the water cycle.</li> <li><input type="checkbox"/> I know condensation in the water cycle.</li> <li><input type="checkbox"/> I know the link between the rate of evaporation with temperature</li> </ul>   |
|                             |   |   |   |  | <ul style="list-style-type: none"> <li><input type="checkbox"/> I can decide what observations to make.</li> <li><input type="checkbox"/> I can record my observations, data and results using clear scientific vocabulary and symbols - in tables and diagrams.</li> <li><input type="checkbox"/> I can explain why something has happened using correct scientific vocabulary.</li> <li><input type="checkbox"/> I can compare my results with others and give reasons why they might be different.</li> <li><input type="checkbox"/> I can make a prediction and give a reason, making links to what I already know.</li> </ul> |