Meadow Vale Primary School		
Topic: Properties and changes to materials	**Subject(s)**: Science	**Year**: 5

What should I already know?

- The names of the three states of matter
- Different materials are used for different purposes depending on their properties: electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, thermal conductivity and transparency.
- The water cycle

Scientific enquiry and skills

- Investigate how different materials can change state, such as: ice - water - water - vapour.
- Understand the difference between reversible and irreversible changes
- Understand how particles move and behave differently

General vocabulary	
material	The substance that something is made out of
solids	One of the three states of matter. Solid particles are very close together, meaning solids, such as wood, hold their shape.
liquids	This state of matter can flow and take the shape of the container because the particles are more loosely packed than solid and can move around each other. Example are milk and water.
gases	One of the three states of matter. Gas particles are further apart than solid or liquid particles and they are free to move around. Examples are oxygen and helium.
melting	The process of heating a solid until it becomes a liquid.
freezing	When a liquid cools and turns into a solid.
evaporating	When a liquid turns into a gas or vapour.
condensing	When a gas, such as water vapour, cools and turns into a liquid
conductor	A conductor is a material that heat or electricity can easily travel through. Most metals are both thermal conductors (they conduct heat) and electrical conductors (they conduct electricity).
insulator	A material that does not let heat or electricity pass through them. Wood and plastic are both thermal and electrical insulators.
transparency	A transparent object lets light through so the object can be looked through, for example glass and some plastics.