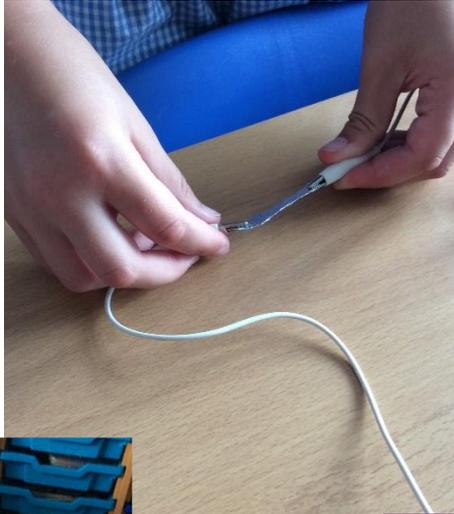


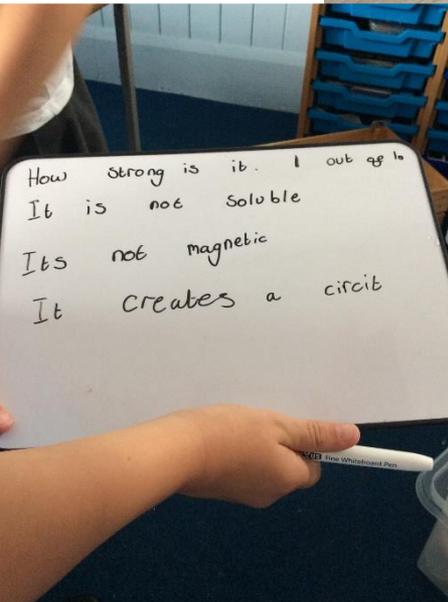
# Science

**Which materials can be  
changed back to their  
original form?**

In our first lesson we recapped what we had learnt linked to this topic before and then explored materials - comparing and grouping them according to their properties.



We thought about why a window needed to be transparent.



LO: I can compare and group materials according to their properties.

Name	How hard is it to break?	Is it soluble?	Is it transparent?	Can it conduct electricity?	Is it magnetic?
iron					
aluminium	5	no			
wood	5	no	no	yes	no
plastic	5	no	no	no	no
glass	5	no	no	no	no
sugar					
flour	5	Sort of	no	no	no
salt	5	yes	no	no	no
bread	5	no	no	no	no
brick					
wood	5	no	no	no	no
cotton					





We learnt what reversible and irreversible changes are and how materials can change. We observed some and then wrote about what we found out.

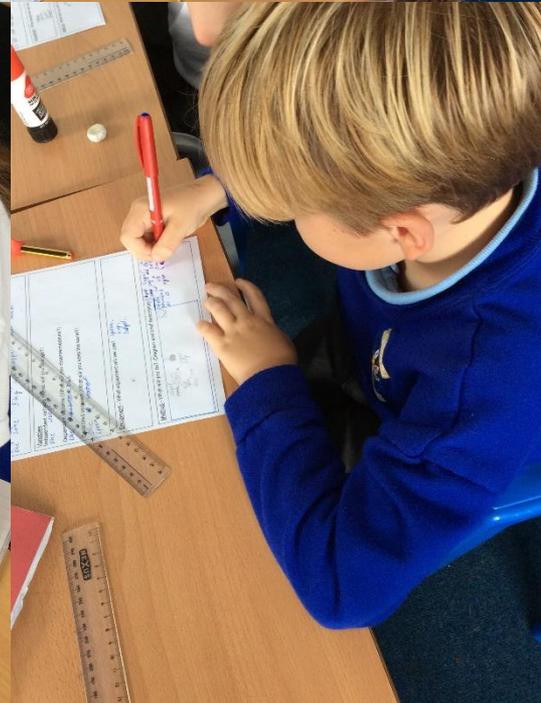
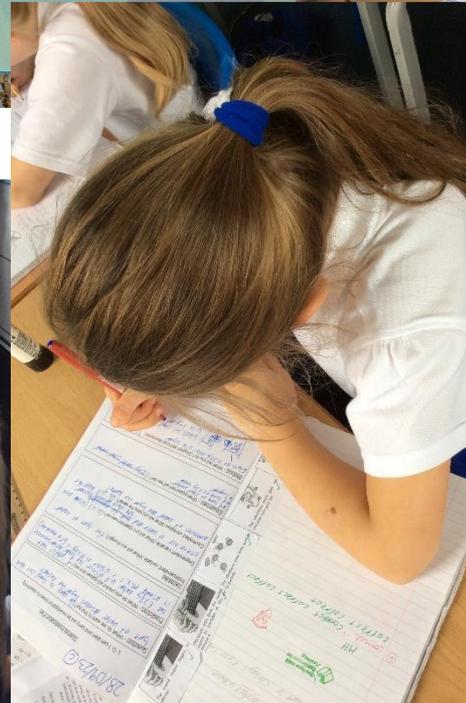
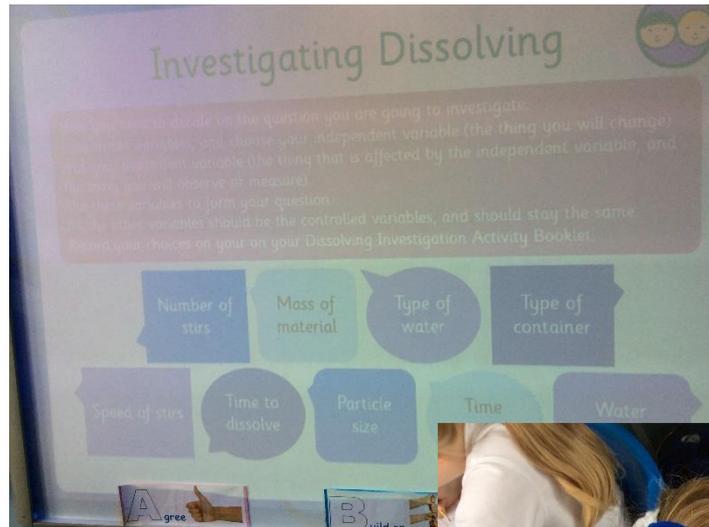


I found it really fun and informative.



We thought more about solutions and planned an experiment to find out whether different things affect the rate at which something dissolves.

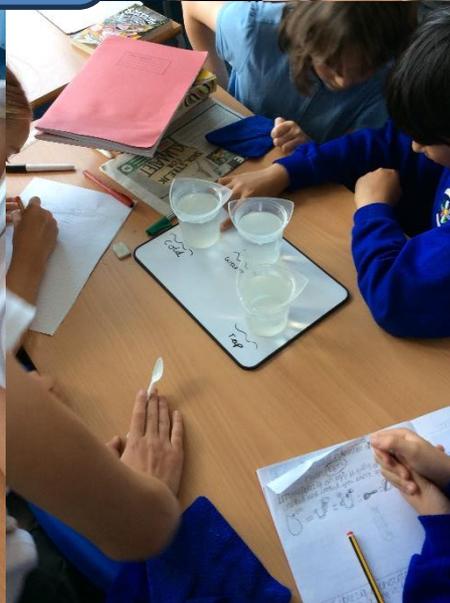
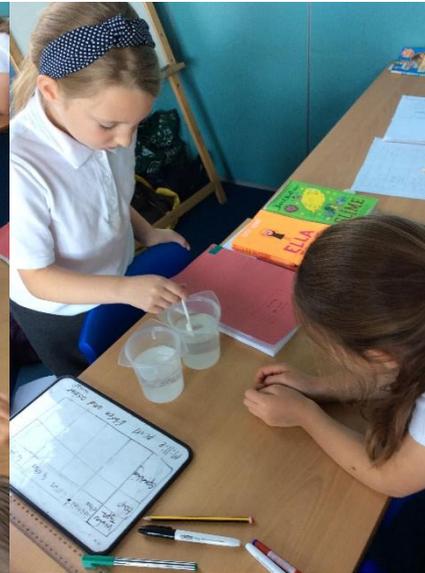
I felt that the plan was quite important as otherwise we wouldn't know what we were doing for our proper experiment.



Next we thought carefully about what we would be looking for and how to record our observations. Then we carried out our experiment.

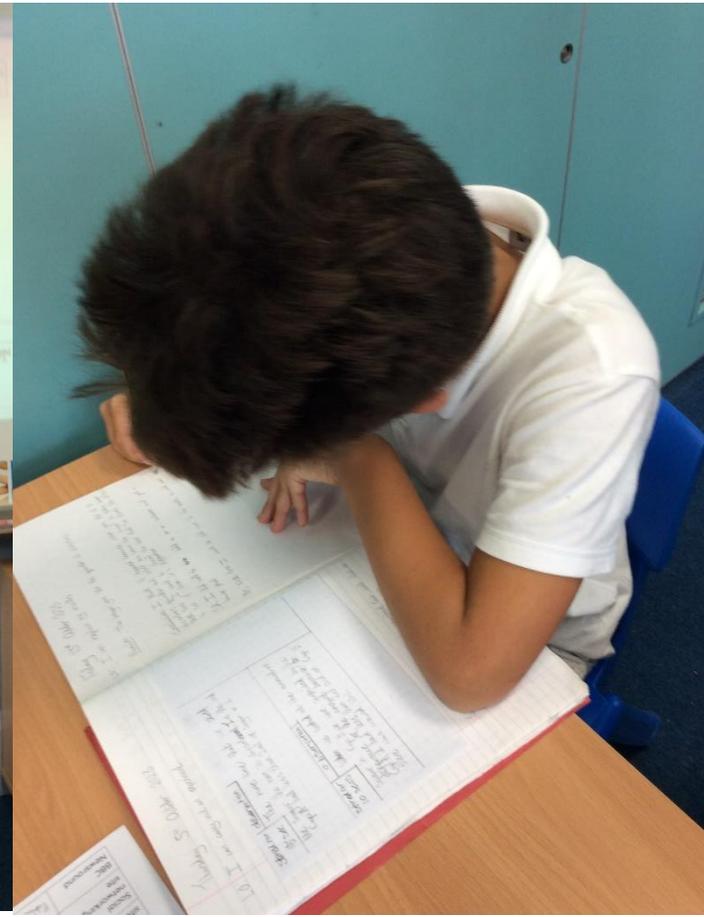
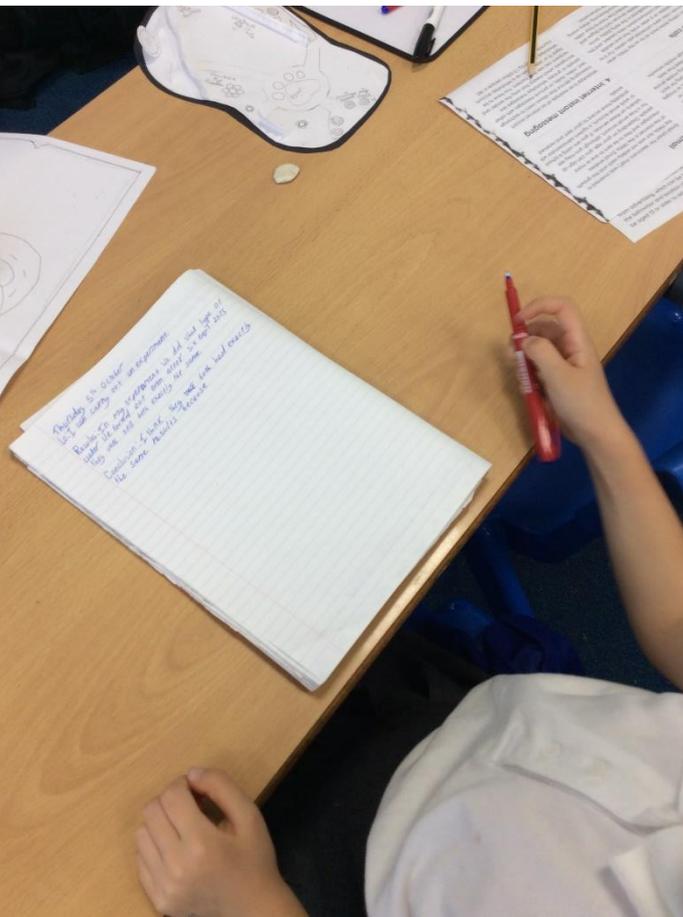
In our group it was quite interesting because we had the different volume of water and it didn't match our prediction.

Fun!

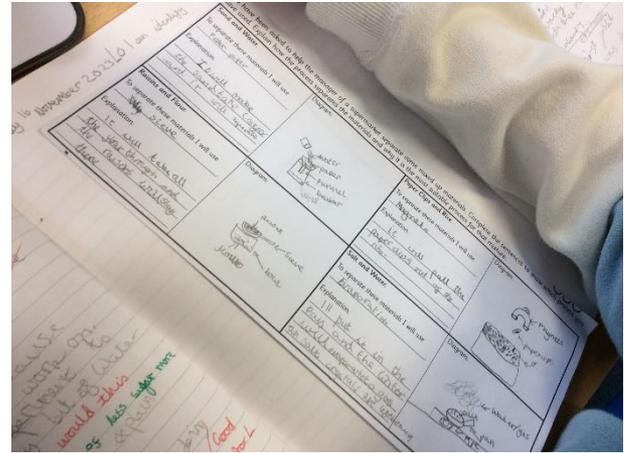


We recorded what we had found out last week – using an –er, -er sentence if we could. We also identified what we would change or investigate further.

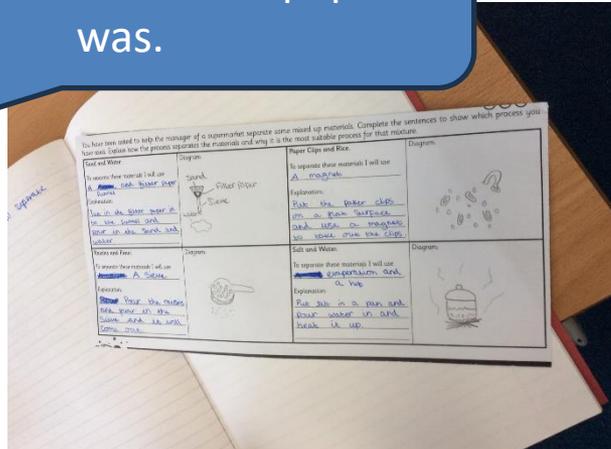
We had to be very honest even if our prediction was wrong. But it was interesting trying to think why.



We looked at different mixtures and then we explored and considered which equipment would be best to separate them back to their original materials.



It was interesting that not many of us knew what filter paper was.





Then we tried out our ideas.

When we did the salt and water it was weird to see the salt stuck to the pan. It looked a bit like snow.



# Science Year 5/6 Knowledge Organiser

**Which materials can or cannot be changed back to their original form?**

End Point: I can identify if and explain how a material can be changed back to their original form.

## Key knowledge

Know about materials that can or cannot be changed back to their original form once an action has been taken

Know what a reversible change means

Know what an irreversible change means

Give examples of reversible and irreversible changes

Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution

Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

## Vocabulary

**dissolve**

To become broken up or absorbed by something or to disappear into something else

**solubility**

Is a chemical property referring to the ability for a given substance to dissolve in a solvent

**filtering**

To pass a substance through a device which is designed to remove certain particles contained within

**melting**

A physical process that results in the transition of a substance from a solid to a liquid

**separating**

Separate, part, and divide mean to break into parts or to keep apart

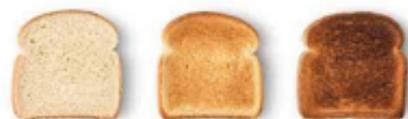
**thermal**

Something that is thermal is hot, retains heat, or has a warming effect

Personal development

Children link science to everyday occurrences

Jobs it could lead to: [environmental scientist](#), [water treatment worker](#)



SCIENCE



**Prior Knowledge—**

**From science:**

**From other lessons:**

**From outside school:**