# Year 1:

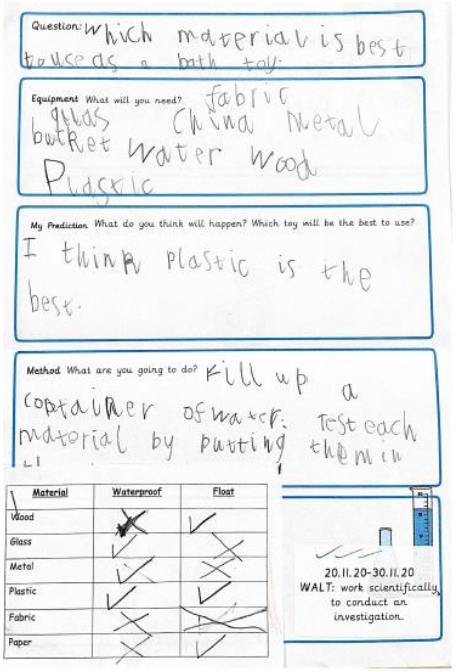
In year 1 science, the children learn about animals and humans, everyday materials, plants and seasons.

In connection with their ‘Animals and Humans’ topic, year 1 had a ‘Senses’ workshop.

The children also visited Shepreth Wildlife Park as part of this topic.

The children have been learning about everyday materials. They were visited by a toy workshop when they were able to work with many different materials to make their own toys.

Here is an example of some work in year 1. The children have been investigating which material is most appropriate for a bath toy.



Question: Which material is best to use as a bath toy.

Equipment What will you need? fabric glass China Metal bucket water wood Plastic

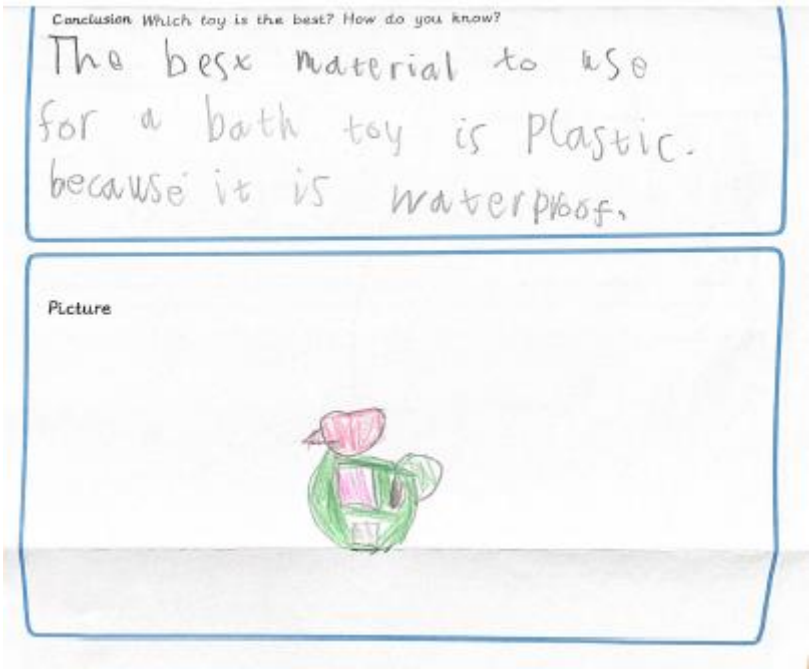
My Prediction What do you think will happen? Which toy will be the best to use?

I think Plastic is the best.

Method What are you going to do? Fill up a container of water. Test each material by putting them in

| Material | Waterproof | Float |
|---|---|---|
| Wood | ✗ | ✓ |
| Glass | ✓ | ✗ |
| Metal | ✓ | ✗ |
| Plastic | ✓ | ✓ |
| Fabric | ✗ | ✗ |
| Paper | ✗ | ✓ |

20.11.20-30.11.20
WALT: work scientifically to conduct an investigation.



Conclusion Which toy is the best? How do you know?

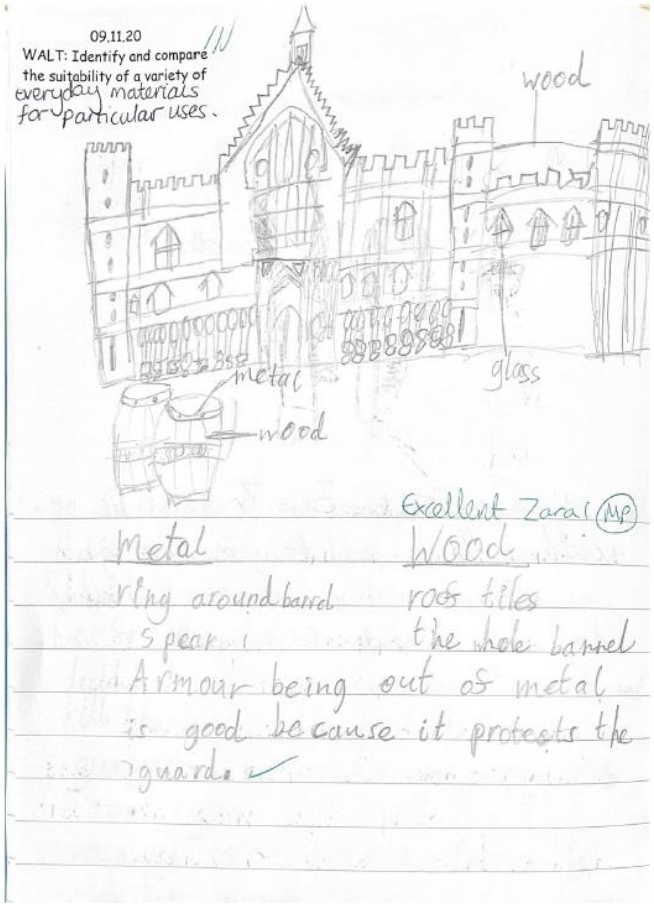
The besx material to use for a bath toy is Plastic. because it is waterproof.

Picture

# Year 2:

In year 2 science, the children build on their knowledge of every day materials from year 1, exploring their uses. The children look at how animals and living things such as plants, grow and survive as well as their habitats.

Here is an example of work where the children explored which materials would be best used to build a castle:



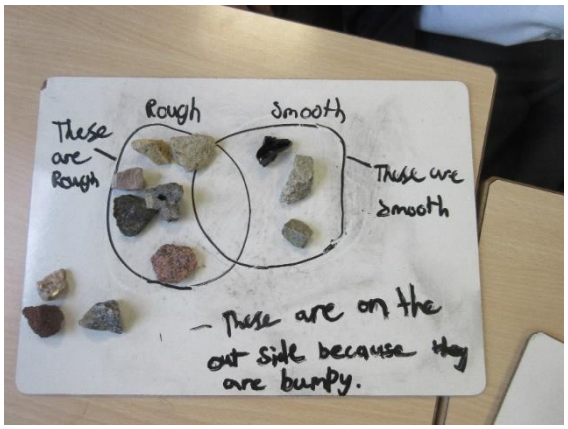

The children went on a bug hunt around the school grounds.

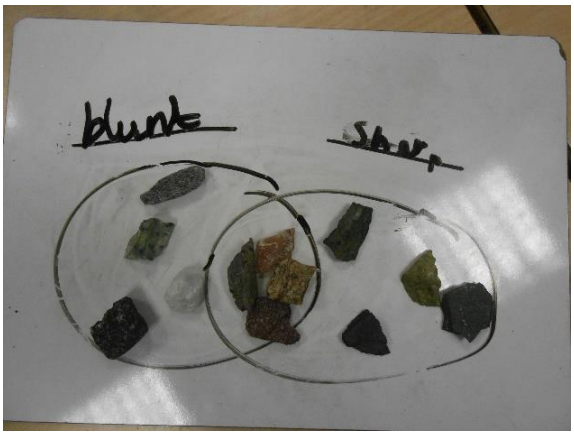
The children visited Rye Meads as part of their ‘Habitats’ topic.

# Year 3:

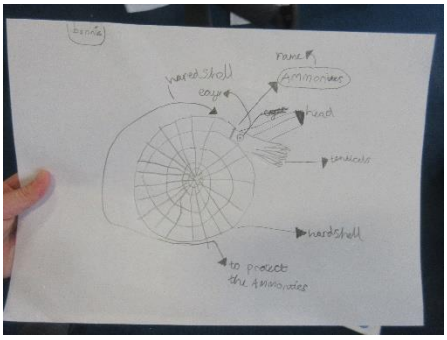
In year 3 science, the children continue to build on their knowledge of animals, including humans and plants. The children are introduced to forces and magnets, light and shadows and rocks, fossils and soil.

Here are some examples of science in year 3.

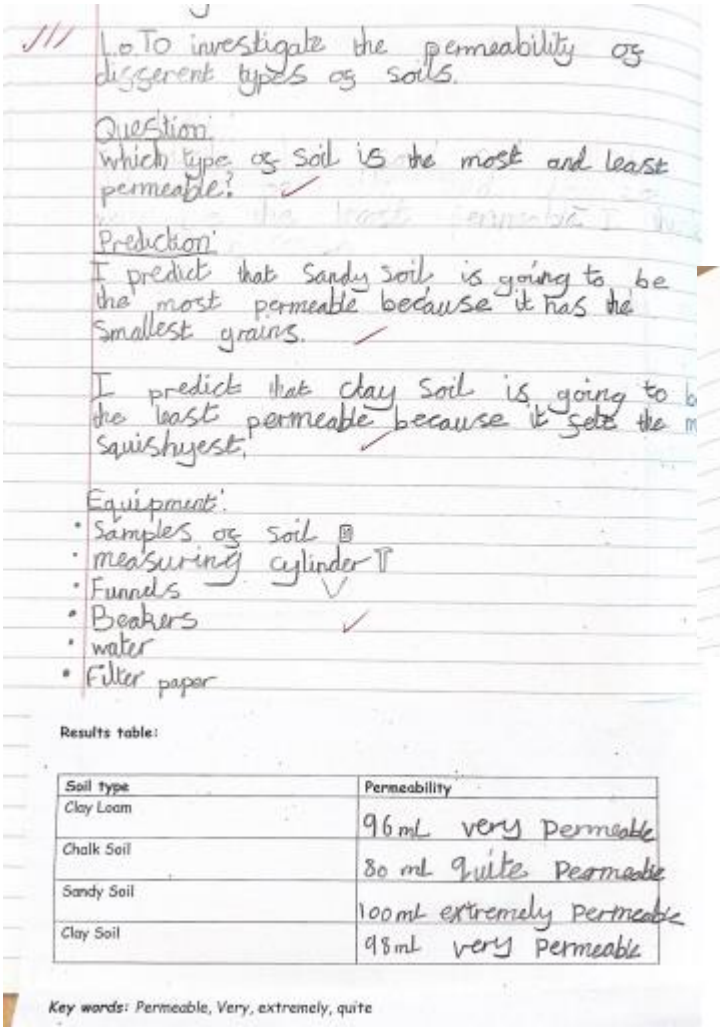



The children decided how to group the rocks based on their properties, using their scientific vocabulary.




A ‘Rocks, Fossils and Dinosaurs’ workshop visited year 3. They had the opportunity to observe some real-life fossils. The children also learnt about Mary Anning and her contribution to science, exploring her discovery of fossils.



L.o. To investigate the permeability of different types of soils.

Question:
Which type of soil is the most and least permeable?

Prediction:
I predict that Sandy soil is going to be the most permeable because it has the smallest grains.

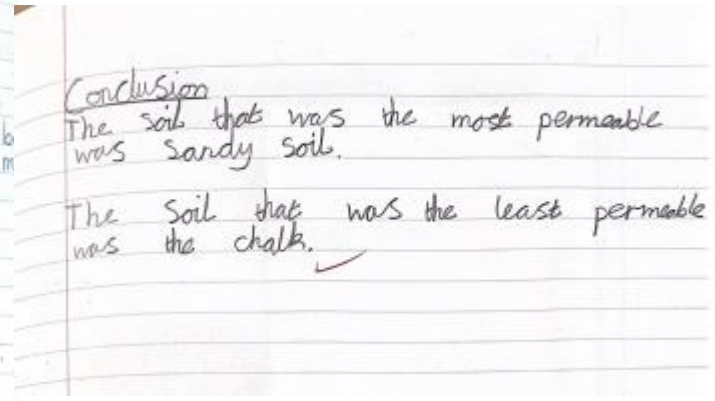
I predict that clay soil is going to be the least permeable because it sets the squishyest.

Equipment:
- Samples of soil
- measuring cylinder
- Funnels
- Beakers
- water
- Filter paper

Results table:

| Soil type | Permeability |
|---|---|
| Clay Loam | 96 mL very Permeable |
| Chalk Soil | 80 mL quite Permeable |
| Sandy Soil | 100 mL extremely Permeable |
| Clay Soil | 98 mL very Permeable |

Key words: Permeable, Very, extremely, quite



Conclusion
The soil that was the most permeable was sandy soil.

The soil that was the least permeable was the chalk.

Here is an example of some work from year 3:
The children investigated which soil type is most permeable.

The children visited The Stem Discovery Centre as part of their ‘Magnets and Forces’ topic.

# Year 4:

In year 4, the children are introduced to sound, electricity and solids, liquids and gases. The children build on their knowledge of animals, living things and their habitats. Here are some examples of science in year 4:

The children are grouping the animals according to their habitats.

The children visited Whipsnade Zoo. They were able to see a variety of different animals and hear from different experts that work closely with these animals.

The children investigated solids, liquids and gases.

L.O: To explore how water changes state

Questions: Can water change from a liquid to gas and back again?

Equipment | Water: kettle: Plastic lid:

method: 1. Fill the kettle with water.

2. Boil the kettle and observe.

3. Place a Plastic lid above the kettle and observe.

Prediction: I predict that when we boil the kettle the water will turn into a gas. I predict when we put the lid above the kettle the water will turn into a liquid.

Observe: When the kettle boiled I could see steam coming out of the spout. The steam floated into the air; When I put the plastic lid above the steam, it made condensation and the lid was wet.

Conclusion: In conclusion my prediction was correct because the water turned to gas when it boiled and then when it met a solid mass, it changed back to liquid. So yes, water can change

it's state from liquid to gas and gas to liquid.

Here is an example of some work from year 4. The children have been learning about how water can change state:

# Year 5:

In year 5 the children build on their prior knowledge of living things, habitats, forces and properties of materials. The children are introduced to earth and space. Here are some examples of science in year 5:

~~Due~~ L.O. To plan and carry out an investigation.

Question:

Does the temperature of the water affect how a skittle dissolves?

Equipment:

- skittles (all one colour)
- petri dishes
- different temperatures of water
- timer

Prediction:

I predict that the skittle in the hottest water will dissolve quickest because we found sugar to dissolve ~~in quickest~~ in quicker in hot water during a previous experiment.

Method:

We will put a series of skittles in two petri dishes and pour the cold water into one. We will then set the timer and straight afterwards we will pour the hot water into the other petri dish and set a different timer. We will then wait for the colours to meet in the middle, which is when we will stop the timer.

Results:

| Water temp | Time to dissolve |
|---|---|
| Cold (12) | 2m 8 |
| Hot (72) | 35 secs |

Analysis:

The hot water greatly effected the speed at which the Skittles' coating dissolved.

Conclusion:

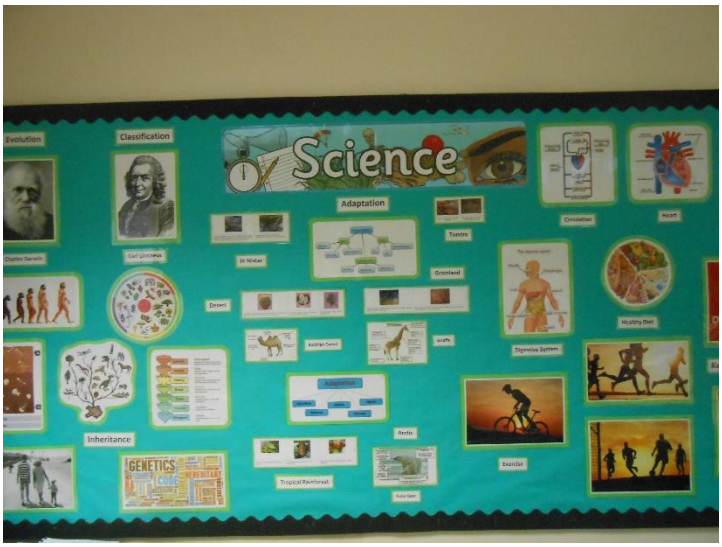
Due to the previous experiment on solubility, my prediction was correct and the hot water increased the speed at which the Skittles dissolved.

The children in year 5 investigated how the temperature of the water affects how a Skittle (sweet) dissolves.

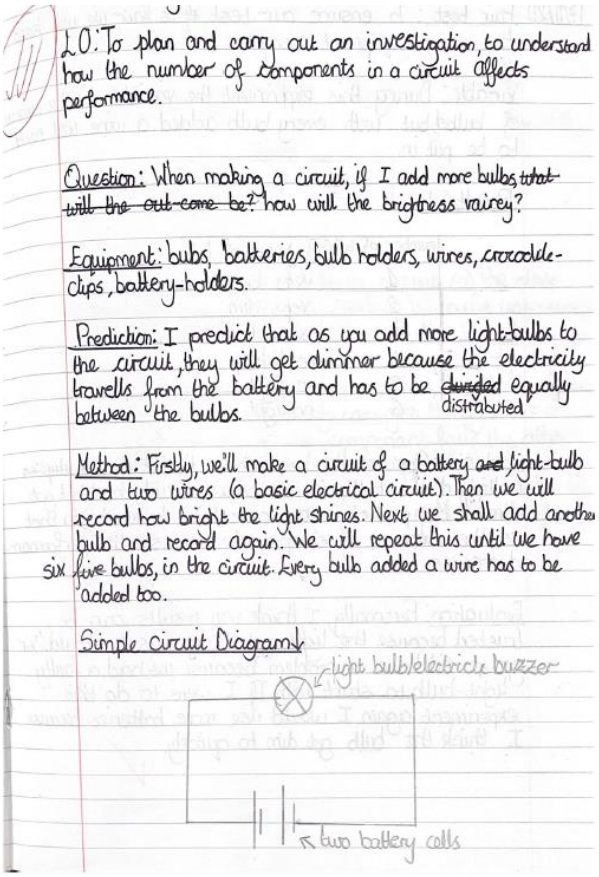
Year 5 had a Science Fair to display their brilliant science projects to the rest of the school.

# Year 6:

In year 6, the children build and consolidate their knowledge of living things, habitats, light and electricity. The children are introduced to the concept of evolution and inheritance. Here are some examples of science in year 6.




In year 6, the children investigated how the number of bulbs in a circuit affects the brightness of the bulbs. Here is an example of their investigation:



L.O. To plan and carry out an investigation, to understand how the number of components in a circuit affects performance.

Question: When making a circuit, if I add more bulbs, ~~that will the out come be?~~ how will the brightness vairey?

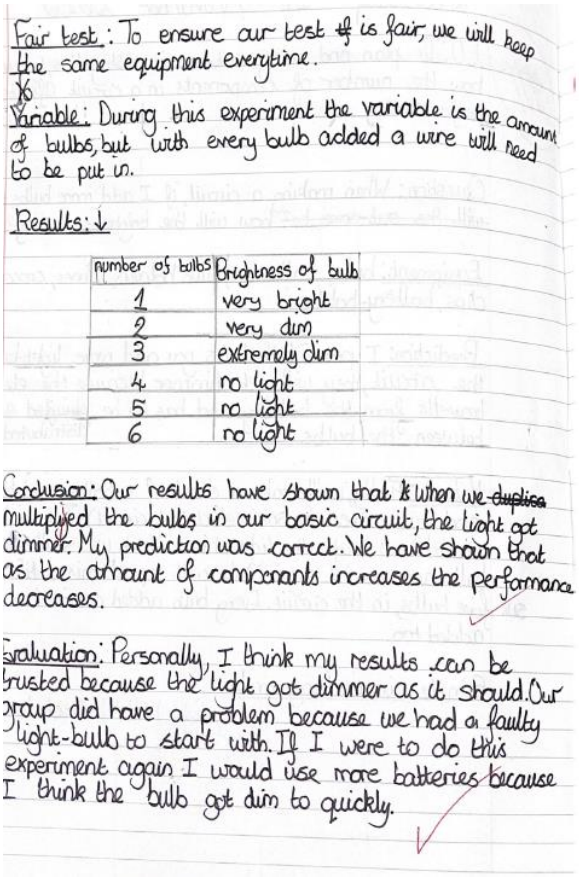
Equipment: bulbs, batteries, bulb holders, wires, crocodile-clips, battery-holders.

Prediction: I predict that as you add more light-bulbs to the circuit, they will get dimmer because the electricity travells from the battery and has to be ~~divided~~ distributed equally between the bulbs.

Method: Firstly, we'll make a circuit of a battery and light-bulb and two wires (a basic electrical circuit). Then we will record how bright the light shines. Next we shall add another bulb and record again. We will repeat this until we have six five bulbs, in the circuit. Every bulb added a wire has to be added too.

Simple circuit Diagram↓





Fair test: To ensure our test ~~is~~ is fair, we will keep the same equipment everytime.

Variable: During this experiment the variable is the amount of bulbs, but with every bulb added a wire will need to be put in.

Results:↓

| number of bulbs | Brightness of bulb |
|---|---|
| 1 | very bright |
| 2 | very dim |
| 3 | extremely dim |
| 4 | no light |
| 5 | no light |
| 6 | no light |

Conclusion: Our results have shown that ~~it~~ when we ~~duplicate~~ multiplied the bulbs in our basic circuit, the light got dimmer. My prediction was correct. We have shown that as the amount of components increases the performance decreases.

Evaluation: Personally, I think my results can be trusted because the light got dimmer as it should. Our group did have a problem because we had a faulty light-bulb to start with. If I were to do this experiment again I would use more batteries because I think the bulb got dim to quickly.