UKS2 Properties and changes of materials.

Key vocabulary	
Chemical change	A reaction which changes the atoms in a substance resulting in formation of a new substance.
Evaporate	The change from a liquid to a gas.
Filter	To separate a solid from a liquid.
Irreversible	New material is made and cannot be changed back to its original form.
Particle	A small portion of matter
Physical change	A substance is changed into another one.
Reversible	A new material is made but can be changed back to its original form.
Sieve	A mesh that separates materials based on their size.
Solution	A mixture of two or more substances.
Substance	A material with certain characteristics.

Key Knowledge	
Preceding	• Describe the properties of a variety of everyday materials. (Y1) • Compare and group everyday materials on the basis of their properties. (Y2) • A gas has particles far apart, it is colourless and cannot be seen. (Y4) • A solid has particles close together, it can be seen. (Y4) • A liquid has particles with some space in between. A liquid takes the shape of the container it is put in (Y4). • When a solid melts it becomes a liquid (Y4) When a liquid is cooled it becomes a solid (Y4). When a liquid is heated it becomes a gas (Y4) • A liquid freezes to a solid when it becomes 0°C. • A liquid becomes a gas when it is heated to 100°C.
Current	• Sugar will dissolve into a liquid to become a solution. • You can recover two substances from a liquid through sieving, filtering, evaporating. • Sometimes you can recover a substance from a solution this is reversible sometimes you cannot this is called irreversible. • When two substances meet there are chemical reactions. Most chemical reactions cause irreversible changes.

Scientific Enquiry	
Observing over time	How does a container of saltwater change over time? How does a nail in saltwater change over time? 
Comparative testing	Which type of sugar dissolves the fastest? 
Fair testing.	How does the temperature of tea affect how long it takes for a sugar cube to dissolve? 
Identifying and classifying	*Identify the properties of materials and why these are appropriate for the job they carry out.*