



Science		Year 5	
Focus: Properties and changes of materials			
Age related vocabulary			
Dissolve	Dissolving is the process that occurs when a substance is added to a solvent (liquid) and makes a transparent liquid called a solution.	Solution	A solution is a mixture of two or more substances that stays evenly mixed.
Reversible	Substances can change in many ways. Some changes can be undone and the material that was changed returns to its original state. This is called a reversible change.	Irreversible	A change is called irreversible if it cannot be changed back again. In an irreversible change, new materials are always formed and these new materials can be useful.

Carlton Assessment Grid			
Success Criteria	Pupil Reflection		Teacher Assessment
I can investigate and compare the properties of materials.	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can explain that some materials will dissolve to form a solution.	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can understand how a mixture can be separated.	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can understand and demonstrate reversible changes.	Before <input type="checkbox"/>	After <input type="checkbox"/>	
I can understand and demonstrate that some changes of state are irreversible.	Before <input type="checkbox"/>	After <input type="checkbox"/>	

Key Knowledge

- Any substance that is used to make something is a material. The words used to describe a material are known as its properties. Each material has its own set of properties. These properties make different materials useful for different purposes.
- Materials can be group based on their properties. Examples include: magnetism, transparency, hardness, permeability and conductivity.
- Dissolving occurs when the particles of certain solids mix with the particles of certain liquids. A solution is formed when a solid dissolves in a liquid. Not all solids will dissolve, and not all liquids will allow solids to dissolve.
- Materials that dissolve are soluble. Materials that do not dissolve are insoluble.
- When two materials have been mixed, these are called mixed materials. Sometimes they can be separated by using different processes like: filtration, sieving, magnetic attraction and evaporation.
- Sometimes changes can be irreversible for materials. For example, heat can cause an irreversible chemical change to occur with some materials.
- Chemical changes involve reactants and products. The reactants are the materials that you start off with, before the chemical change happens. The products are the materials that are formed in the chemical change.



dissolving solution

