

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 tested which material is best for a waterproof hat. They have planted some potatoes and will be digging them up soon. They have also liked looking for minibeasts in our garden area, naming them and being very gentle with them when they were holding them.



23.5.23

<u>L.O : To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</u>

WILD PLANTS: WHERE DID WE FIND THEM?

Use this table to record the plants you find.



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.



Tuesday 11 ^h July 2023

What makes a tree, a tree?

LO: Identify and describe the basic structure of a variety of common flowering plants, including trees.









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.

This bar chart shows

how much rubish was

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'.

Friday 12th May 2023 LO: Derdorstrate an indestanding of human impact on food chains and habitate in another part of the world. Deephater Horizon Oil Spill.
The deep water horizon spill happend in 2010, and ups one of the worst oil disasters ever. As of 2012, Crilf Coast was polluted with oil. This could have killed many more animals mainly getting EXTINCE , so other animals the
Over 8,000 animals were report reported killed just 6 months after the oil spill. The oil spill explosion killed ft? the simul kish can di Il people and injured It other people than the big fish will die because they have nothing to eatr. Hen this signall food chain will be busiter. Fish big fish Sea tion Shark US!

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.'



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.



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 - <u>https://www.plasticfreejuly.org/</u> Perseid Meteor Shower (August) -<u>https://www.nhm.ac.uk/discover/meteor-shower-lyrids-perseids-</u> <u>geminids-leonids-</u> <u>orionids.html#:~:text=Usually%20one%20of%20the%20best,of%20a%2</u> <u>Ograin%20of%20sand</u>

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

SCIENCE FUN AT HOME







BEFORE YOU STARTI Please read through this with an adult:

- Make sure you have read the 'IMPORTANT NOTICE' on the back of this page.
- If you have a space outside that you can use safely, then you can do the 'Try this outdoors' activity outside. Don't worry if not as you could still do it indoors.
- Talk to your adult about sharing the science you have done and if they want to share on social media, please tag @ScienceSparks and @pstt_whyhow and use #ScienceFromHome

LIQUID SCIENCE



TRY THIS INDOORS ... LIQUID RACES

Set up a ramp by leaning the card, plastic or wooden board against the back of a chair. You might want to cover it with white paper so you can see the liquids more clearly, and it is good idea to put a cloth on the floor under the ramp. Put spoons of different liquids at the top of the ramp and time how long they take to run down to the bottom. Try to pour the same amount of liquid down the ramp each time.

WHAT DO YOU NOTICE? Things to talk about ...

Which liquid reaches the bottom first? And last? What do you notice about the liquids that take the longest or flow most slowly? What do you notice about the liquids that flow most quickly? What happens when you change the angle of the ramp – does this affect how quickly the liquids flow?

You will need

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- Timer or stopwatch Thick card, plastic or wooden board to use as a ramp
- Different liquids, e.g. whole milk, orange juice, chocolate sauce, ketchup, cooking oil, treacle
- Comflour
- Plastic bowl
- Water and spoon



TRY THIS OUTDOORS IS IT SOLID OR LIQUID?

This activity can be very messy. It is a good idea to wear old clothes or an apron.

Put 4 tablespoons of cornflour into a bowl. Gradually add water, stirring in a small amount at a time, until you have made a very thick liquid. Now you can explore what happens when you do different things with it. Stir it in the bowl with a spoon or your hand, first slowly then quickly. Roll it into a ball in your hand, and see what happens when you stop rolling it. Try dropping a toy into the bottom of it and then lifting it up again.

WHAT DO YOU NOTICE? Things to talk about ...

Is it easy or hard to stir or roll it? How does mixing it very vigorously compare with stirring it slowly? How hard is it to remove objects from the bottom of the bowl?



WHAT IS THE SCIENCE?

All liquids have a property known as **viscosity**. This is a measure of how much the liquid resists changing shape, or flowing. A thin liquid like water has a low viscosity and flows easily. A thicker liquid like ketchup has a higher viscosity and so flows more slowly.

When you mix comflour with water and stir it slowly, the particles of comflour and water can move around each other easily so the mixture will flow. If you use a sudden stronger force, like stirring quickly or hitting it, the particles of comflour clump together which stops it from flowing, and this makes it behave like a solid. This kind of liquid is called a non-Newtonian liquid. Sand mixed with water is another example. It is easier to run across wet sand than it is across dry sand. But if you stand still on wet sand you will start to sink.

MORE ACTIVITIES YOU COULD TRY

FUN WITH LIQUIDS - KITCHEN SCIENCE ACTIVITIES https://www.cience.co.uk/kitchen-science/

WATERPROOFING EXPERIMENT https://www.science-sparks.com/waterproofing/

WHAT DISSOLVES IN WATER? https://www.science-sparks.com/exploring-which-solids-dissolve-in-water/

SCIENCE TOP TIPS TO HELP WITH YOUR COOKING

https://www.nationalgeographic.co.uk/family/2020/05/stem-tricks-to-teach-your-at-home-cooks

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These activities are designed to be carried out by children working with a parent, guardian or other appropriate adult. The adult involved is fully responsible for ensuring that the activities are carried out safely.

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