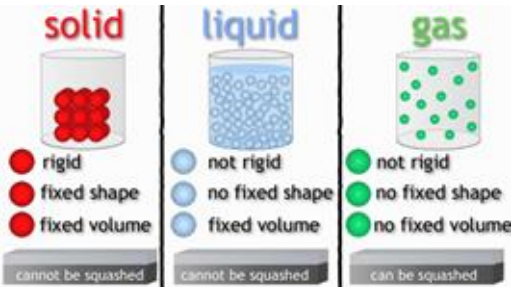
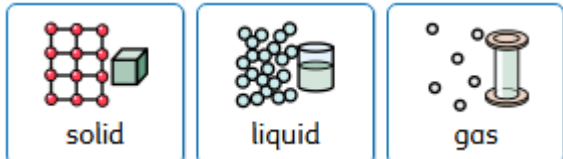
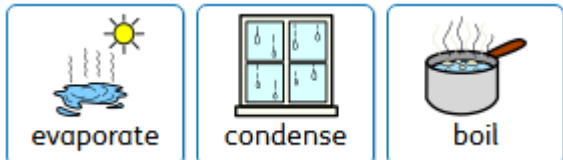
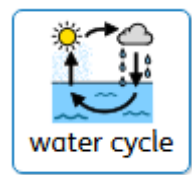
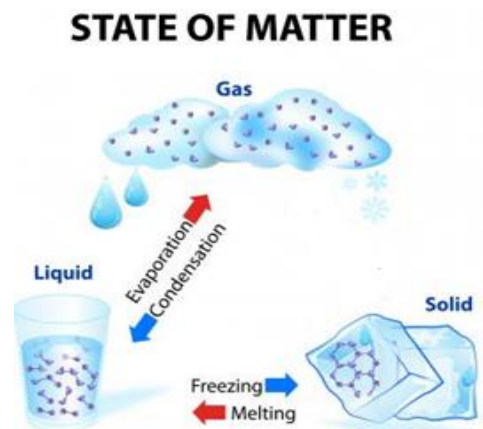











Year 4 States of Matter (Chemistry)							
Crucial Knowledge		Important images	Key Vocabulary				
<p>A solid is made up of particles held together tightly with strong bonds which means they can be held, keep its shape and have a fixed volume.</p> <p>A liquid is made up of particles that are held together but not as tightly as a solid. This means they have a fixed volume but changes in shape to fit the container.</p> <p>A liquid can be poured and keeps a level, horizontal surface.</p> <p>A gas fills all available space; it has no fixed shape or volume.</p>			  				
<p>Melting is a state change from solid to liquid.</p> <p>Freezing is a state change from liquid to solid.</p> <p>Boiling is a state change from liquid to gas.</p> <p>Evaporation is the same state change as boiling (liquid to gas), but it happens slowly at lower temperatures and only at the surface of the liquid.</p> <p>Heating a liquid will increase the rate at which it evaporates.</p> <p>Condensation is the change back from a gas to a liquid caused by cooling.</p> <p>Changing state happens at different temperatures for different materials.</p>			Key Concepts Materials - Year 3 understanding Materials are what objects are made of. Materials all have different properties which means they are suitable for different purposes. We can compare and group rocks and soils based on their appearance and physical properties. Materials - Year 4 understanding We can compare and group together materials according to whether they are a solid, liquid or gas. We can change the state of some materials by heating or cooling them.				
The water cycles involves changes of state include evaporation and condensation.							
Crucial Skills (Working Scientifically Skills)							
 present data in different ways	 sort using Venn diagrams	 read a thermometer	 read scales marked in 10s	 make careful observation for labelling	 design a results table	 measure to the nearest mm and oC	 use data to answer questions

