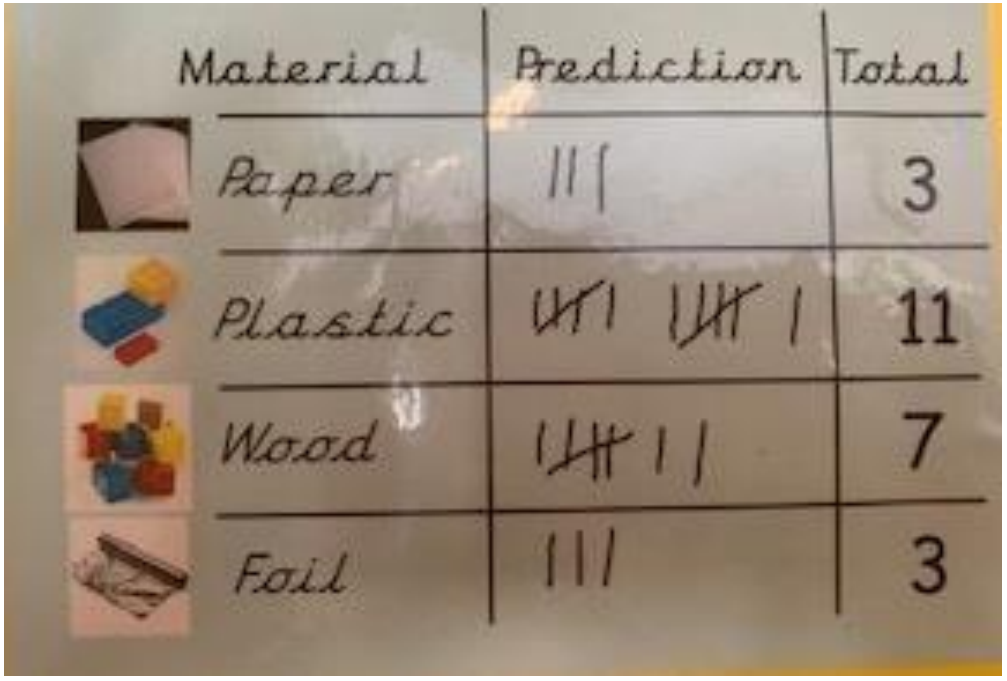
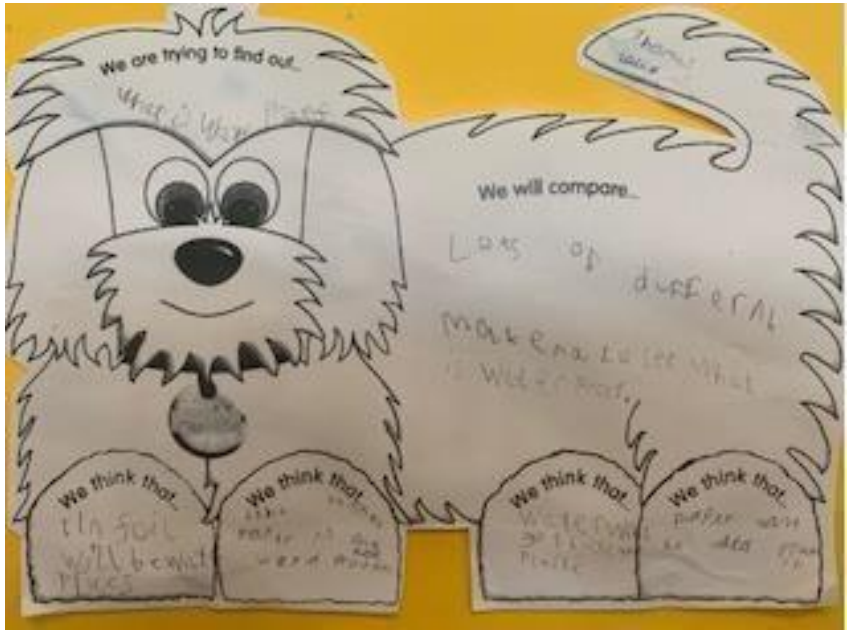
Science
Curriculum Progresson
Strand- working scientifically

Foundation Stage: *Children begin to ask and answer questions as a class. For example, which would be the most suitable material?*

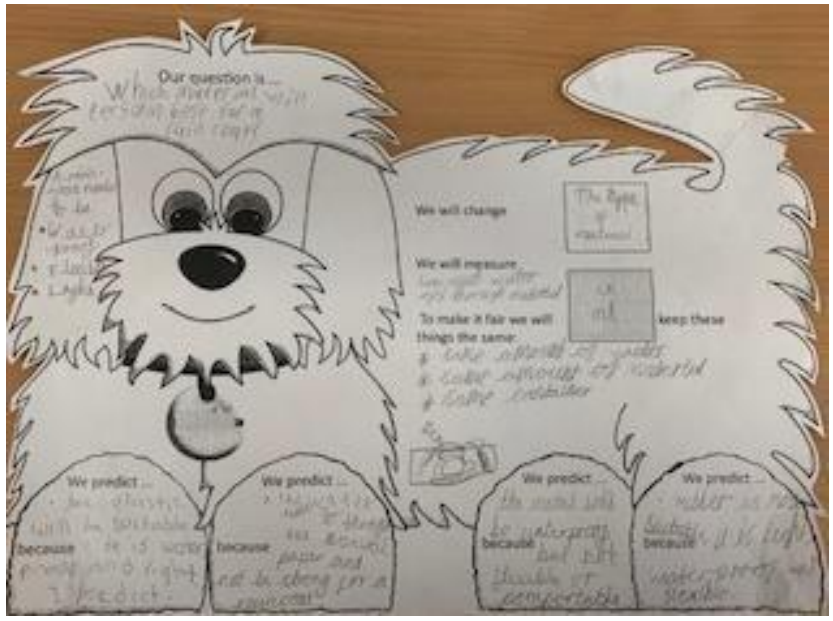


Material	Prediction	Total
Paper	𝍸 |	3
Plastic	𝍸 𝍸 | 𝍸 |	11
Wood	𝍸 | |	7
Foil	|||	3

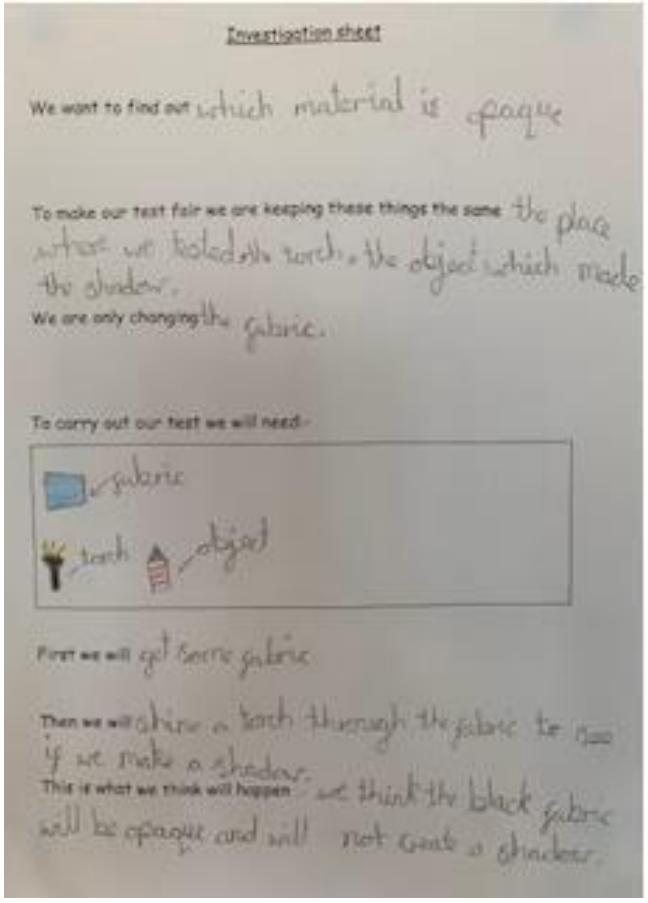
Year 1: *children perform simple tests.*



Year 2: *children use observations and ideas to suggest answers to questions. Then gather and record data to help in answering questions.*



Year 3: *children set up simple, practical enquiries and comparative and fair tests.*



Investigation sheet

We want to find out which material is opaque

To make our test fair we are keeping these things the same: the place where we tested with torch, the object which made the shadow.
We are only changing the fabric.

To carry out our test we will need:-

fabric

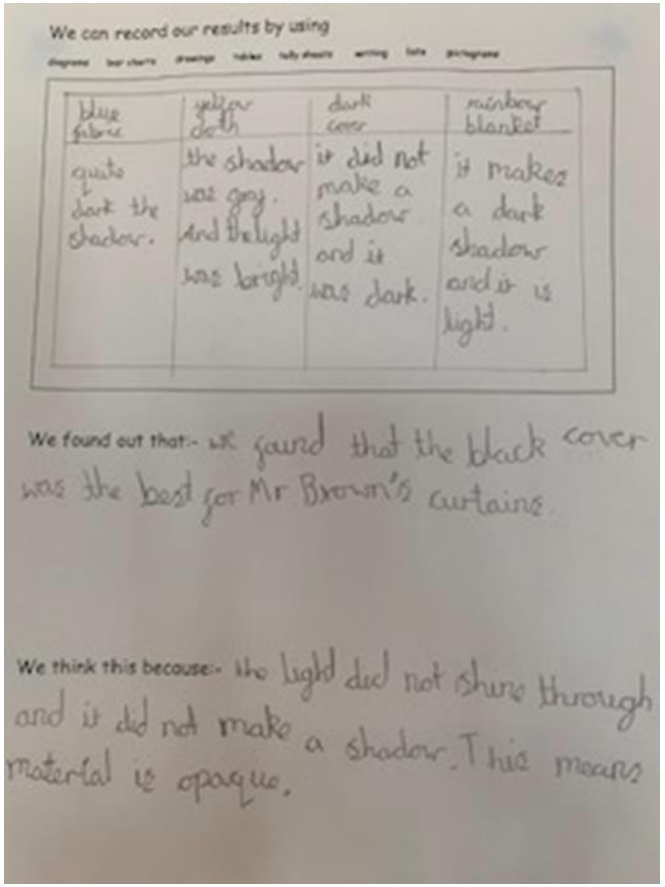
torch

object

First we will get some fabric

Then we will shine a torch through the fabric to see if we make a shadow.

This is what we think will happen: we think the black fabric will be opaque and will not make a shadow.



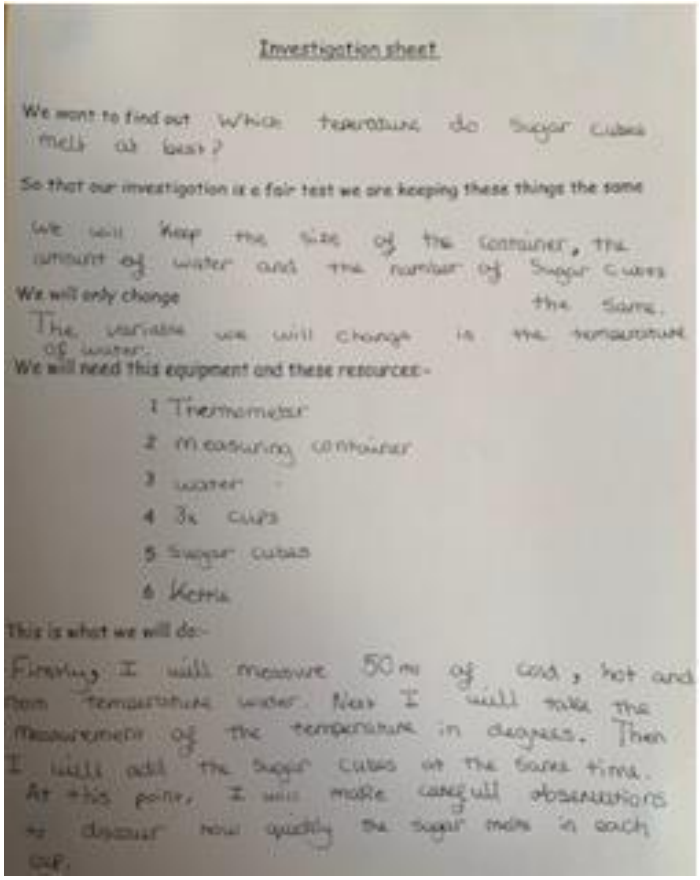
We can record our results by using

blue fabric	yellow cloth	dark cover	curtain blanket
quite dark the shadow.	the shadow was grey. And the light was bright.	it did not make a shadow and it was dark.	it makes a dark shadow and it is light.

We found out that:- we found that the black cover was the best for Mr Brown's curtains.

We think this because:- the light did not shine through and it did not make a shadow. This means material is opaque.

Year 4: *set up simple, practical enquiries and comparative and fair tests. Then make accurate measurements using standard units, using a range of equipment.*



Investigation sheet

We want to find out which temperature do sugar cubes melt at best?

So that our investigation is a fair test we are keeping these things the same

We will keep the size of the container, the amount of water and the number of sugar cubes the same.

We will only change

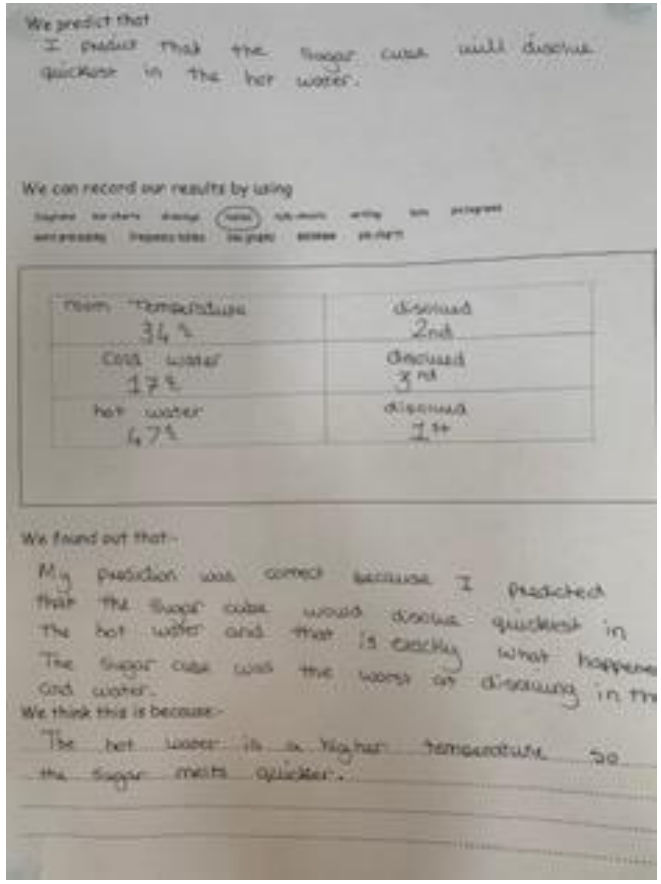
The variable we will change is the temperature of water.

We will need this equipment and these resources:-

1 Thermometer
2 measuring container
3 water
4 3x cups
5 Sugar cubes
6 Kettle

This is what we will do:-

Firstly I will measure 50ml of cold, hot and room temperature water. Next I will take the measurement of the temperature in degrees. Then I will add the sugar cubes at the same time. At this point, I will make careful observations to discover how quickly the sugar melts in each cup.



We predict that

I predict that the sugar cube will dissolve quickest in the hot water.

We can record our results by using

room temperature 34°	dissolved 2nd
cold water 17°	dissolved 3rd
hot water 47°	dissolved 1st

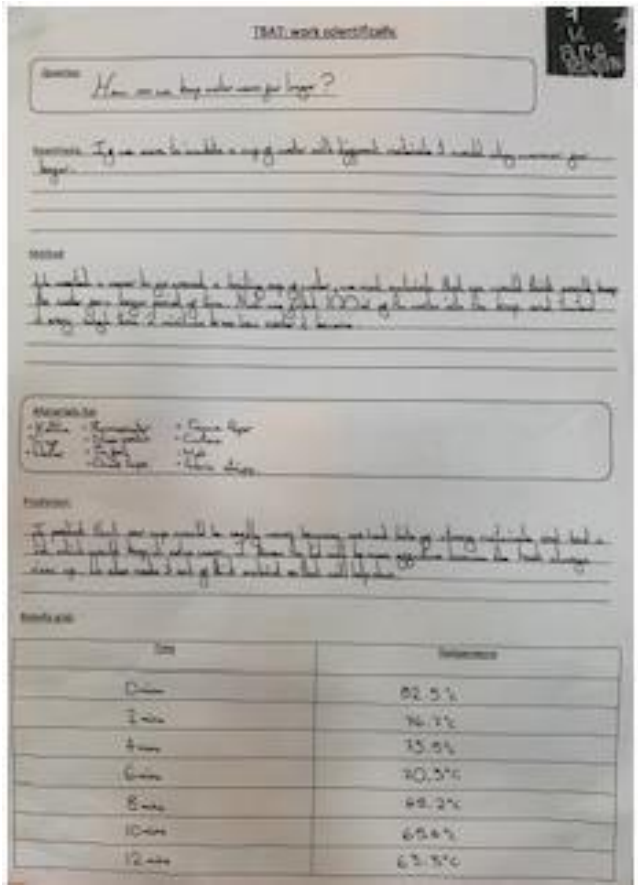
We found out that:-

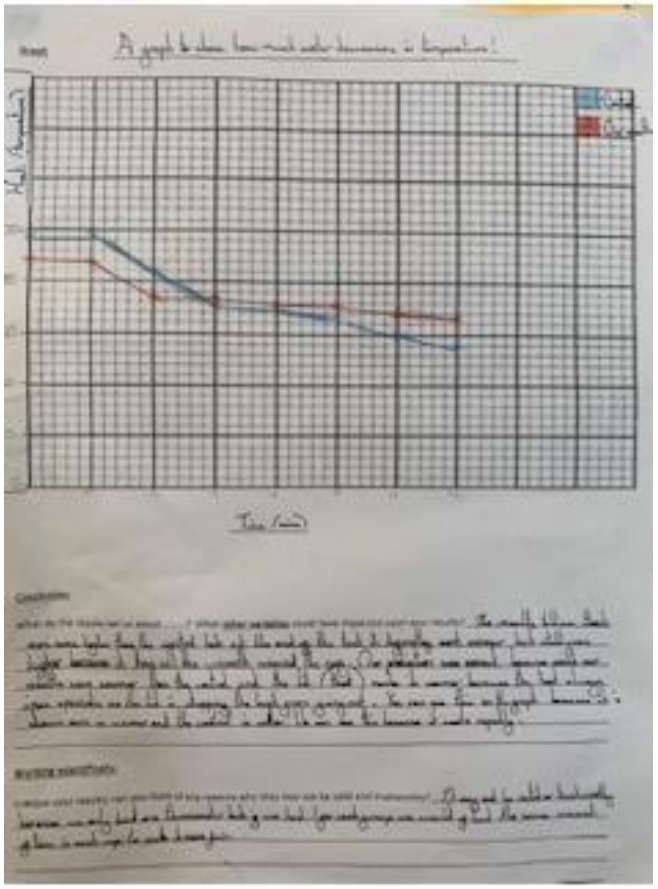
My prediction was correct because I predicted that the sugar cube would dissolve quickest in the hot water and that is exactly what happened. The sugar cube was the worst at dissolving in the cold water.

We think this is because:-

The hot water is a higher temperature so the sugar melts quicker.

Year 5: *children plan enquiries, including recognising and controlling variables where necessary.*





Year 6: *children report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.*