Properties and Changes of Materials

Learning objective:

To know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.





Salt dissolves in water. This means that it breaks up into tiny particles and you can no longer see it in the water. Salt creates a solution when mixed with water.

Solutions are sometimes coloured, however, they are always transparent. You can see straight through a solution!



Can you think of some other solutions?





When materials are mixed with water several different things can happen. Sometimes the material will dissolve, sometimes it will react to make a new material and sometimes it will just float or sink.

Have a look at these materials. Which would dissolve, which would react and which would float or sink when mixed with water?



sand



sugar



plaster of Paris







The sand will sink in the water.



The sugar will dissolve in the water. This means that it breaks into tiny particles which you can no longer see but you know the sugar is still there because the water will taste sweet.



The plaster of Paris will react with the water and the mixture will turn hard. It will create a new material.



