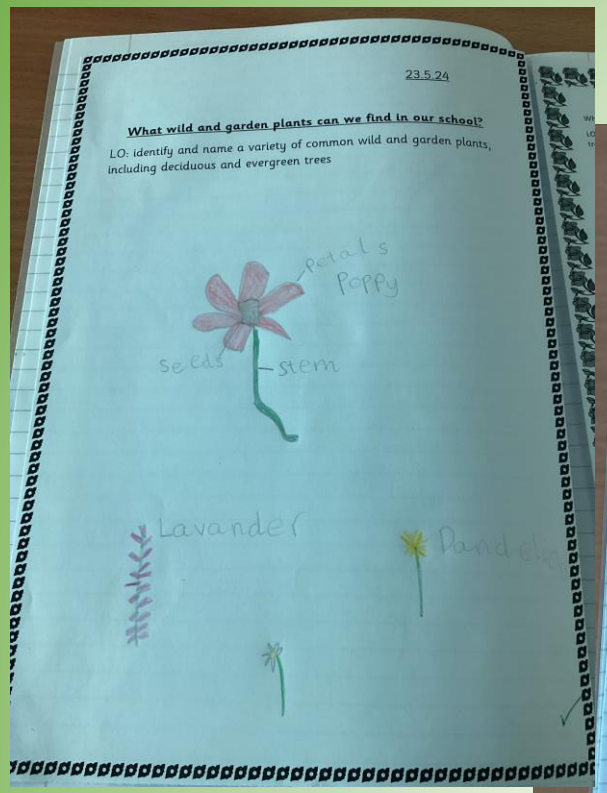
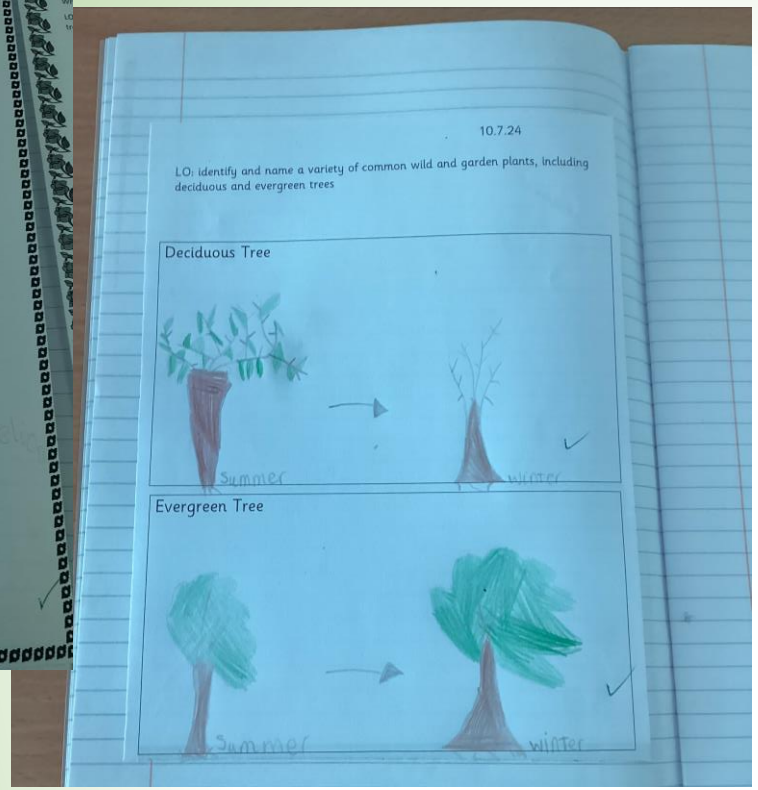
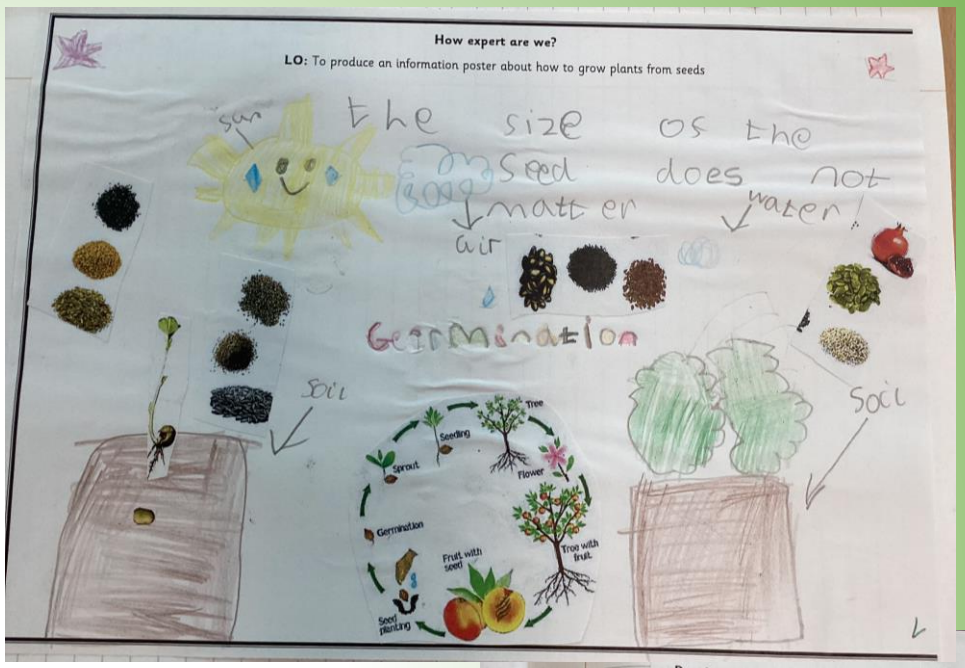
# Science at St. Louis Catholic Primary School

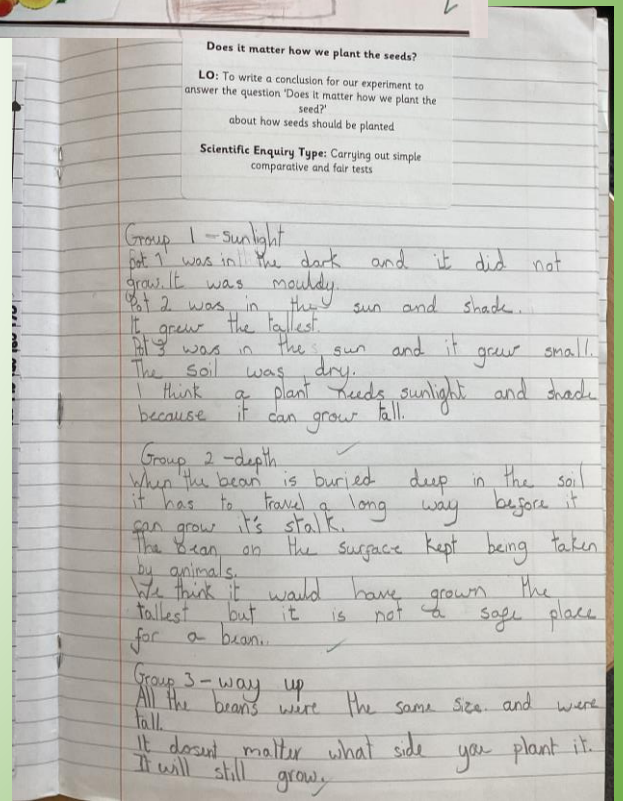
Welcome to another science newsletter!
We have had an exciting last term of the school year, including a Year 6 trip to St. Michael's School to find out about science at secondary school . Here are some examples of the children's science and some science activities that will hopefully inspire you to do more science at home too!

Reception have been exploring lots of different things. They have also liked looking for minibeasts in our garden area, naming them and being very gentle with them when they were holding them. They have learnt how to make butter and how the cream changed to make this. They then enjoyed eating it with their 'school made bread!' They have planted sunflower seeds and are hoping they will grow into tall sunflowers.



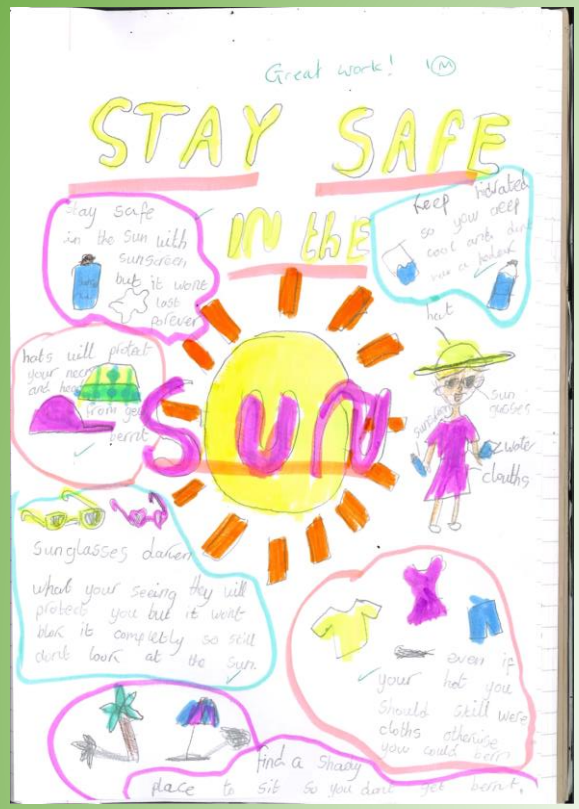



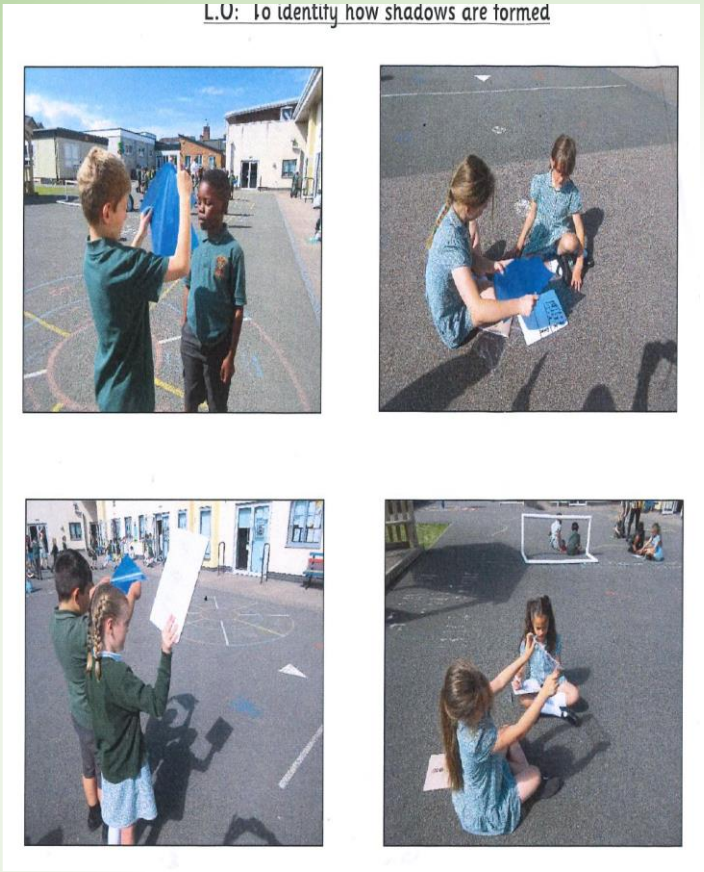



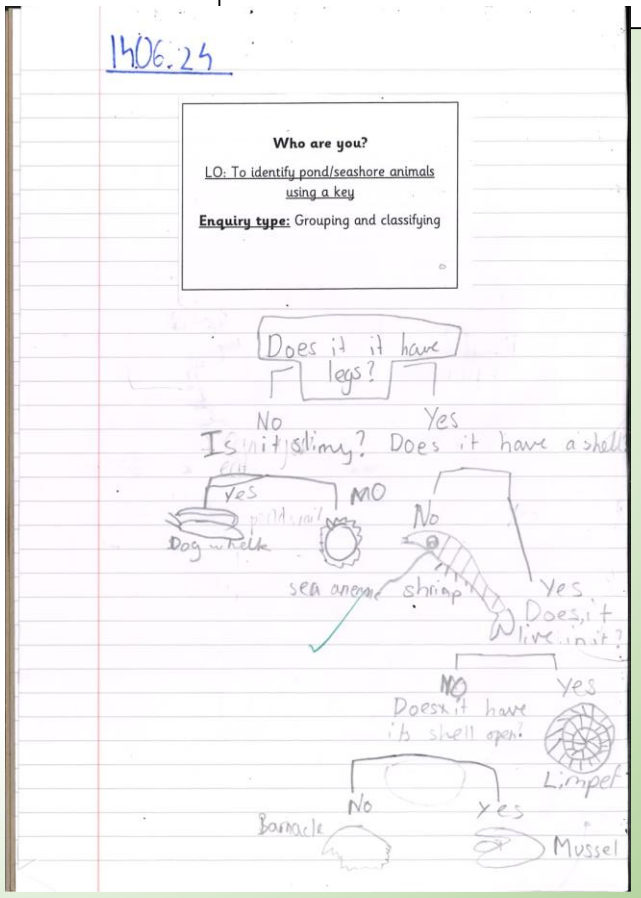

This term Year 1 have continued their work on 'everyday materials.' They have investigated the different materials to test their properties. They have also been 'plant detectives' and have been learning about lifecycles.

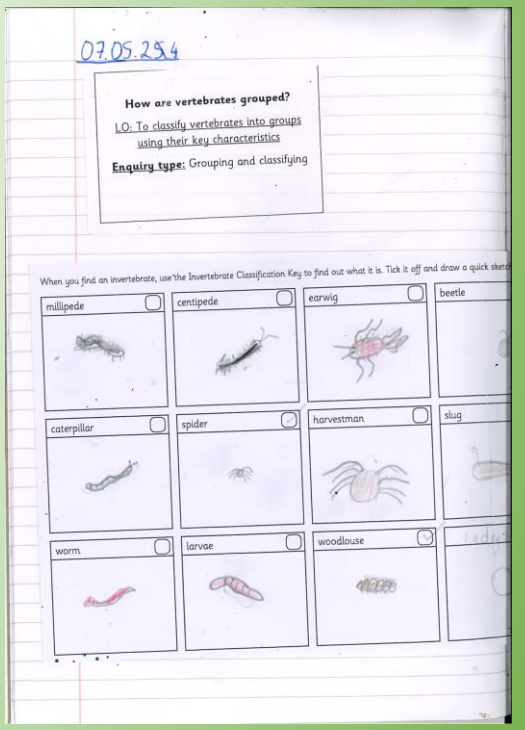
Year 2 have built upon what they learnt in Year 1 and have been 'apprentice gardeners.' They have investigated the best way to plant a seed and if the size of a seed affects the height the plant will grow.




Year 4 have continued their work learning about solids, liquids and gases through their topic ‘in a state’. They have also learnt about some of the positive and negative ways that humans change the environment, locally and globally, with a particular focus on how this affects other living things in the topic ‘human impact’.

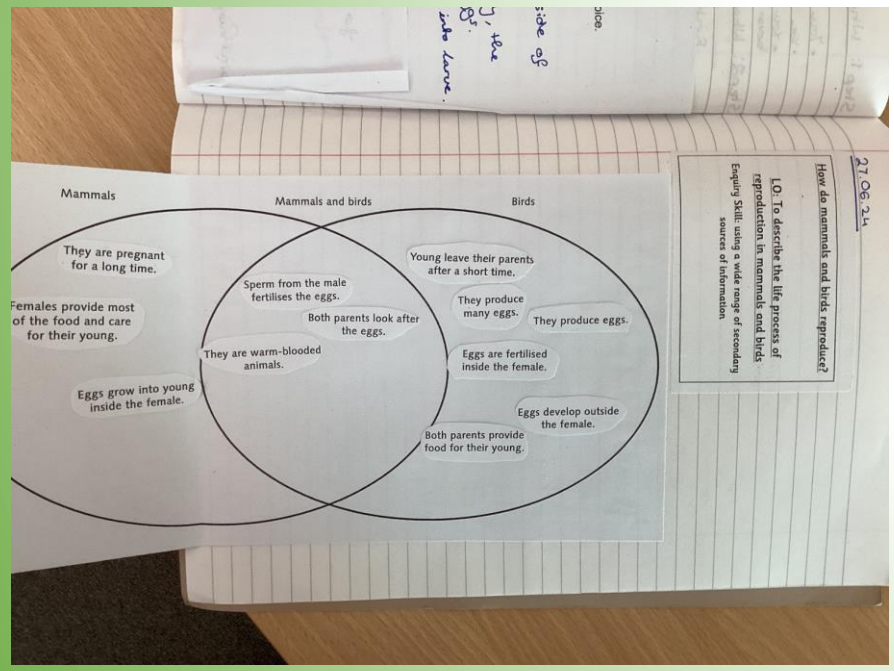


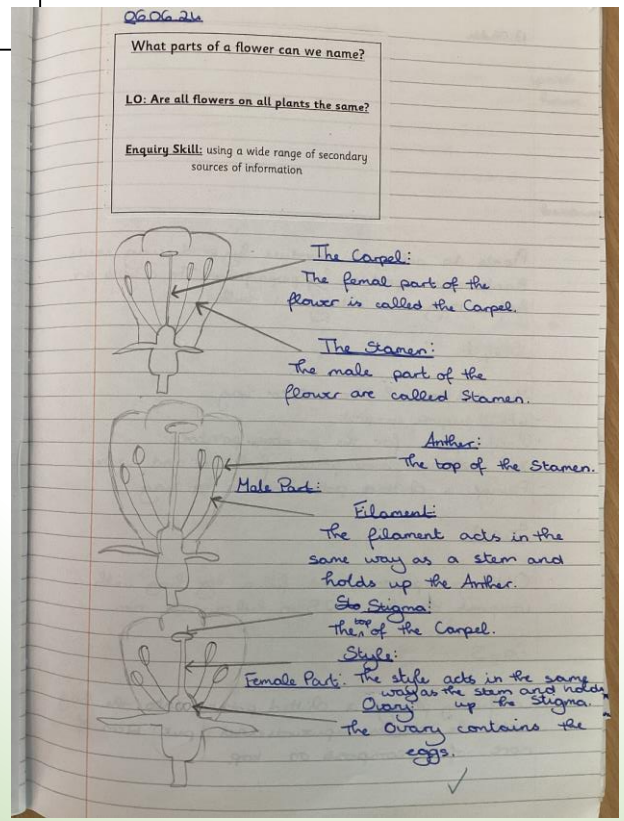



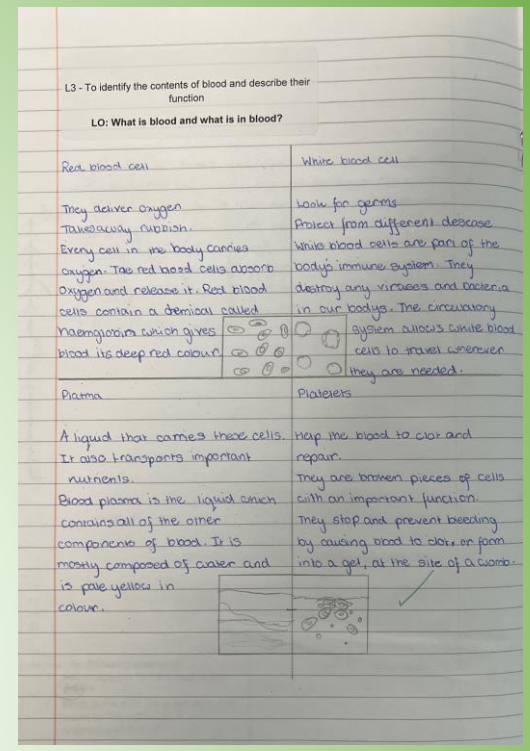

Year 3 have also built upon prior knowledge to look at ‘how does your garden grow.’ They have also been looking at light in the topic ‘can you see me.’ They have learnt about how we see objects and the ways in which different objects reflect different amounts of light, including exploring shadows.

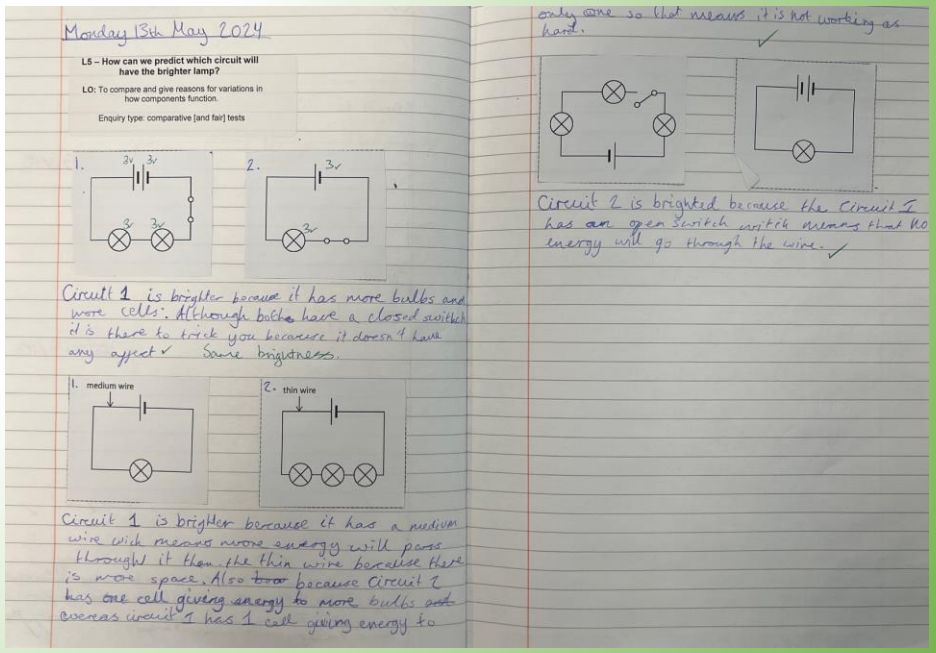
Year 5 have been looking at the ‘circle of life.’ They have compared and contrasted different life cycles, identifying common features as well as explaining key differences. They have used their knowledge of life cycles to help them to create a fantastical creature of their own, complete with its own distinct life cycle. They also learnt about reproduction in plants and animals.

Year 6 have developed their understanding of electrical circuits and built on the work from Year 4 in their topic ‘Danger! Low voltage.’ They have also learnt about how to keep their bodies healthy and how their bodies might be damaged in the topic ‘body health.’



# Science Trips

Year 6 had the amazing opportunity to visit St. Michael's School to learn about secondary school science lessons. The children learnt about the importance of safety in science and were able to use various elements to see what colour the flame burnt on a Bunsen burner. The teachers also demonstrated other experiments with explosive results. All of the children were amazed at both of these!


Reception enjoyed a trip to Tring Zoological Museum where they saw lots of different animals, including polar bears, sharks, tigers and gorillas. They attended a workshop where they learnt about the best habitat for a glis glis and thought about which animals it would live with. Some Reception children even built a Tring Museum when they were back at school.

Lego club have had fun making bridges and building structures, working together collaboratively to make sure the tower does not fall. They also made their own marble runs, taking turns and sharing ideas of ways to allow the marble to run one end to the other.

Year 1 enjoyed a trip to Waddesdon Manor where they learnt about the life cycles of different minibeasts, plants and animals. They also enjoyed looking at the different birds and plants that can be found at Waddesdon Manor.

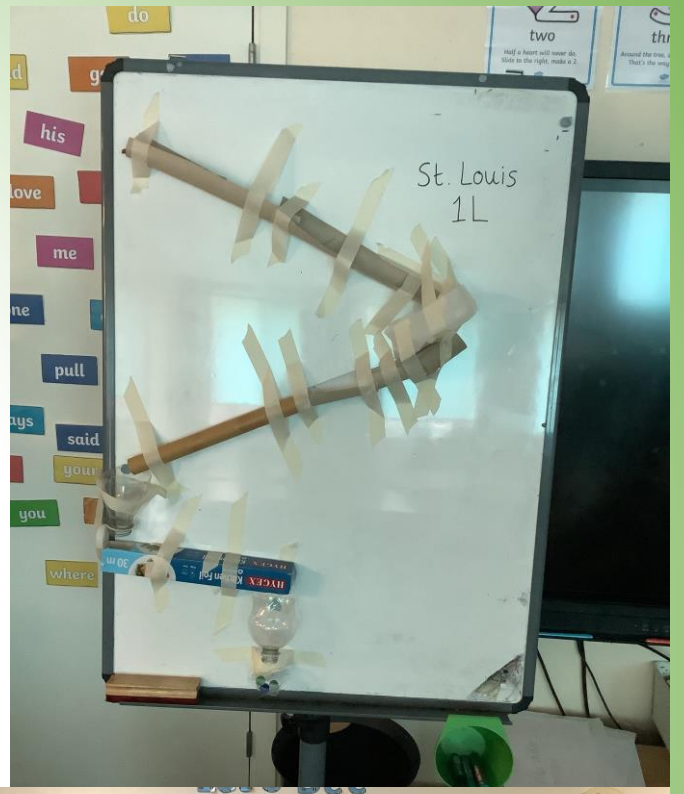
## Upcoming Science related events

Plastic free July - https://www.plasticfreejuly.org/

Perseid Meteor Shower (August) - https://www.nhm.ac.uk/discover/meteor-shower-lyrids-perseids-geminids-leonids-orionids.html#:~:text=Usually%20one%20of%20the%20best,of%20a%20grain%20of%20sand

National Aviation Day (August 19th) Can you make your own paper aeroplane?

The whole school enjoyed making their own marble runs to enter the competition. They used lots of scientific discussion and testing to make the longest marble runs.





# FIREWORK IN A GLASS

## You'll need

Vegetable or sunflower oil
Warm water
Food colouring
Glass or jar

## Instructions

Fill the glass or jar about 3/4 full of warm water

Carefully pour a small layer of oil onto the surface of the water and leave to settle. Note that oil and water don't mix!

Carefully drop small amounts of food colouring into the jar. You should see the food colouring drop through the oil into the water leaving colourful trails behind.

## Extension Task

Try with colder or warmer water, is the display different?

## Why does it work?

Food colouring is more dense than water so sinks to the bottom of the glass leaving trails (resembling fireworks) as some of the colour diffuses into the water.

The water based food colouring forms a bead shape in the oil as oil is hydrophobic ( water hating ). Oil molecules are more attracted to each other than water molecules so repel the food colouring . Surface tension between water molecules pulls them into the coloured spheres you see in the oil.



Why not try some of these science activities at home?
We would love to see any photos from any science related activities you complete at home. You may even appear in the next newsletter!
Please email these to the school office FAO Science leader

# SQUARE BUBBLES

## You'll need

Pipe Cleaners
Bubble Mix
Jug

## Instructions

Create a cube frame like the one in the image above.

Pour the bubble mix into the jug and dip the cube frame in so it's completely subermged.

Carefully lift out the frame and admire your square bubble!

## Extra Challenge

Make your own different shaped bubble wands.

## Why is the bubble square?

The soap film sticks to all six sides of the cube and the bubbles on the sides push against the middle bubble giving it corners and sides like a cube.

The square isn't perfect as the bubble is trying to become its natural sphere shape!

## Why is a bubble a sphere?

The forces acting between the molecules of the bubble cause it to form the shape that encloses the most volume with the least surface area – a sphere!