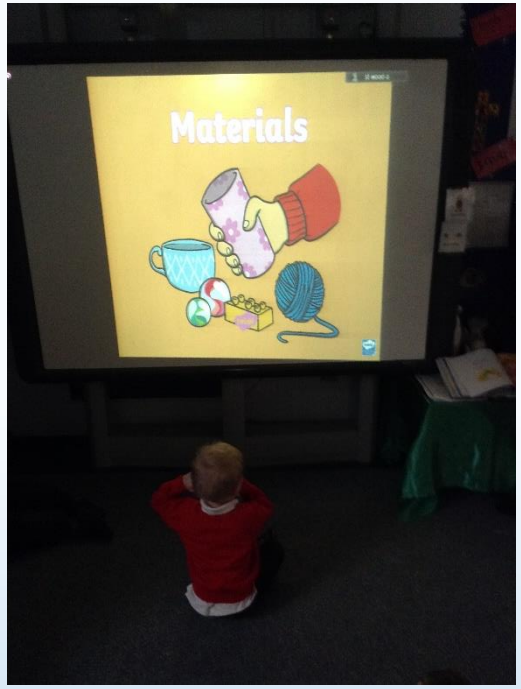
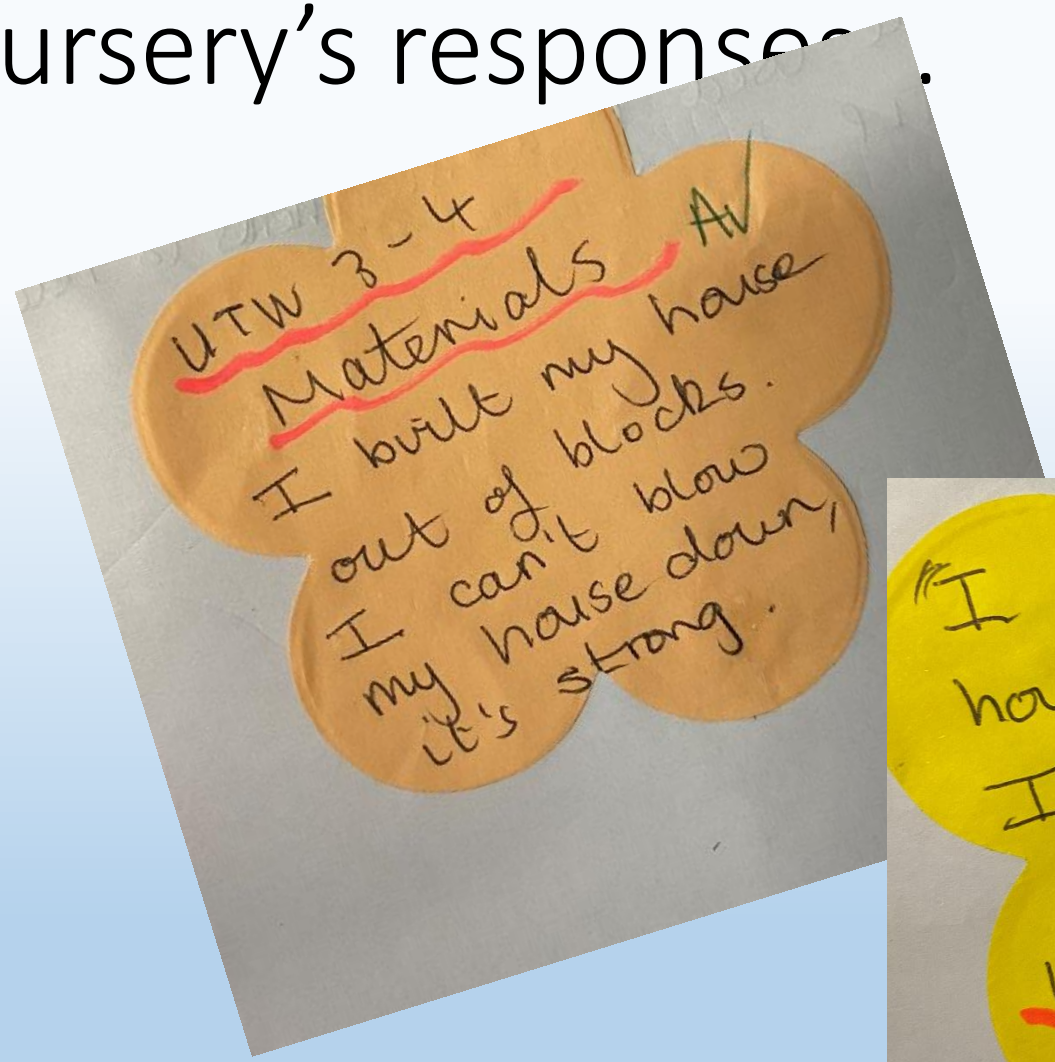


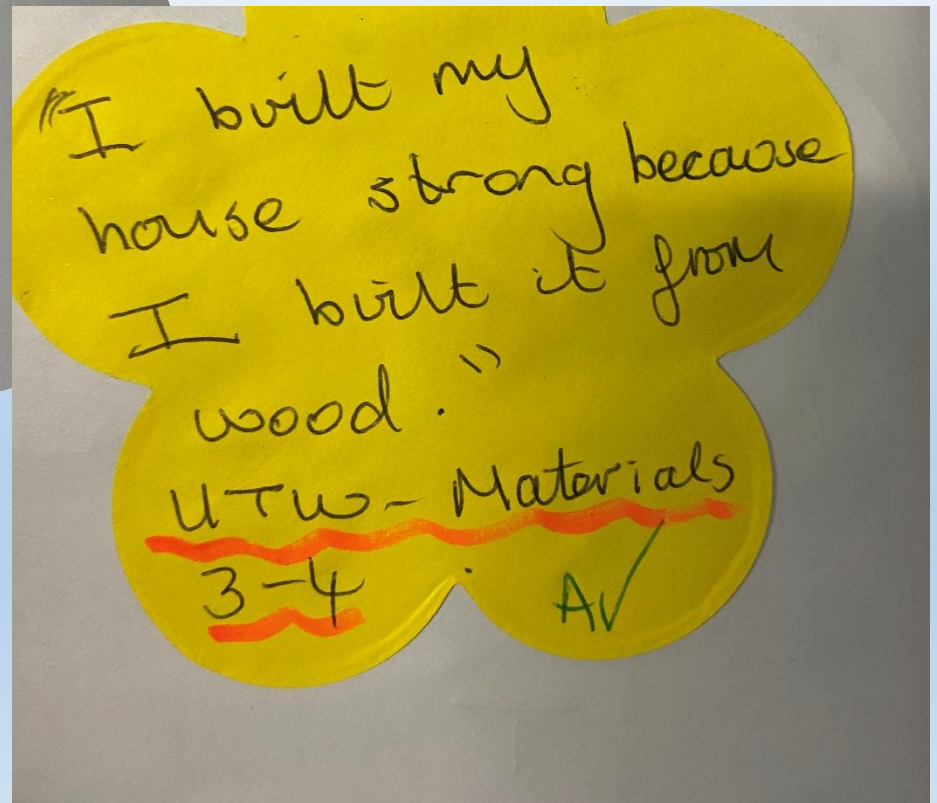
Nursery

Which material will be the strongest so that the Big Bad Wolf cannot blow it down?

Nursery: working on their strong houses…

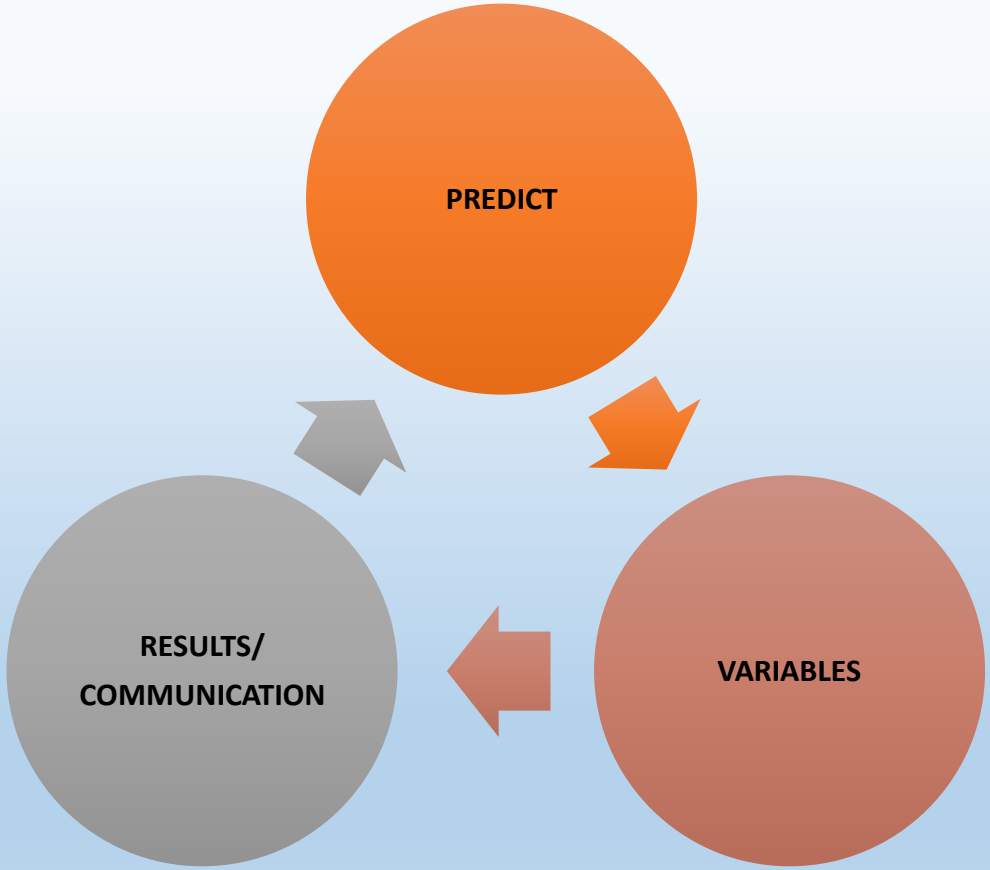
Nursery's responses.





Reception's science investigation

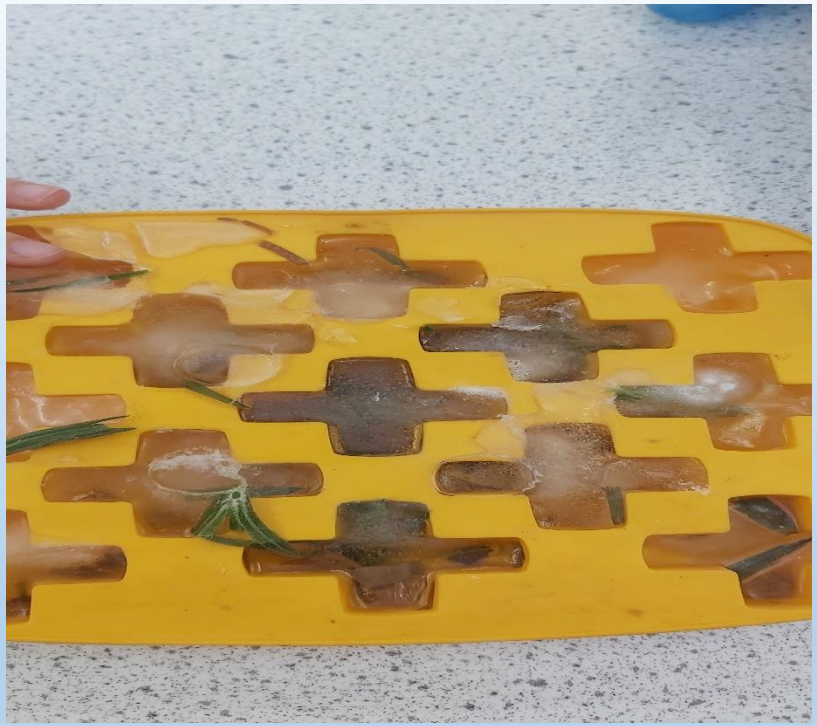
Successful Testing



Stimulus?

What can make ice melt faster or slower?

We froze some water in an ice cube tray



The fair test….

- An Ice cube was put into a cup
- We looked at each ice cube every minute
- One ice cube went back into the freezer
- One ice cube had salt added
- One ice cube was held in the cup in our hands

Children at home completed the experiment too.

Some photographs of the experiment

Results

The children noticed that the ice cube in the cup being held melted the quickest. They were not expecting the ice with the salt to melt But it did!

Salt melts ice as well as heat!

What did I learn?

Salt stops us from slipping

The freezer kept the ice cube frozen.

The ice cube melted because it was warm.

What did they learn?

The children learnt that salt melts ice.

Ice is sprinkled on the road so it is safe to drive when it is icy.

It stops us from slipping when when salt is put on the path around school when the weather is freezing.

Reception children enjoyed carrying out the investigation

Year 1

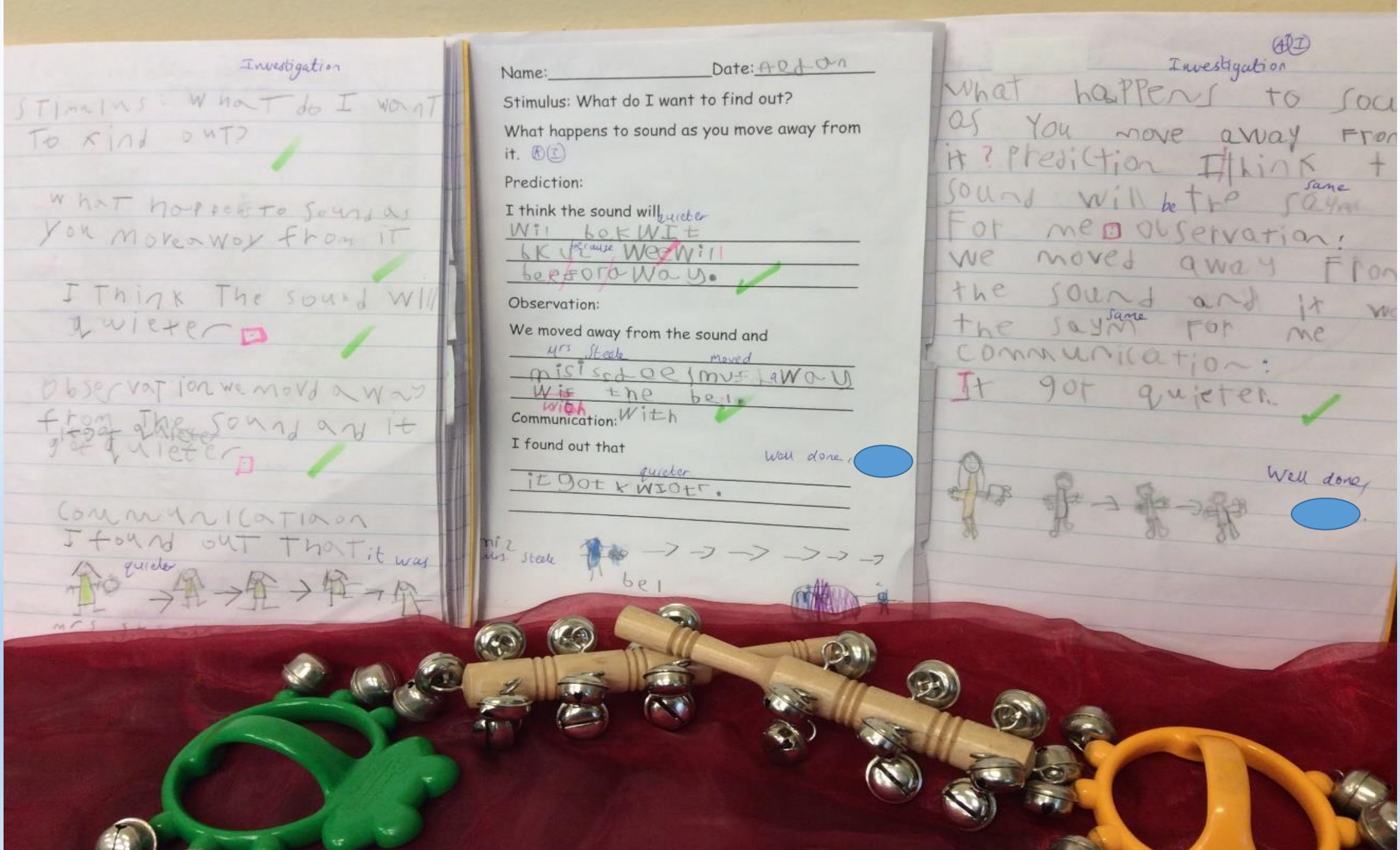
Science Investigation: What happens to sound when you walk away from it?

Investigation Planning Boards

What we did

- We wanted to find out what happens to sound the further away we are.

- Mrs Steele stayed in one spot, every time she rang the bell we took one step away.


Investigation
Stimulus: What do I want To find out?
what happens to sound as you move away from it
I think The sound will get quieter
Observation we moved away from The sound and it got quieter
Communication I found out That it was
quieter
Name: Date: Add on
Stimulus: What do I want to find out?
What happens to sound as you move away from it. A I
Prediction:
I think the sound will quieter
because
Observation:
We moved away from the sound and
Communication:
I found out that
quieter
Investigation A I
What happens to sou as You move away Fro it? Prediction I think t sound will be the same
For me observation: we moved away Fro the sound and it w the same for me communication: It got quieter.
Well done
Well done

Year 2

Science Investigation: We were looking at different investigations.

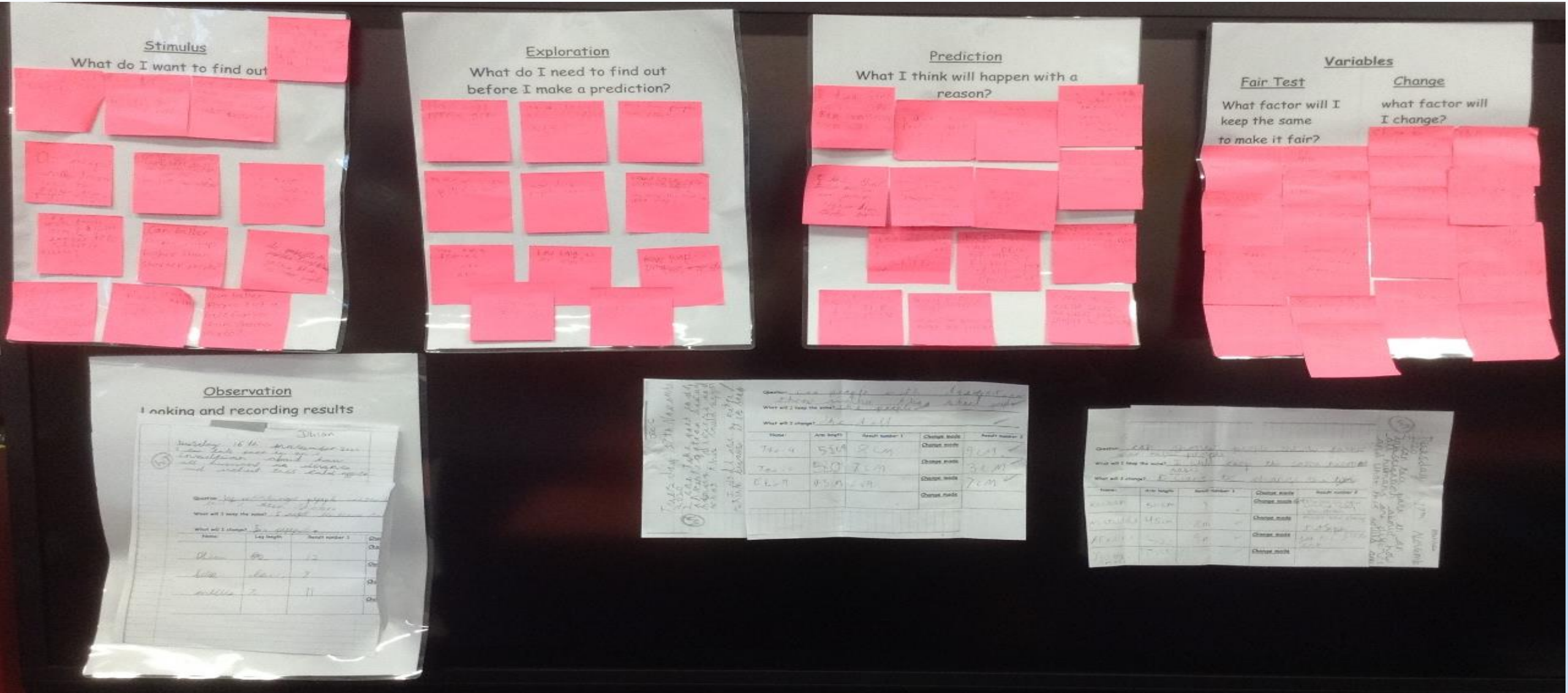
Can taller people jump higher than shorter people?

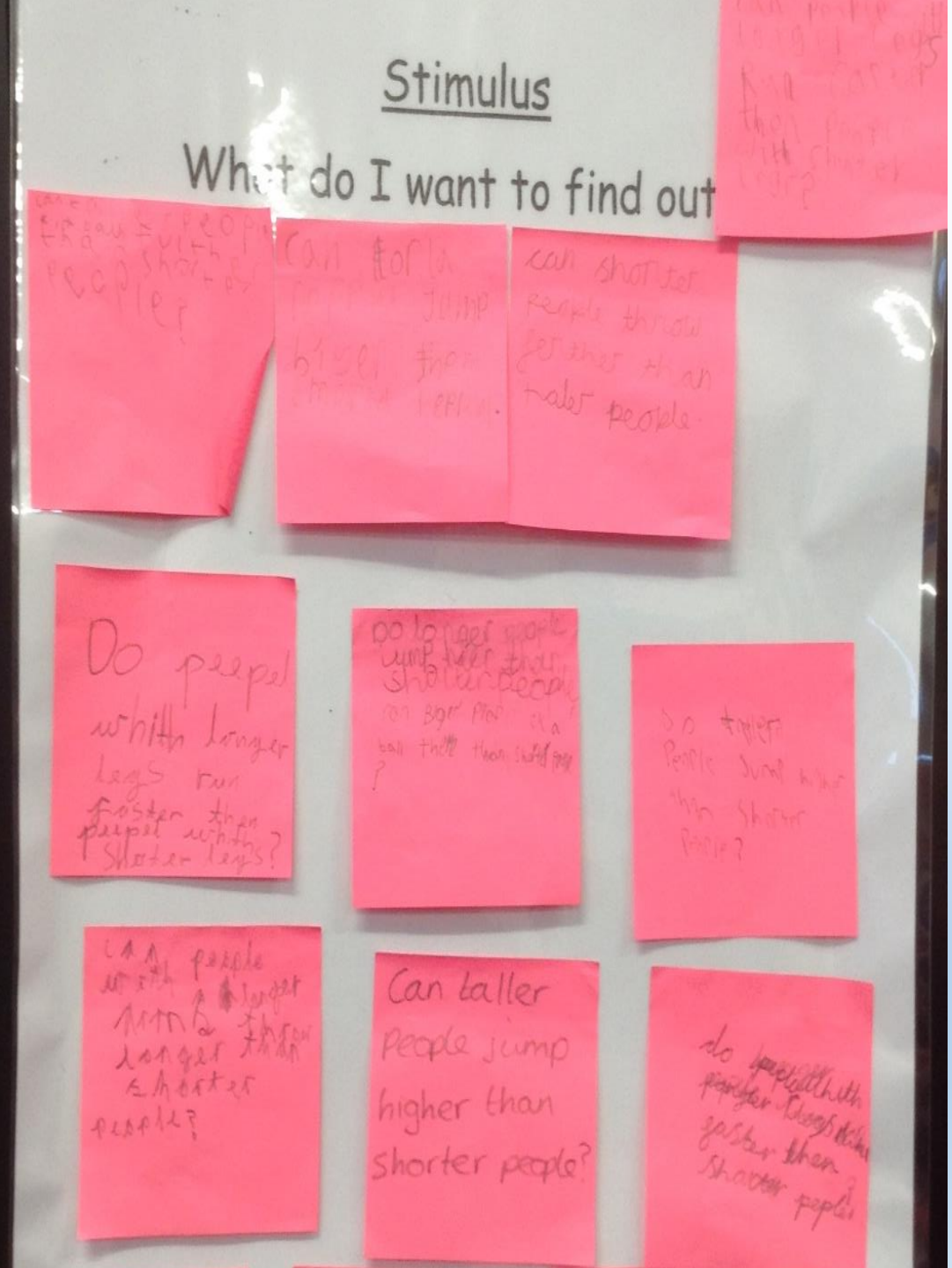
Call taller people kick a ball further than shorter people?

Do people with longer legs run faster than people with shorter legs?

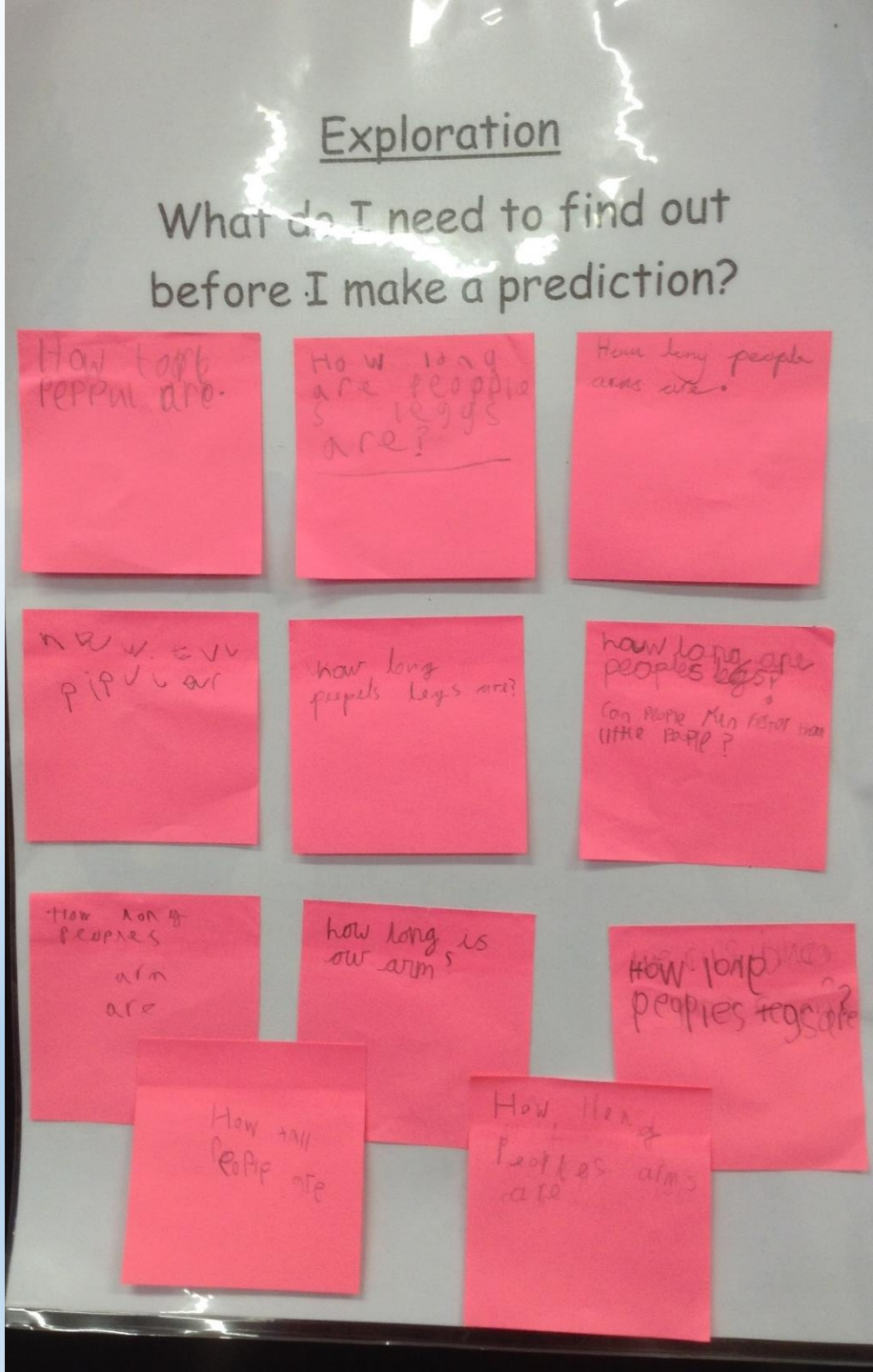
Can people with longer arms throw further than people with shorter arms?

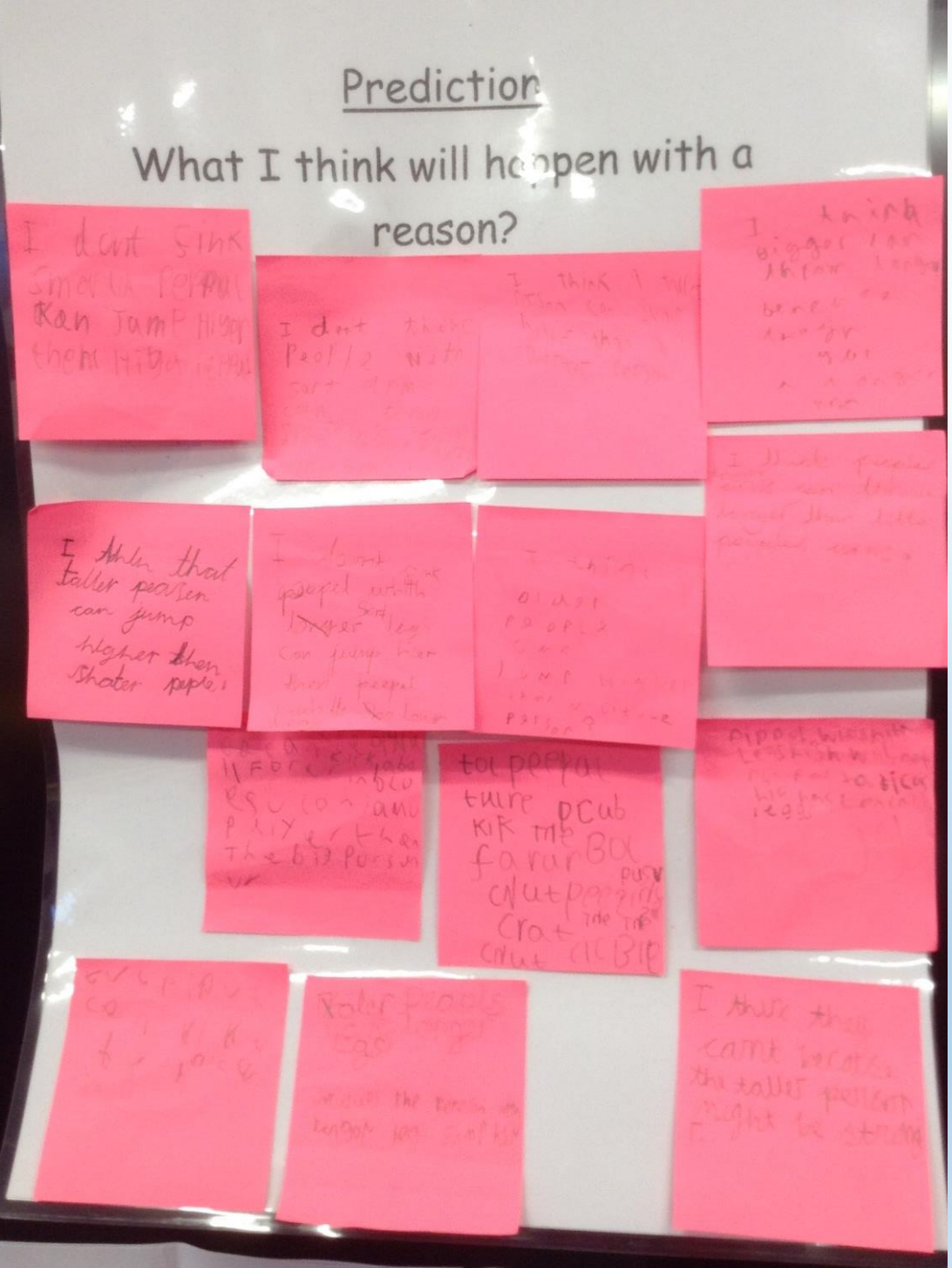
Investigation Planning Boards



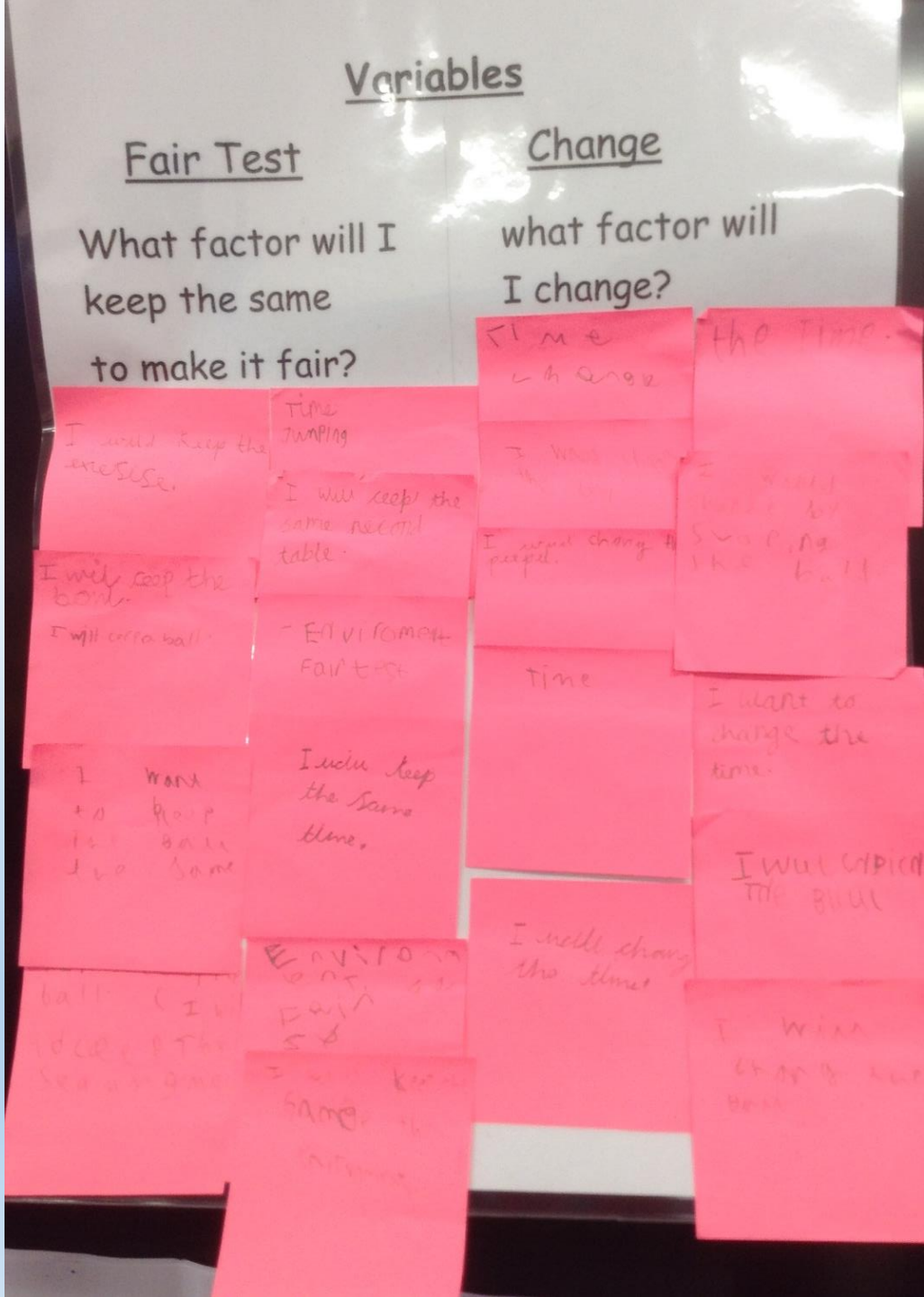


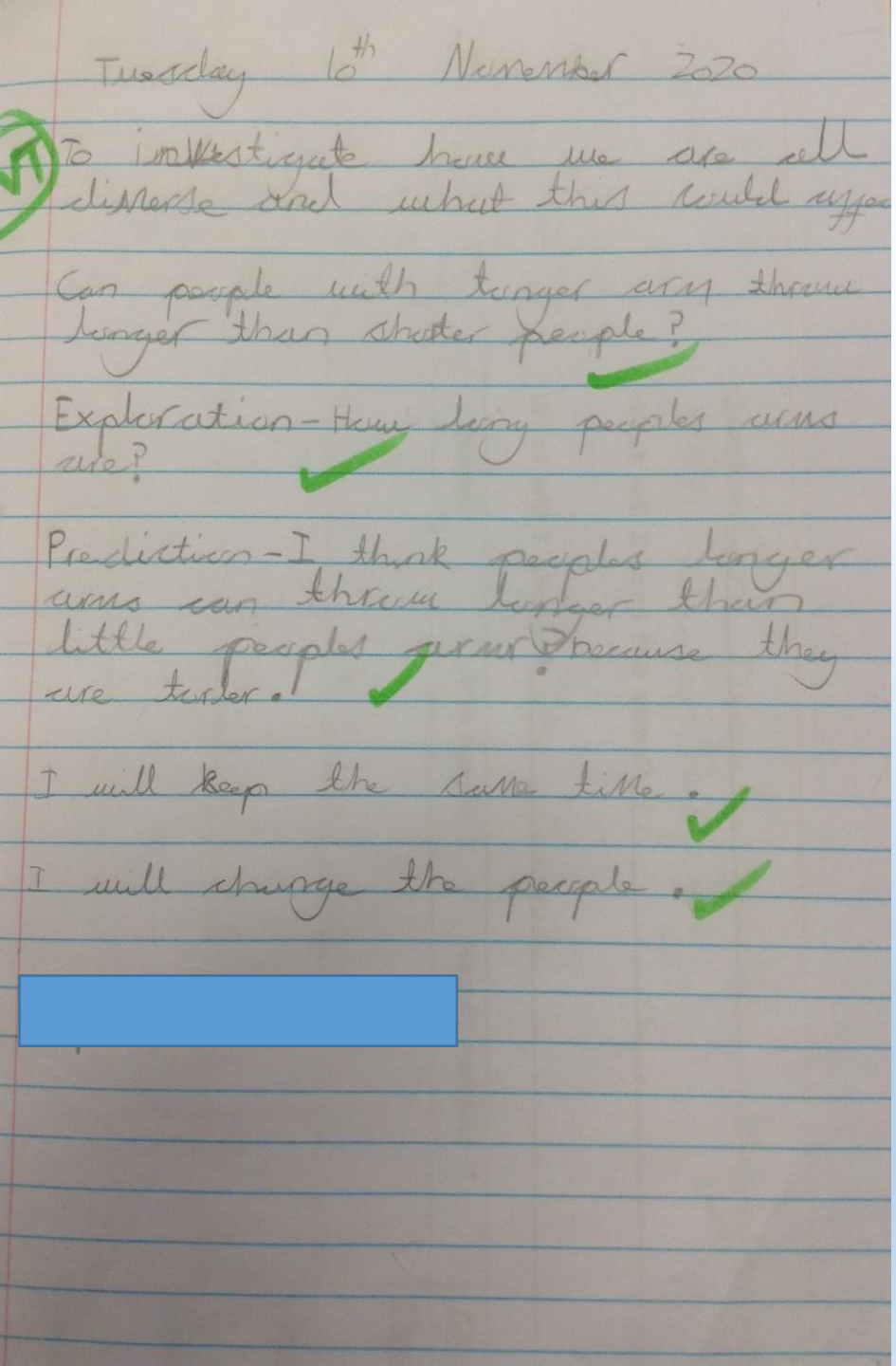
We each had a post-it note to write down our ideas, we then stuck them onto the planning boards and discussed our ideas as a class.



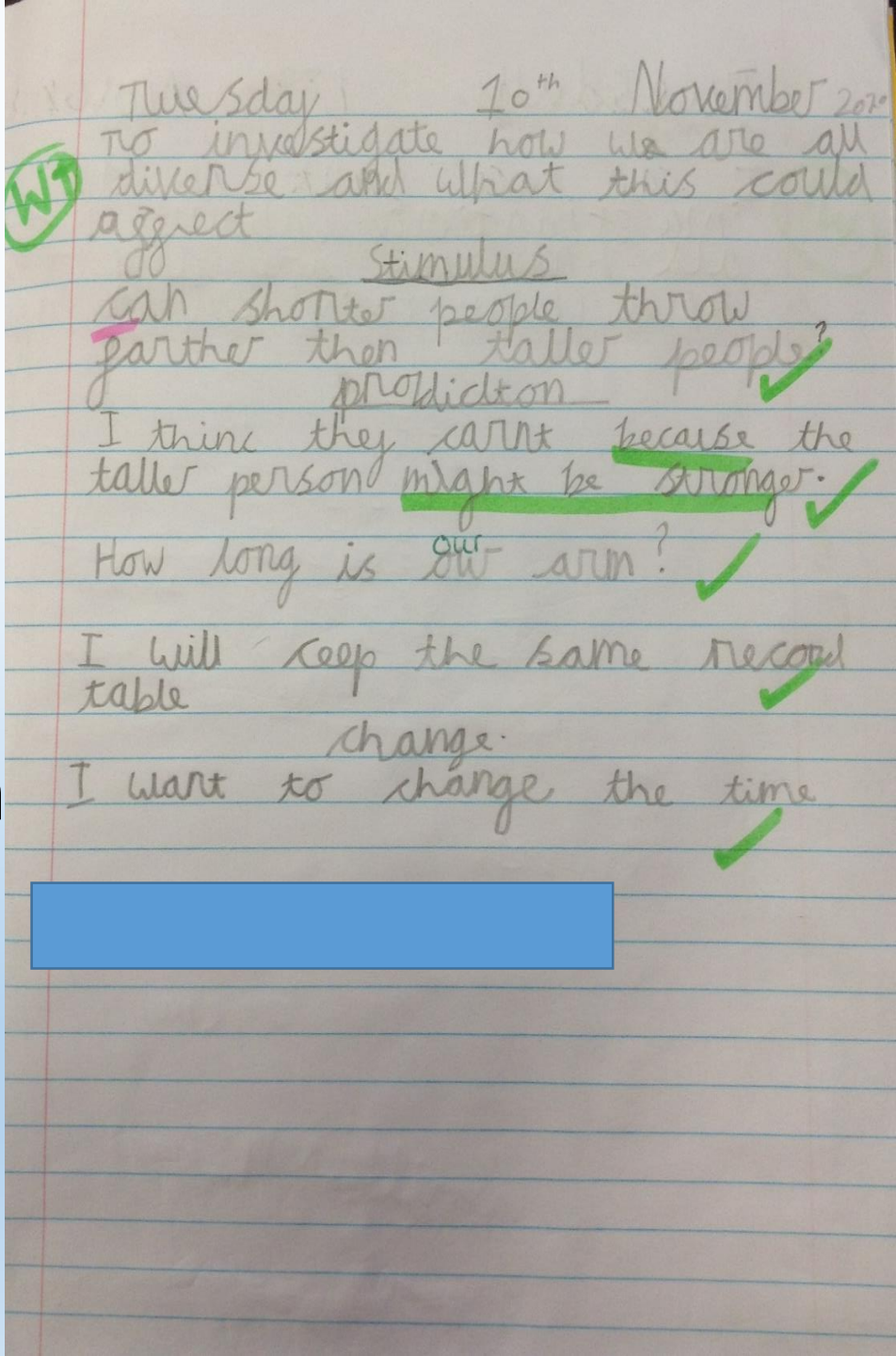


We made sure it was a fair test so that our results would be as accurate as possible.





After we completed the boards, we started writing the investigation independently in our books.



What we did

We wanted to find out if taller people jump higher than shorter people.

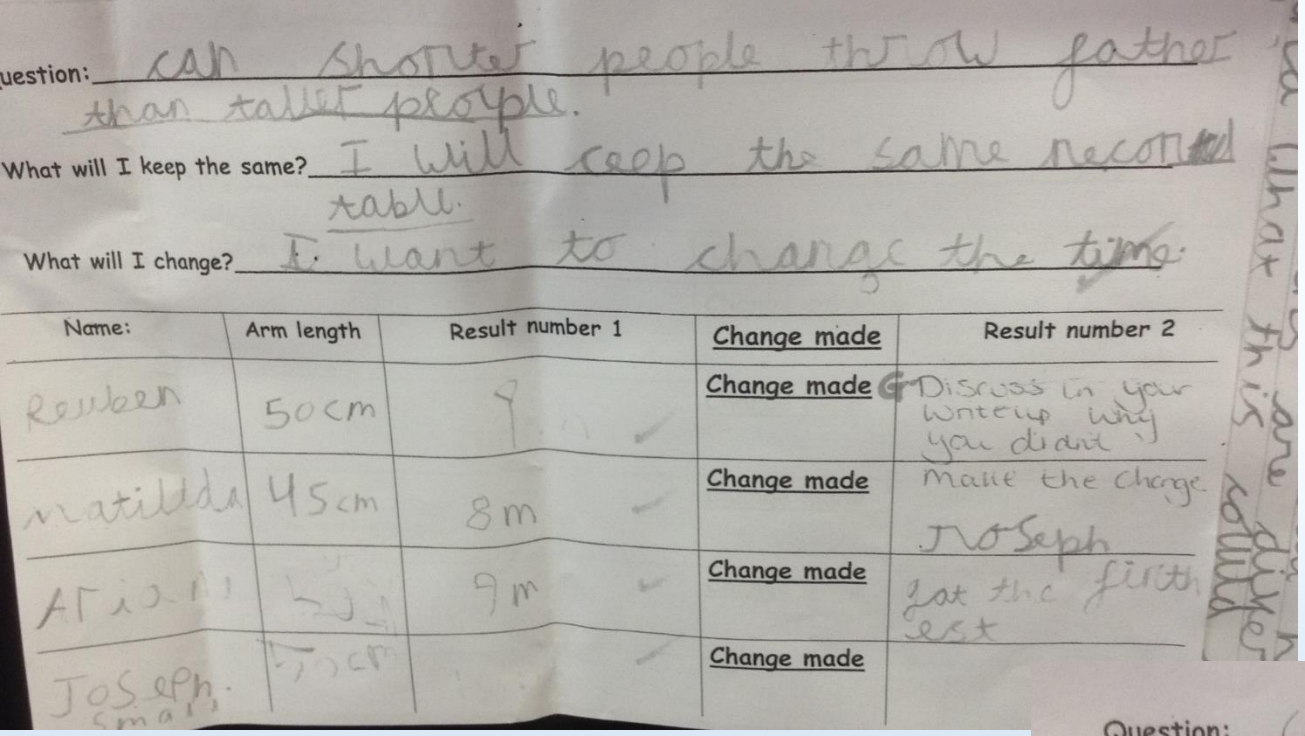
We used metre sticks to measure the jumps we did.

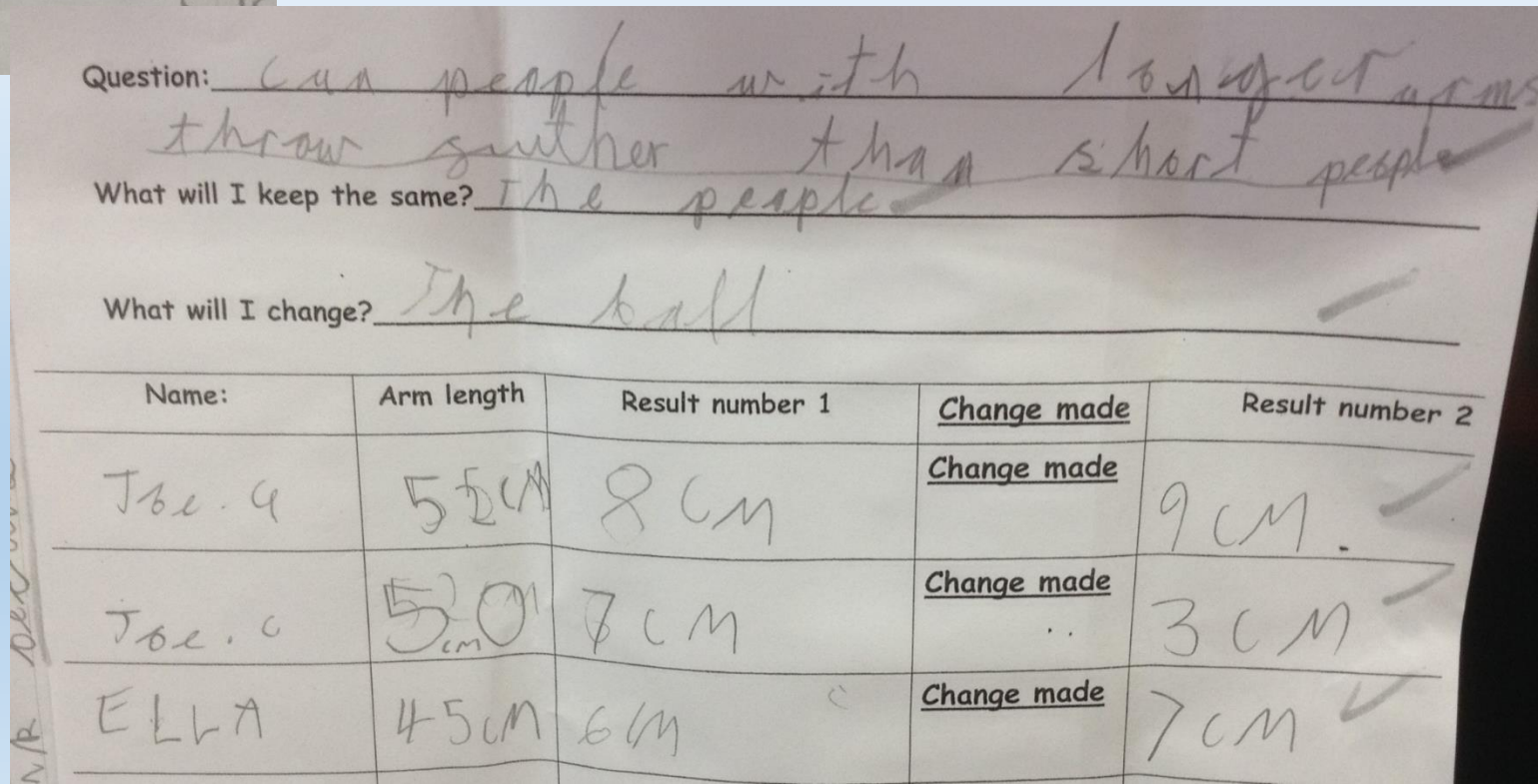
We timed each other running from one side of the playground to the other to see if people with longer legs run faster than people with shorter legs.

We threw a ball across the playground and used a metre stick to measure the distance.

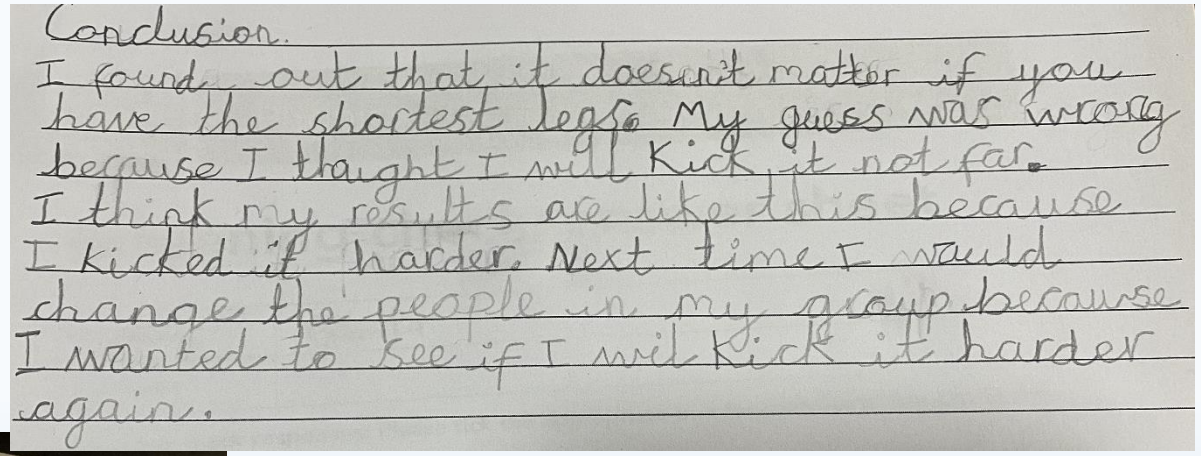
We worked in groups to complete the investigation and record our results.

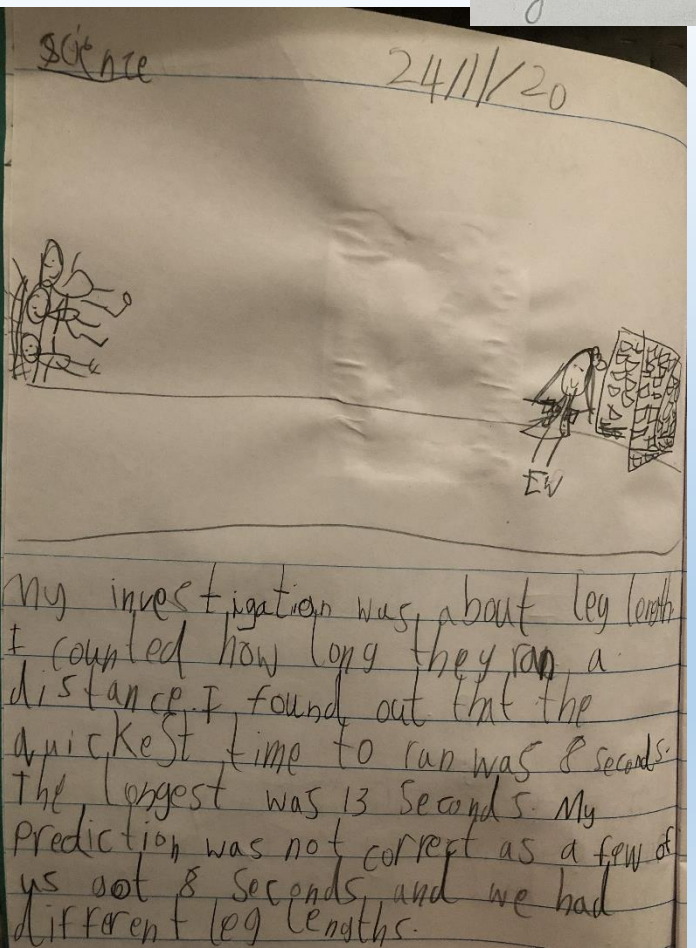
We completed a table of our results.





What did we find out?


Conclusion.
I found out that it doesn't matter if you have the shortest legs. My guess was wrong because I thaught I will kick it not far.
I think my results are like this because I kicked it harder. Next time I would change the people in my group because I wanted to see if I will kick it harder again.

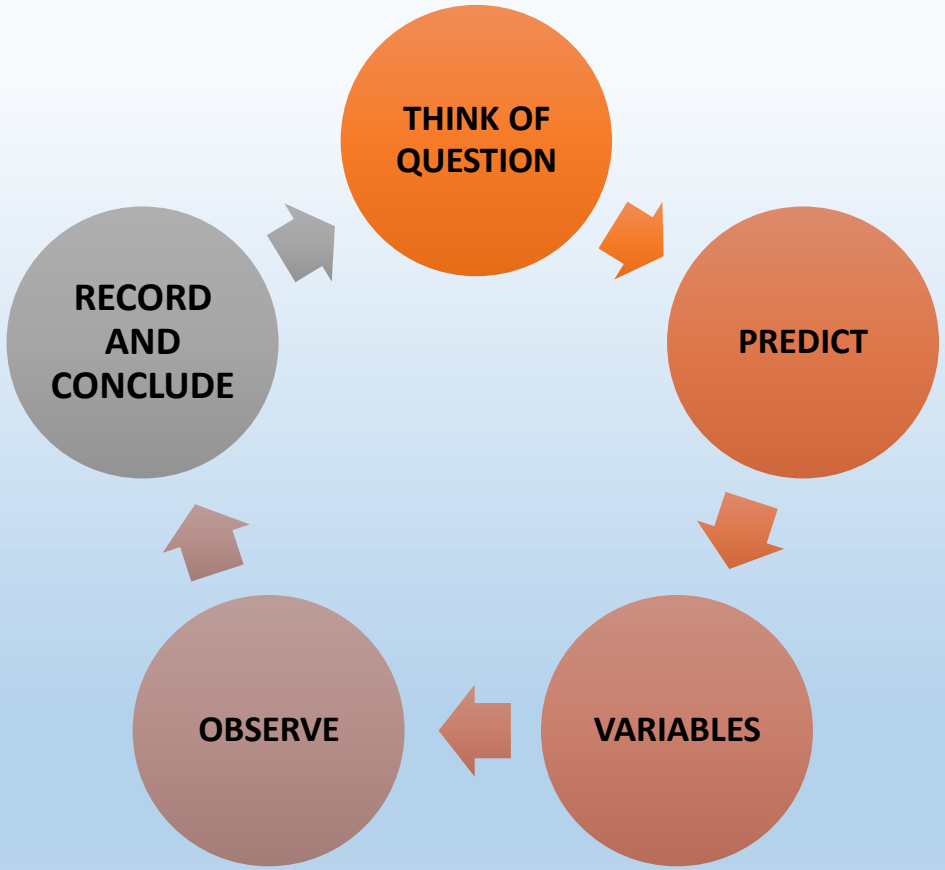

Science 24/11/20
Ev
My investigation was about leg length I counted how long they ran a distance. I found out that the quickest time to run was 8 seconds. The longest was 13 seconds. My prediction was not correct as a few of us got 8 seconds and we had different leg lengths.

Were our predictions correct?

We worked hard to write the conclusion to our investigation.

Year Three's science investigation

Successful Testing



Stimulus?

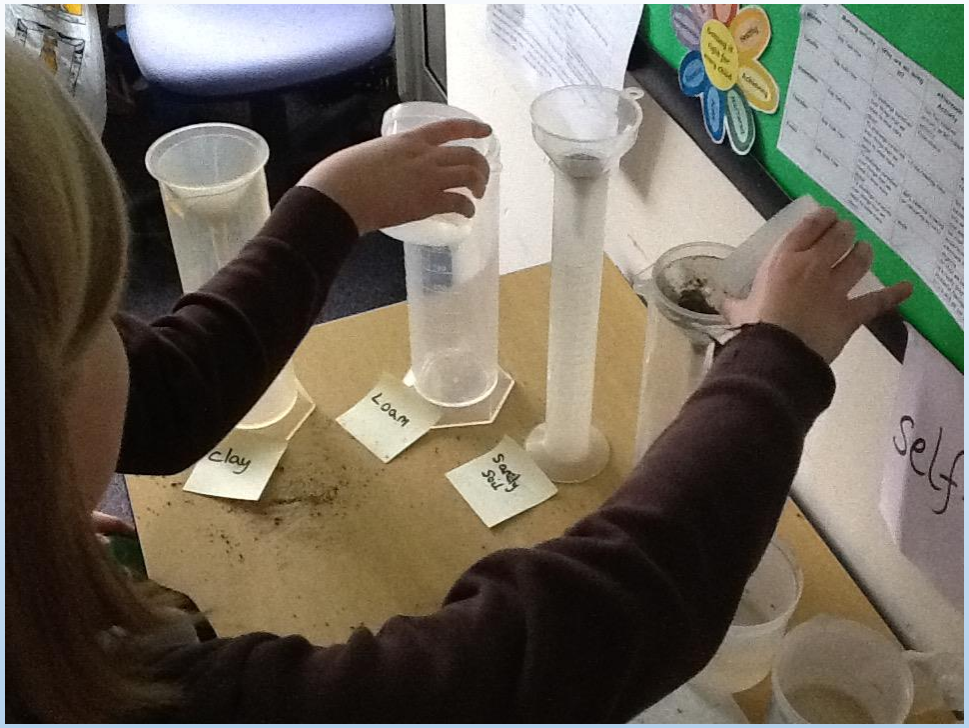
What Soil is the most Permeable?

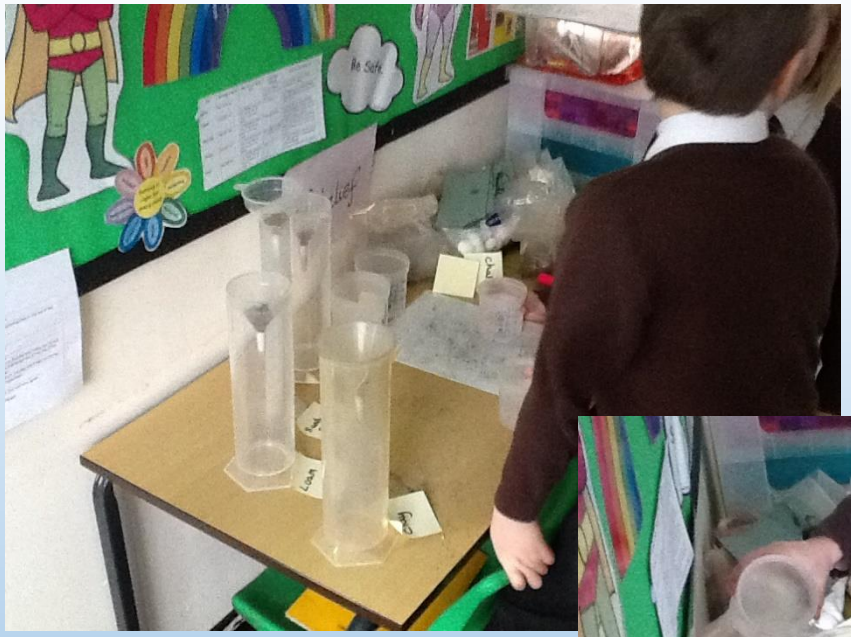
WE poured water over soils and watched to see which one drained the most water.

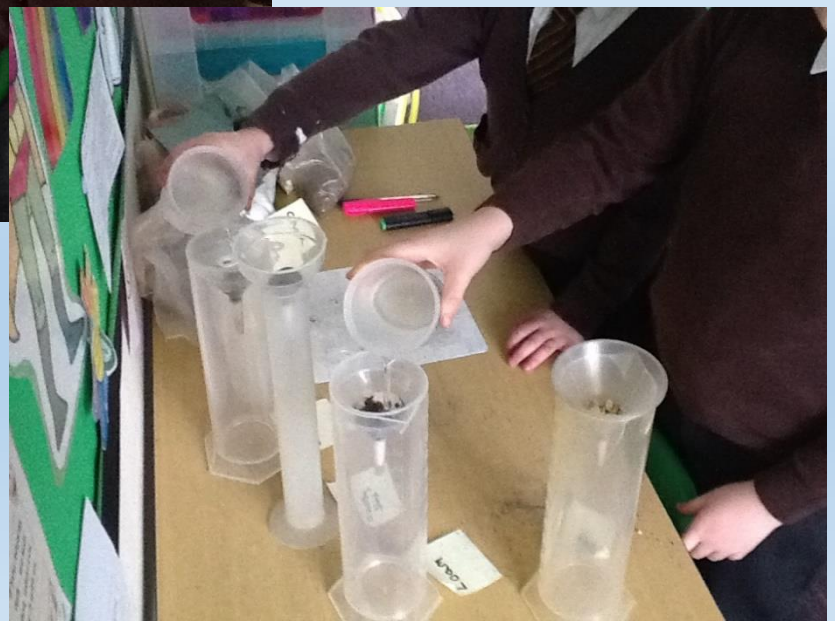
The fair test….

- The same amount of soil
- The same amount of water
- The same size beaker
- The same time to observe.

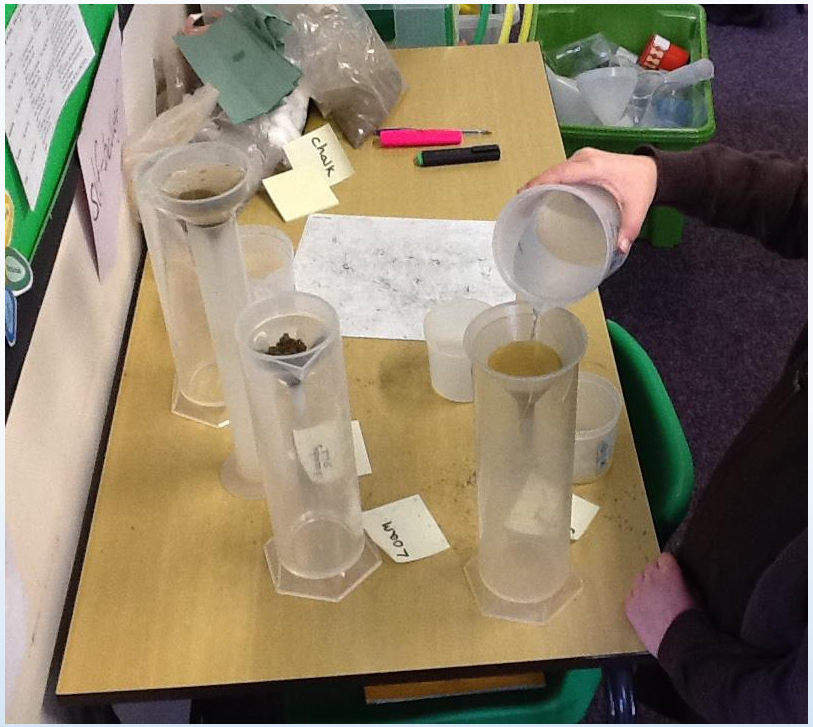
Some photographs of the experiment

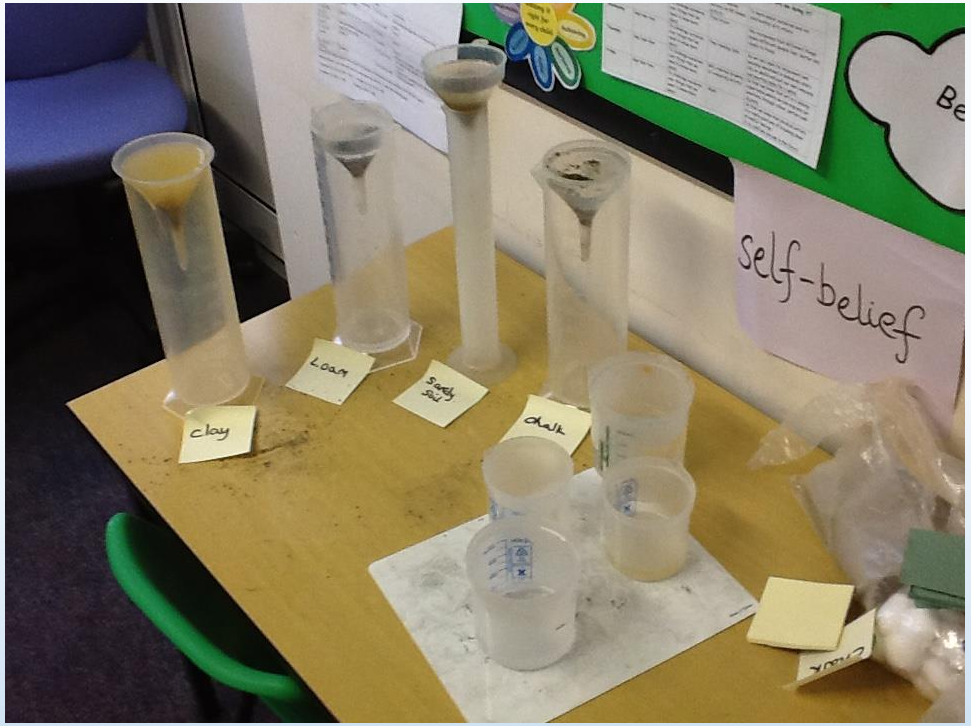


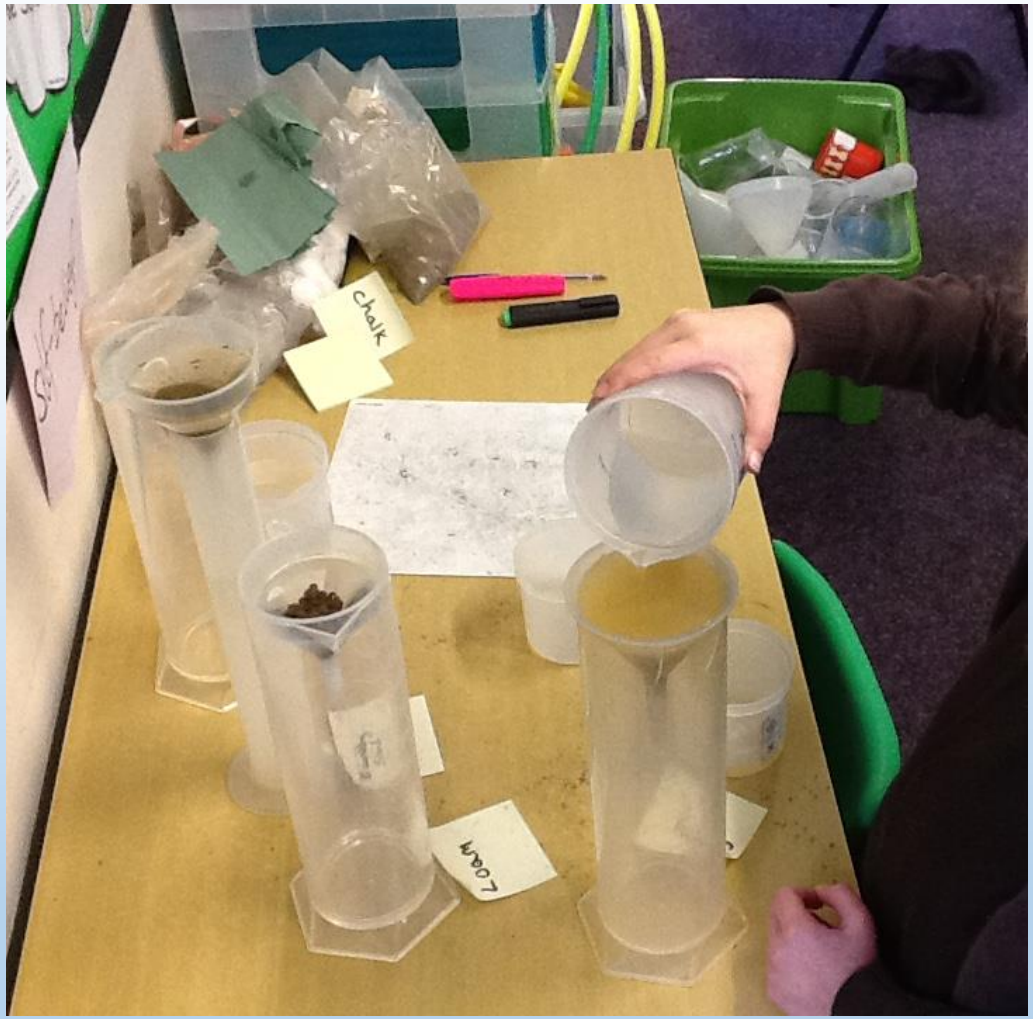




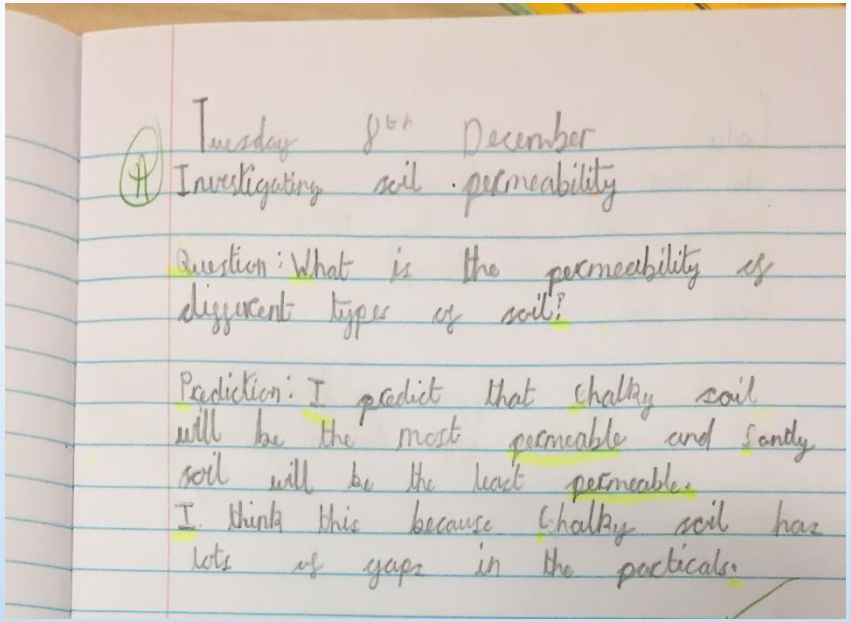

Loam
Sandy Soil
Chalk


chalk


self-belief
clay
Loam
chalk


chalk

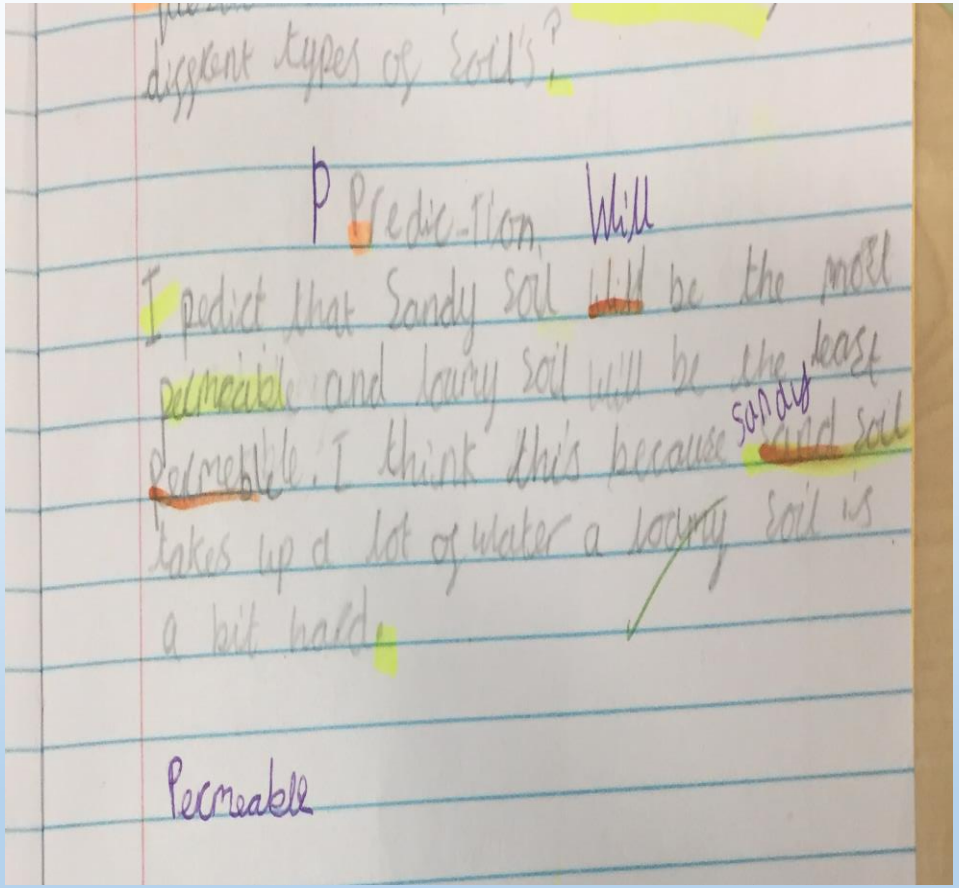
We wrote our Predictions



Tuesday 8th December
Investigating soil permeability

Question: What is the permeability of different types of soil?

Prediction: I predict that chalky soil will be the most permeable and Sandy soil will be the least permeable.
I think this because chalky soil has lots of gaps in the particals.



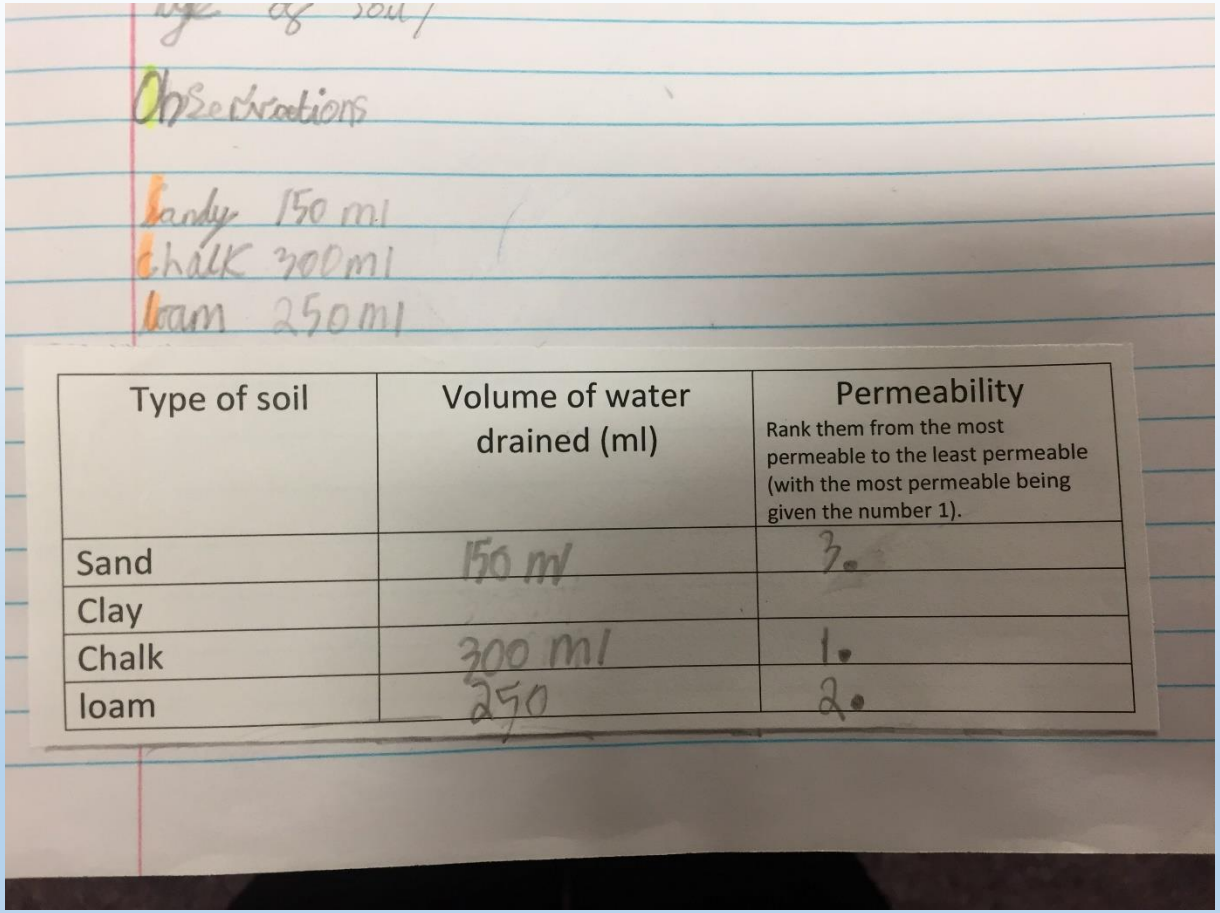
different types of soil's?

Prediction Will

I predict that Sandy soil will be the most permeable and loamy soil will be the least permeable. I think this because sandy soil takes up a lot of water a loamy soil is a bit hard.

Permeable

We recorded the results

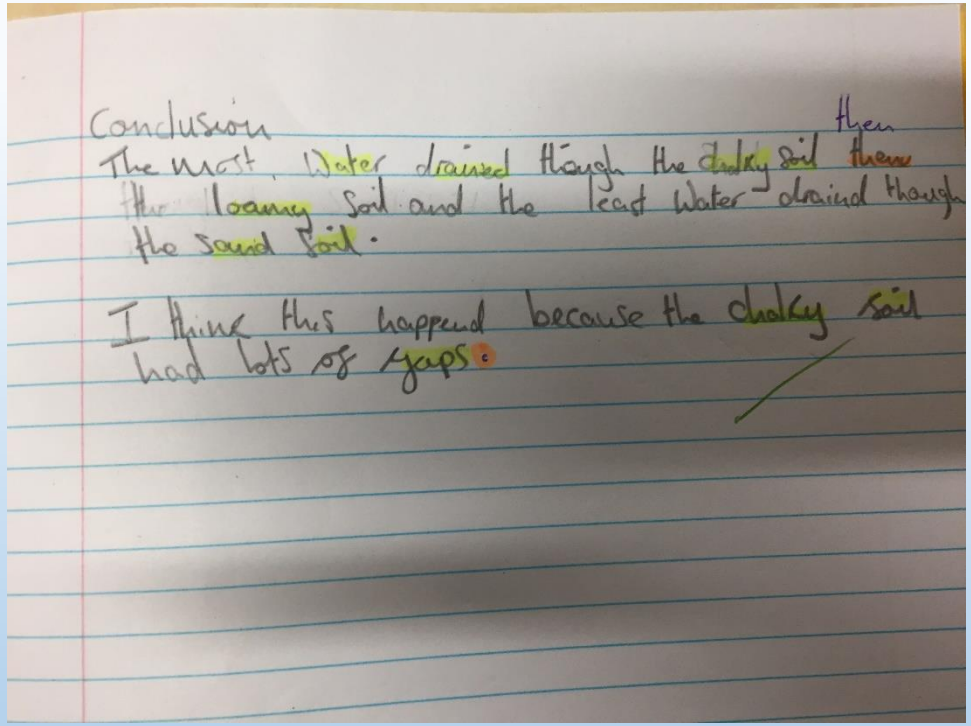


Observations

Sandy 150 ml
Chalk 300 ml
loam 250 ml

Type of soil	Volume of water drained (ml)	Permeability Rank them from the most permeable to the least permeable (with the most permeable being given the number 1).
Sand	150 ml	3.
Clay		
Chalk	300 ml	1.
loam	250	2.

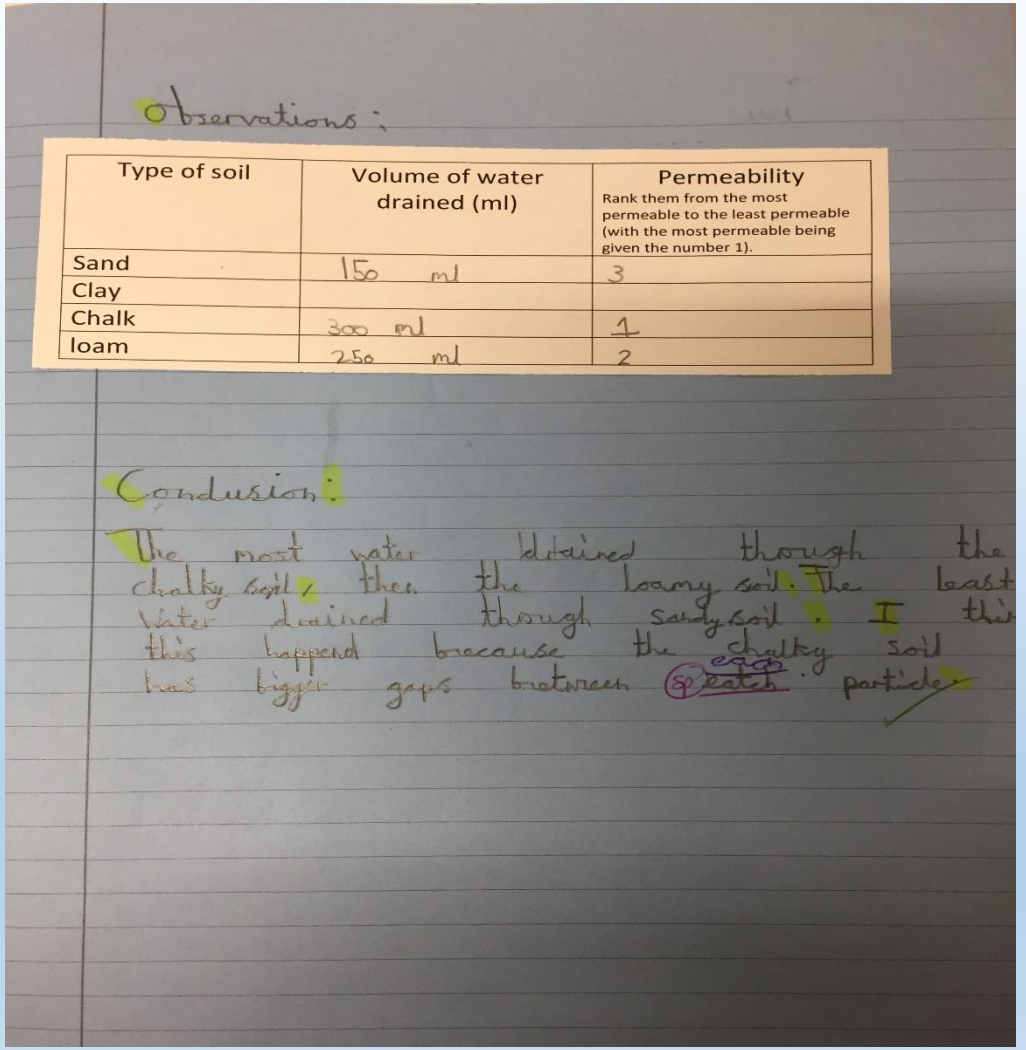
We wrote our conclusions



Conclusion

The most water drained though the chalky soil then the loamy soil and the least water drained though the sand soil.

I think this happend because the chalky soil had lots of gaps



Observations:

Type of soil	Volume of water drained (ml)	Permeability Rank them from the most permeable to the least permeable (with the most permeable being given the number 1).
Sand	150 ml	3
Clay		
Chalk	300 ml	1
loam	250 ml	2

Conclusion:

The most water drained through the chalky soil, then the loamy soil. The least water drained though sandy soil. I think this happend because the chalky soil has bigger gaps between each particle.

Communication

We found out that water drained through the chalky soil the most.
The least water drained through the sandy soil.
We think that the chalky soil was the most permeable because it had bigger gaps between each particle.

What did I learn?

Permeable means it allows liquid to pass through

The sandy soil was the least permeable.

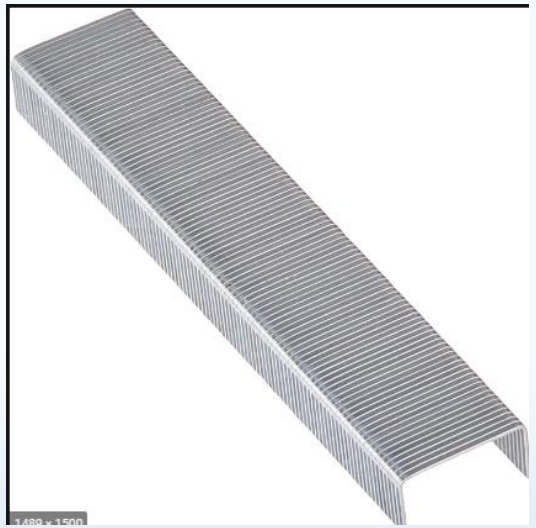
The chalky soil was the most permeable

Year 4

Investigating Electrical Conductors!

Which materials make the best conductors in an electrical circuit?

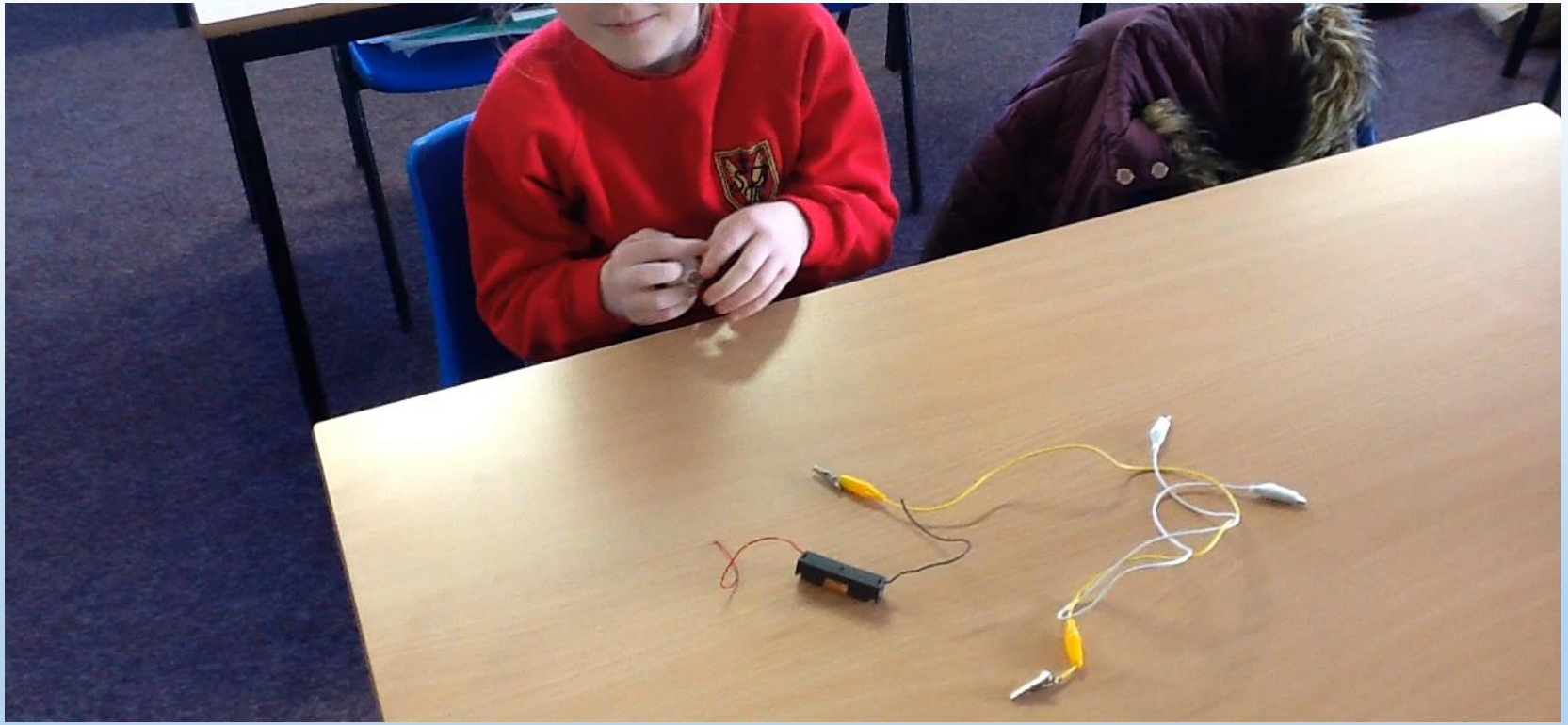
Foam

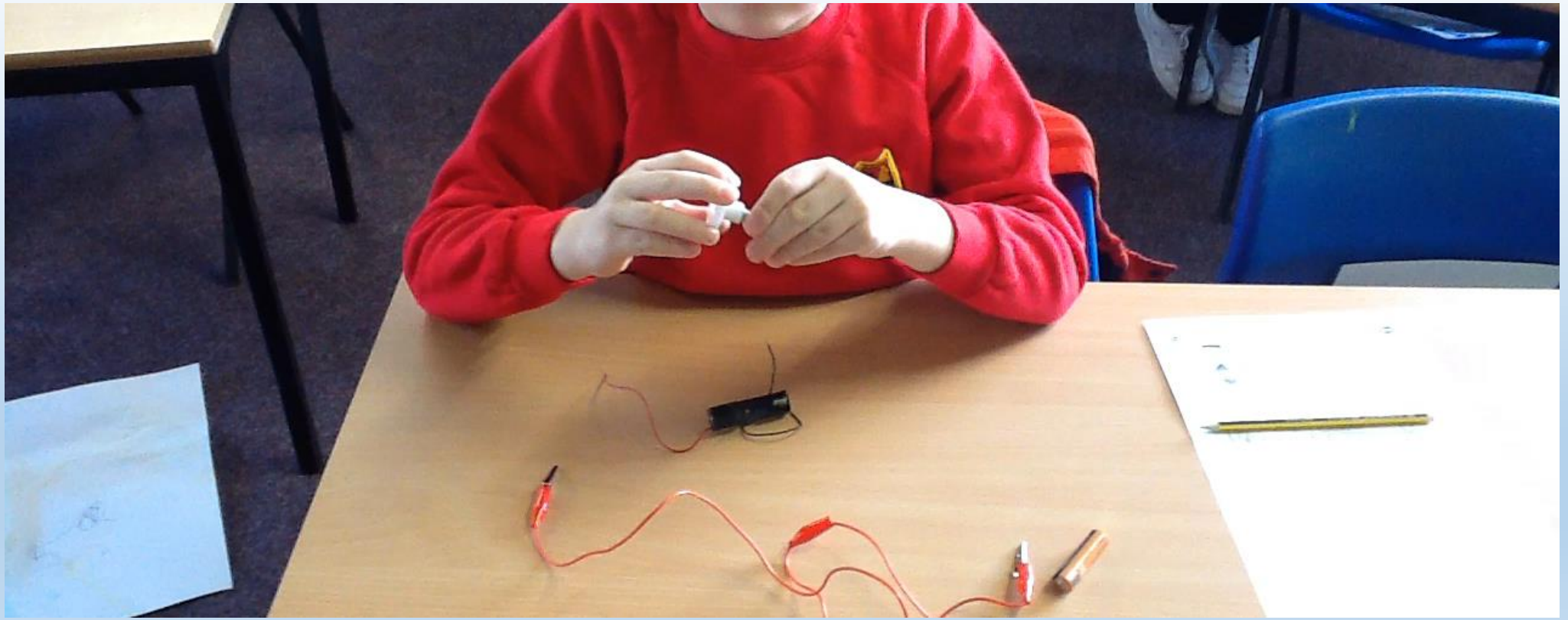


Metal

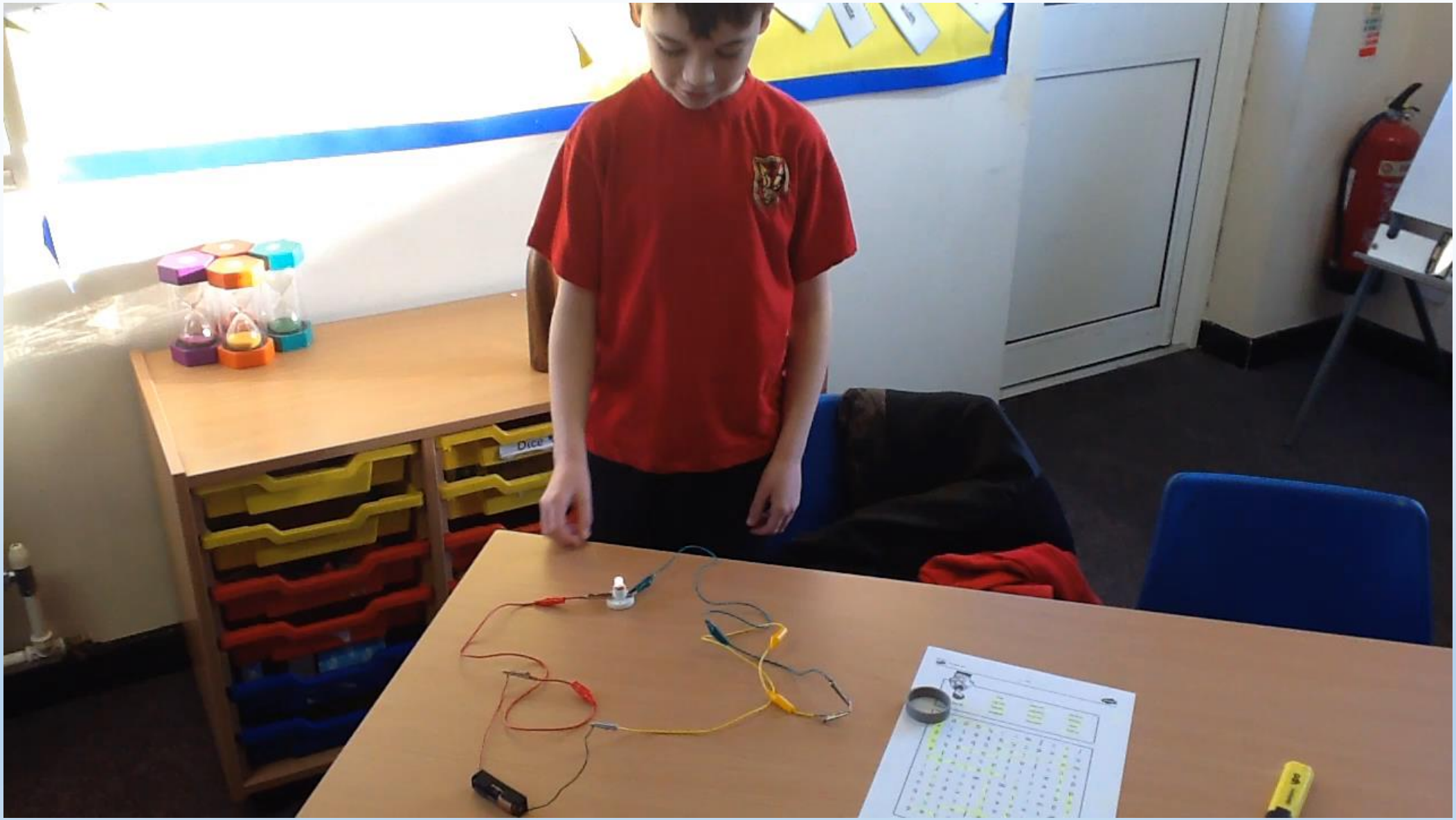
Paper

Rubber

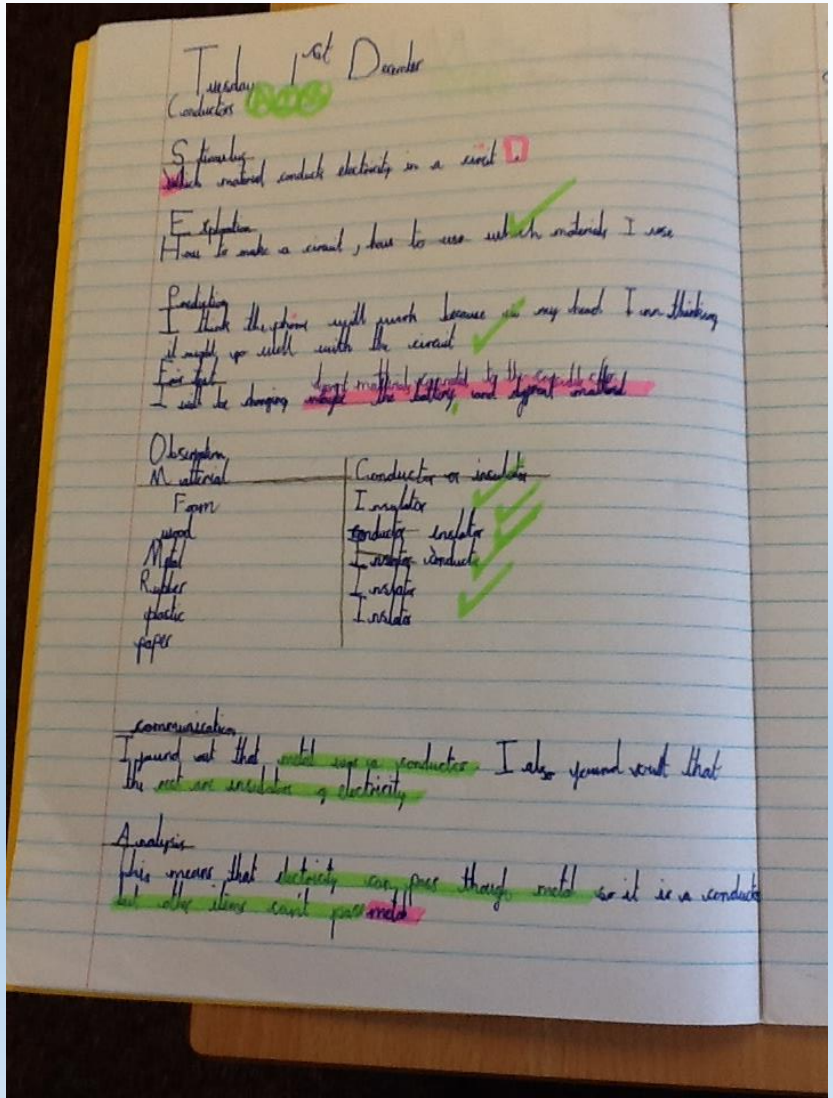


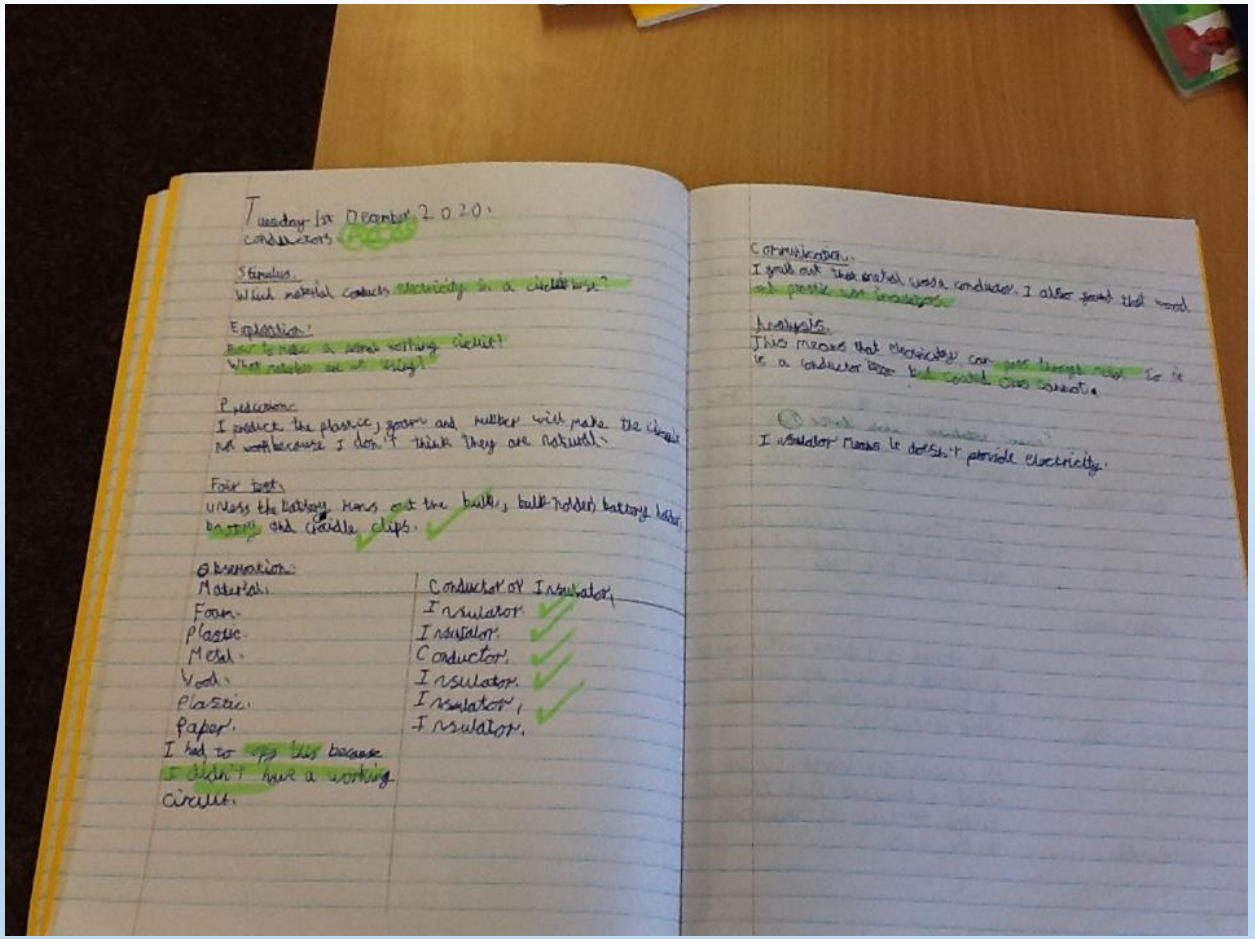


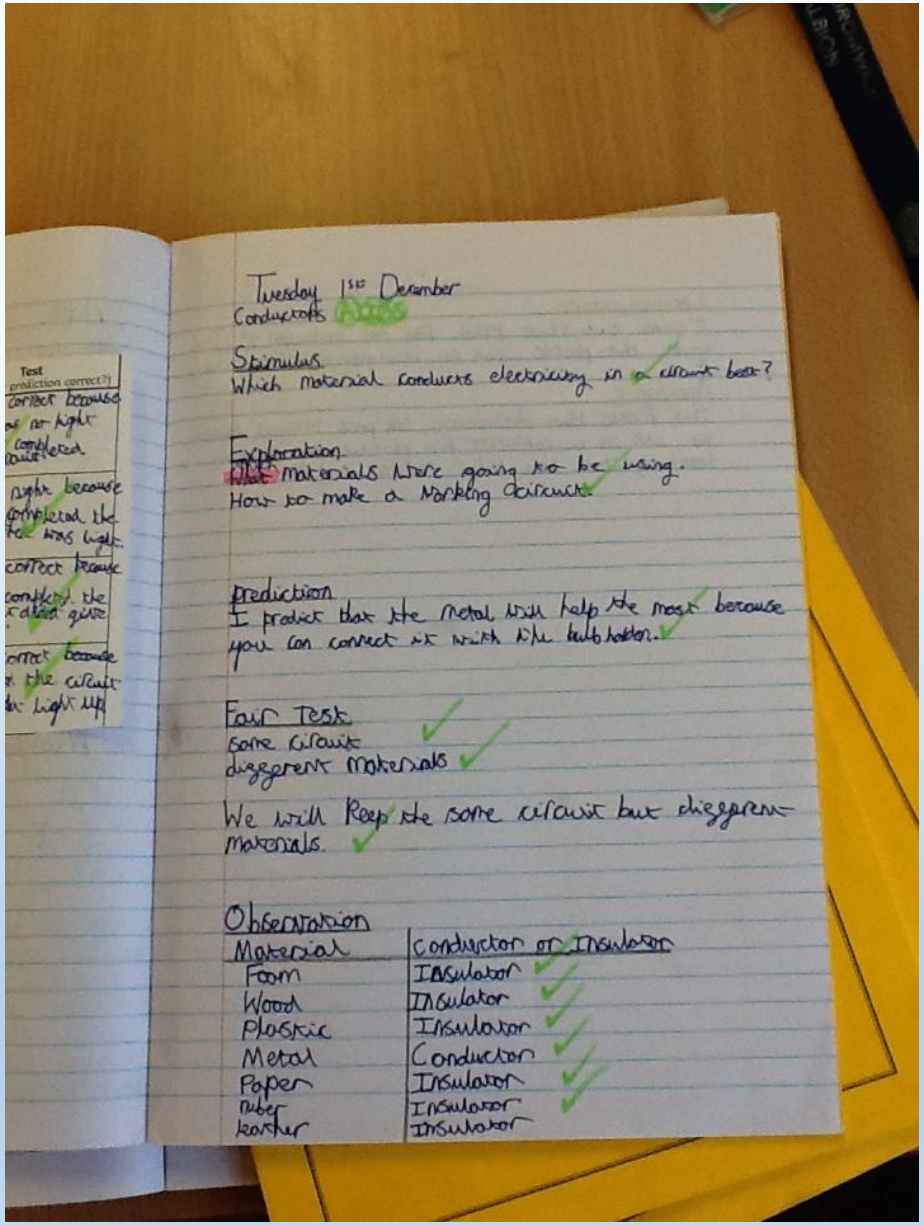

STARS
ANCIENT ROME
BRIT



Some examples of our work….







Test
prediction correct?)
correct because
or light
connected.
light because
connected the
bulb was light.
correct because
connected the
circuit gave
correct because
the circuit
the light up

Tuesday 1st December
Conductors

Stimulus
Which material conducts electricity in a circuit best?

Exploration
What materials were going to be using.
How to make a working circuit.

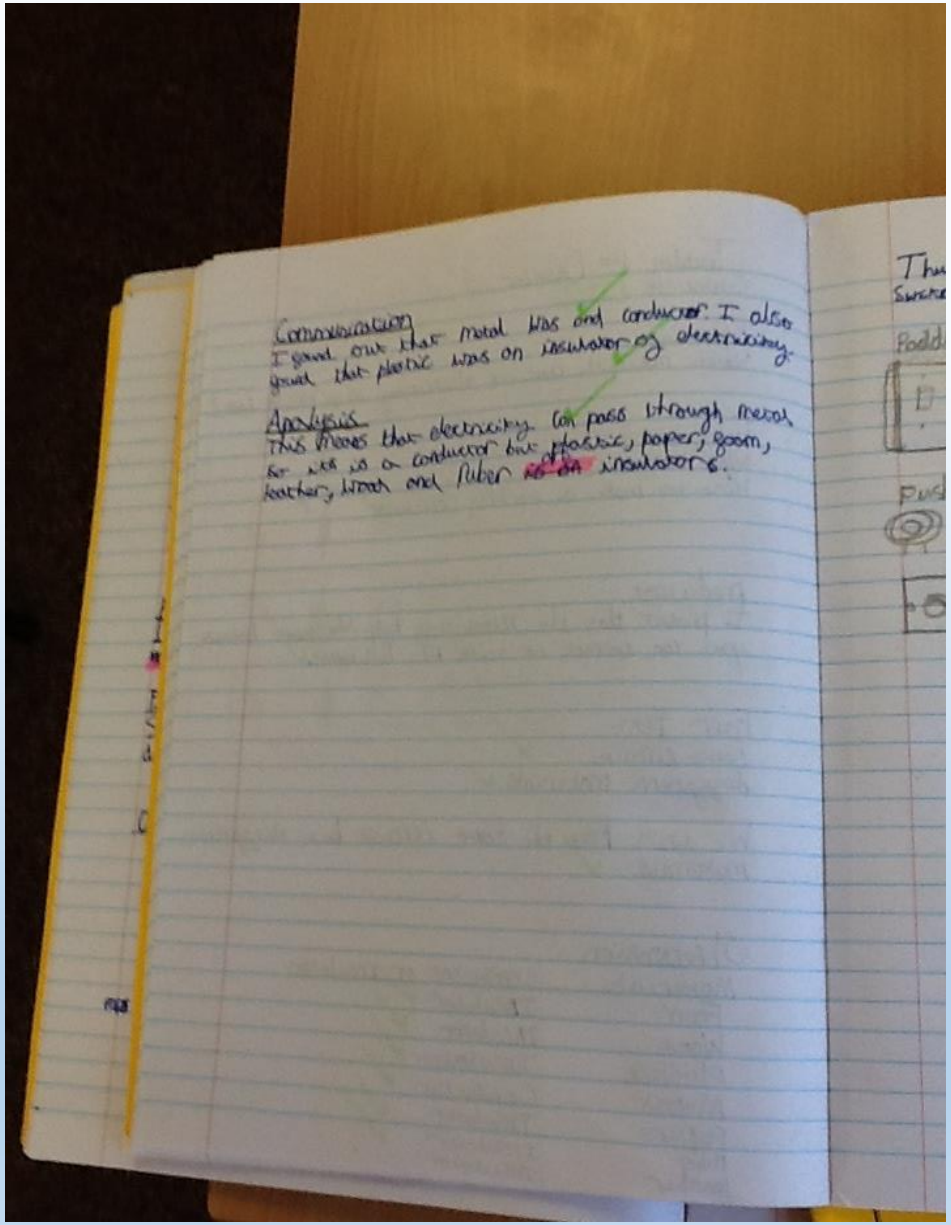
Prediction
I predict that the metal will help the most because you can connect it with the bulb holder.

Fair Test
same circuit
different materials

We will keep the same circuit but different materials.

Observation

Material	conductor or Insulator
Foam	Insulator
Wood	Insulator
Plastic	Insulator
Metal	Conductor
Paper	Insulator
rubber	Insulator
leather	Insulator



Conclusion
I found out that metal was and conductor. I also found that plastic was an insulator of electricity.

Analysis
This means that electricity can pass through metal, so it is a conductor but plastic, paper, foam, leather, wood and fiber are insulators.

Tuesday 1st December
Conductors

Stimulus
What material lets electricity flow?

Exploration
How to make a circuit. What materials work. What materials we are going to use.

Prediction
I think that the metal will work because it will make light.

Fair Test
We are going to keep the same materials the same or else it won't be fair. I will change the materials.

Observation

Material	Conductor or Insulator
Foam	Insulator
Rubber	Insulator
Plastic	Insulator
Metal	Conductor
Paper	Insulator
Wood	Insulator
Leather	Insulator

Conclusion
I found out that metal was a conductor. I also found out that glass didn't and rubber was one of the things insulators is.

Analysis
This means that electricity can pass through metal as it is a conductor but glass & rubber insulators.

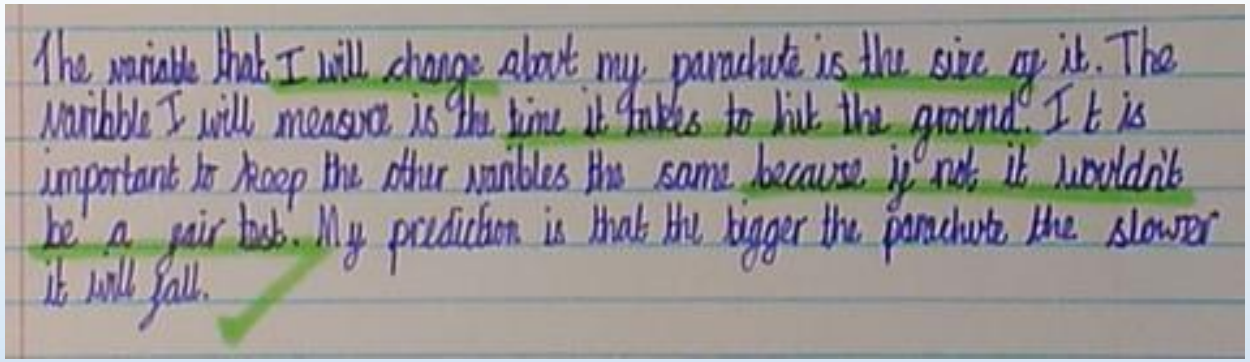
Year 5 and 6

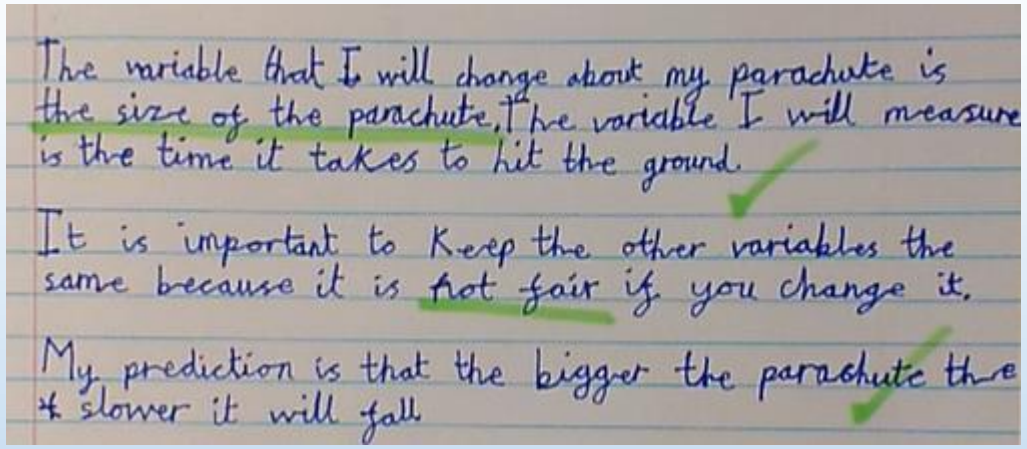
- Plan different types of scientific enquiries to answer questions, including recognising and control variables.
- Take measurements, using a range of scientific equipment with increasing accuracy and precision.
- Record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Use test results to make predictions to set up further comparative and fair tests.
- Identify scientific evidence that that has been used to support ideas or arguments.

Year 5 have been looking at how air resistance affects moving objects.

The children were asked to redesign a parachute for the Super Skydiving Company. They planned and conducted an investigation into the effects of air resistance by designing three parachutes and seeing which one fell the slowest.

Variables and Predictions


The variable that I will change about my parachute is the size of it. The variable I will measure is the time it takes to hit the ground. It is important to keep the other variables the same because if not it wouldn't be a fair test. My prediction is that the bigger the parachute the slower it will fall.


The variable that I will change about my parachute is the size of the parachute. The variable I will measure is the time it takes to hit the ground.

It is important to keep the other variables the same because it is not fair if you change it.

My prediction is that the bigger the parachute the slower it will fall

Variables and Predictions

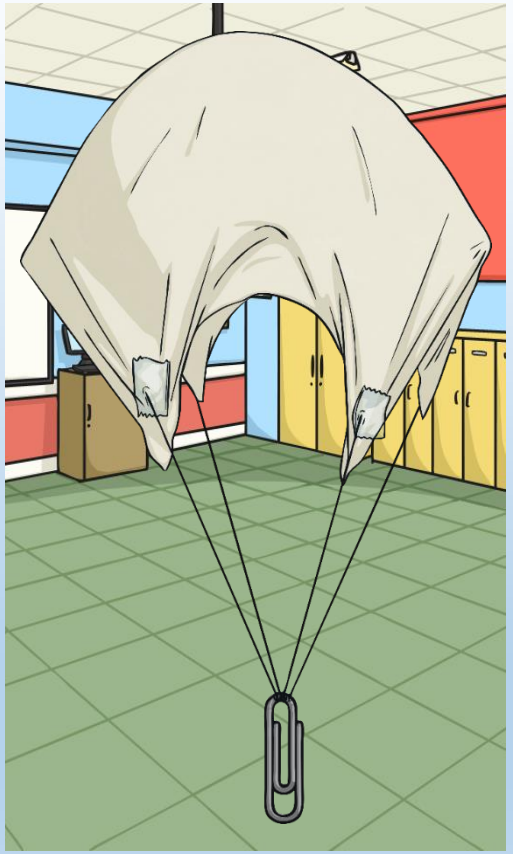
It is important to keep the other variable the same because the test will not be fair if you don't keep them the same.

The variable that I will change about my parachute is the size of the parachute. The variable I will measure is the time it takes to hit the ground.

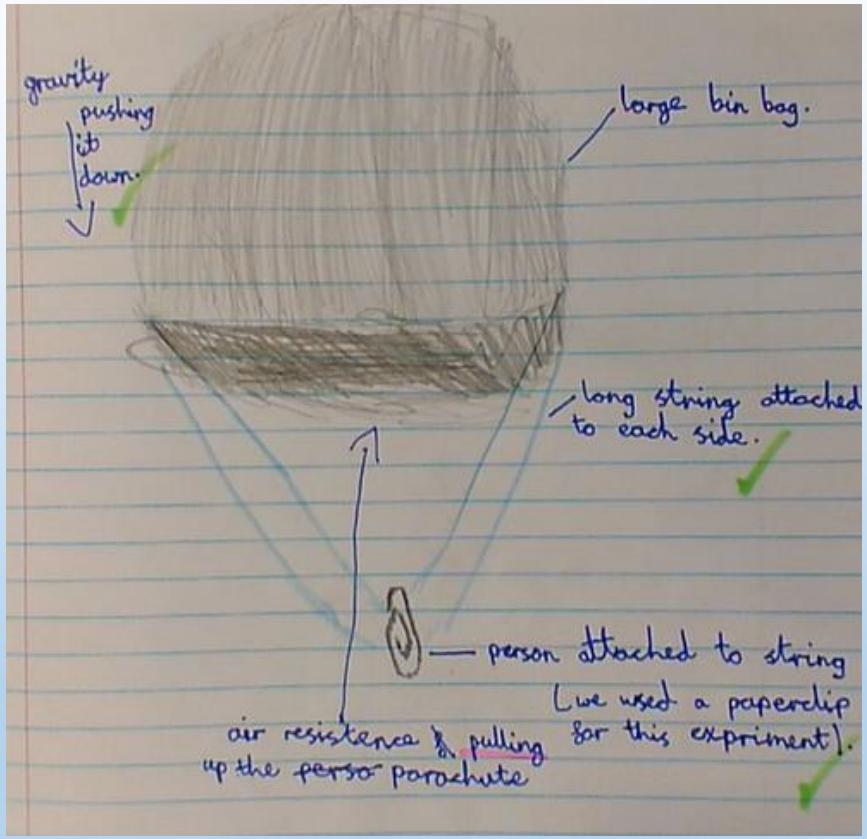
It is important to keep the other variables the same because if you dont keep them the same it wont be a fair test.

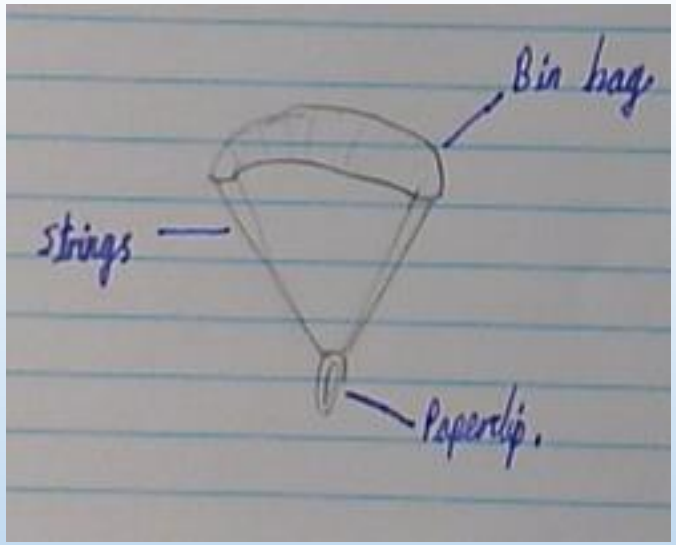
My prediction is that the bigger the parachute the slower it will fall.

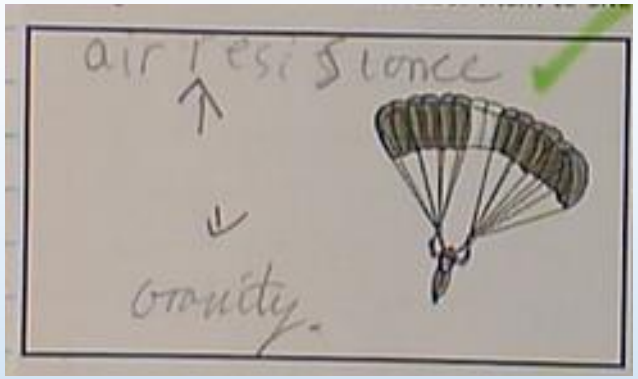
our results show that the par-ch-ute that was the slowest was the large one.



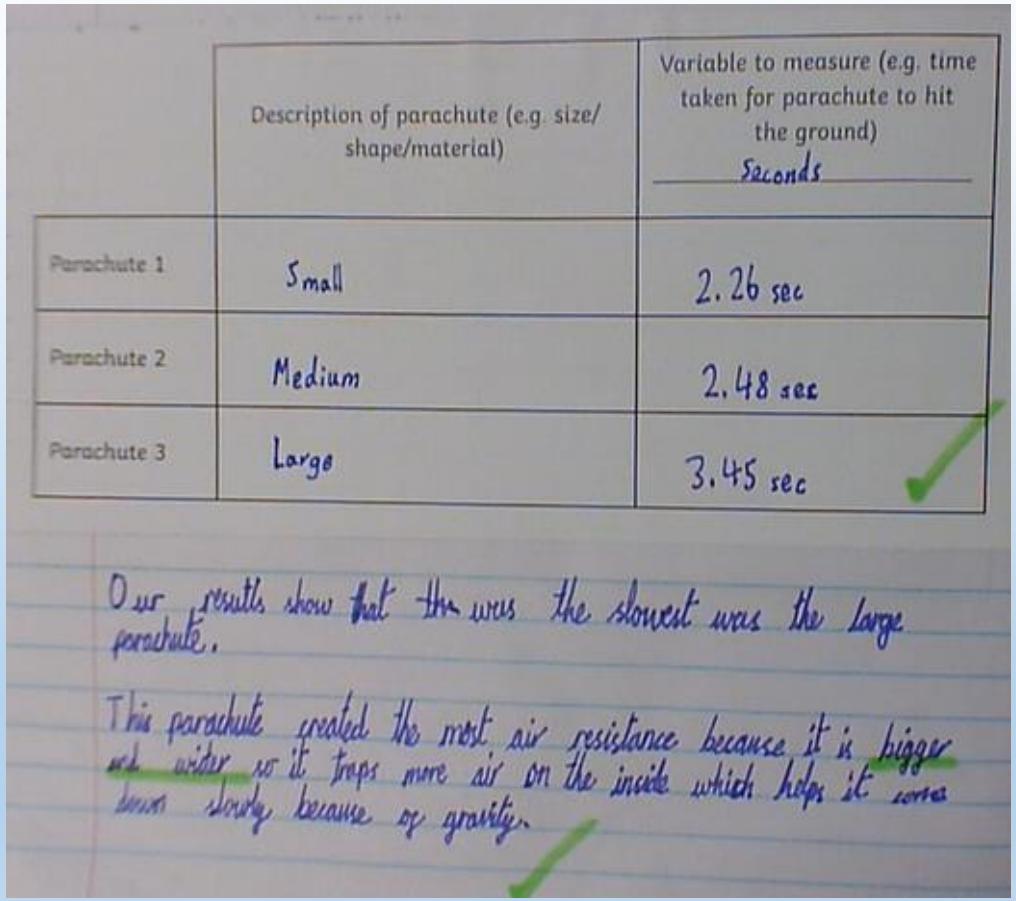
Testing


gravity pushing it down.
large bin bag.
long string attached to each side.
person attached to string
(we used a paperclip for this expriment).
air resistance & pulling up the ~~perso~~ parachute


Bin bag
strings
Paperclip.


air resistance
gravity.

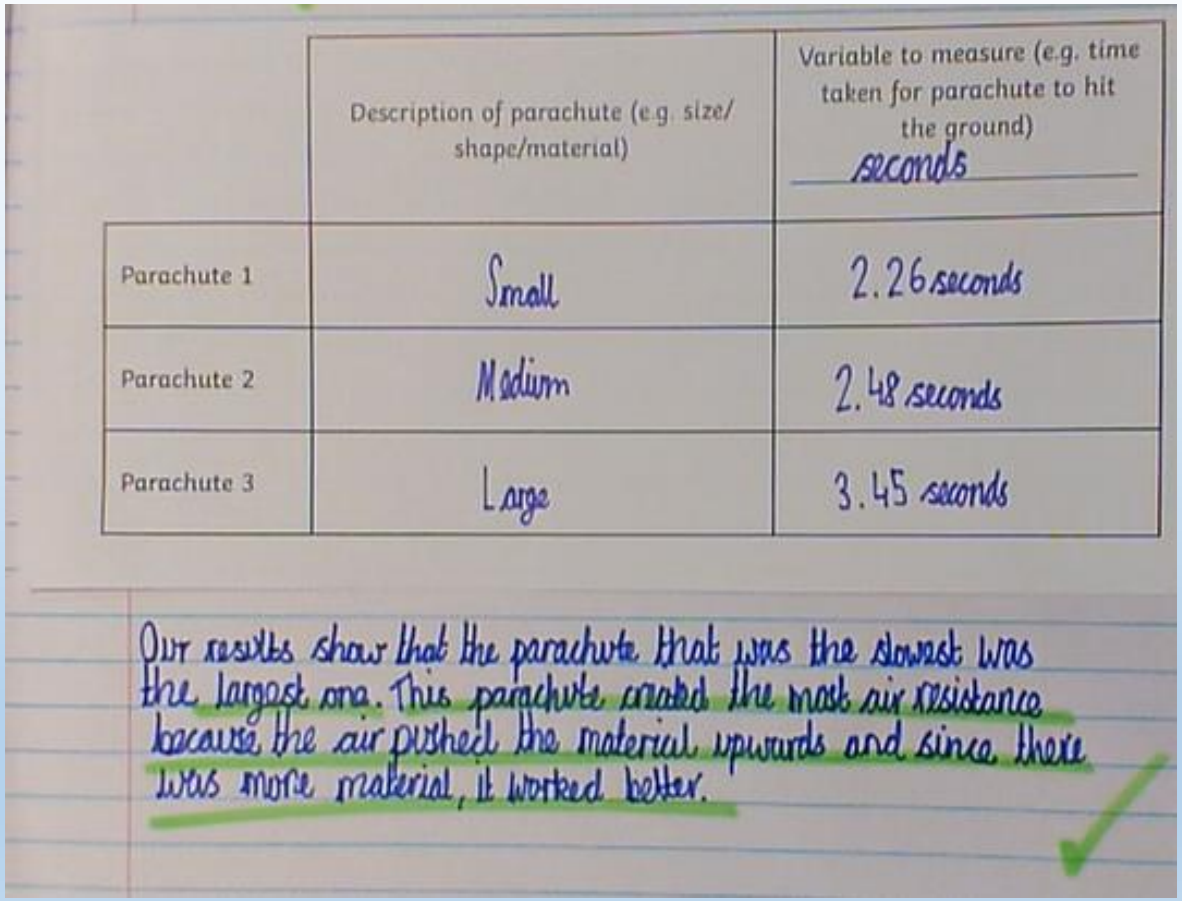
Results and Conclusions



	Description of parachute (e.g. size/ shape/material)	Variable to measure (e.g. time taken for parachute to hit the ground) Seconds
Parachute 1	Small	2.26 sec
Parachute 2	Medium	2.48 sec
Parachute 3	Large	3.45 sec

Our results show that the one that was the slowest was the large parachute.

This parachute created the most air resistance because it is bigger and wider so it traps more air on the inside which helps it come down slowly because of gravity.



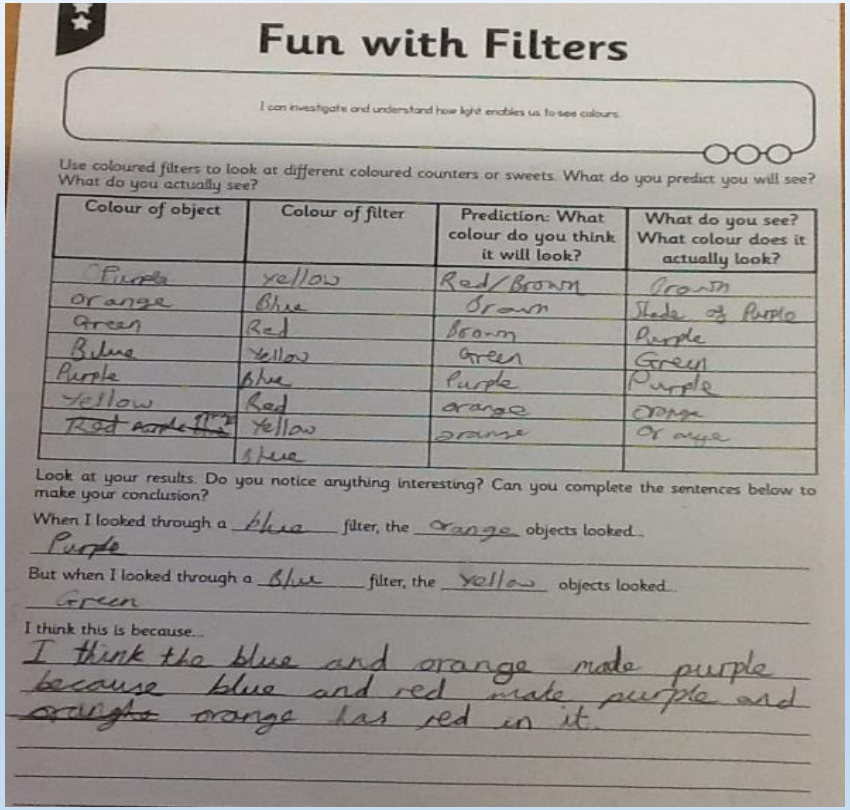
	Description of parachute (e.g. size/ shape/material)	Variable to measure (e.g. time taken for parachute to hit the ground) seconds
Parachute 1	Small	2.26 seconds
Parachute 2	Medium	2.48 seconds
Parachute 3	Large	3.45 seconds

Our results show that the parachute that was the slowest was the largest one. This parachute created the most air resistance because the air pushed the material upwards and since there was more material, it worked better.

Year 6

- What happens to colour if you apply a colour filter?

Communication and analysing…



Fun with Filters

I can investigate and understand how light enables us to see colours.

Use coloured filters to look at different coloured counters or sweets. What do you predict you will see? What do you actually see?

Colour of object	Colour of filter	Prediction: What colour do you think it will look?	What do you see? What colour does it actually look?
Purple	yellow	Red/Brown	Brown
orange	Blue	Brown	Shade of Purple
Green	Red	Brown	Purple
Blue	Yellow	Green	Green
Purple	Blue	Purple	Purple
Yellow	Red	orange	orange
Red ~~and Yellow~~	Yellow	orange	Orange
	Blue		

Look at your results. Do you notice anything interesting? Can you complete the sentences below to make your conclusion?

When I looked through a Blue filter, the Orange objects looked Purple

But when I looked through a Blue filter, the Yellow objects looked Green

I think this is because...

I think the blue and orange made purple because blue and red made purple and ~~orange~~ orange has red in it.