Science at St. Louis Catholic Primary School

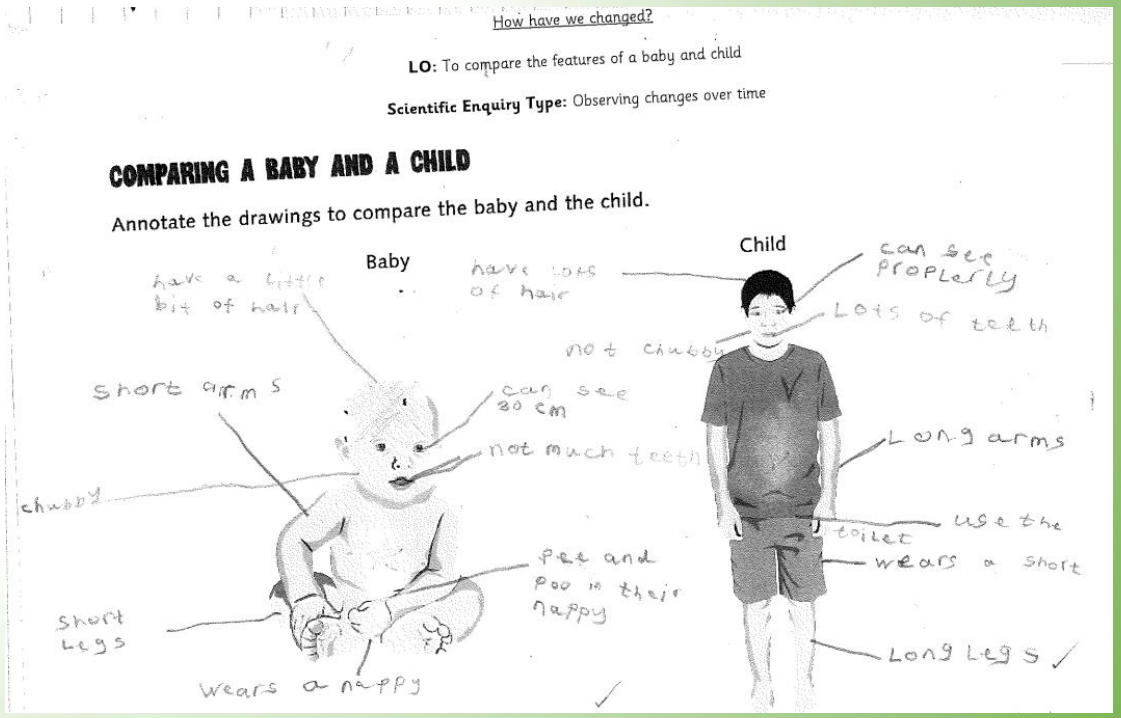
Here we will share science news from throughout the school; some examples of the children's science; publish dates of science-based events and share some science activities that will hopefully inspire you to do more science at home too!

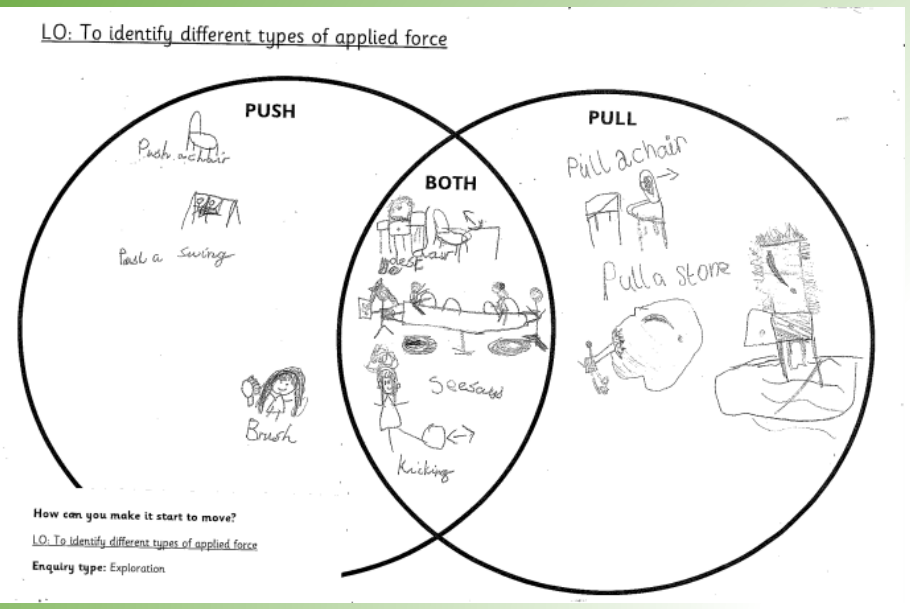
We really enjoy learning about science at St. Louis Catholic Primary School and we have had great fun experimenting and investigating during our science topics.

Reception have been exploring the world around them. They have observed the changes during autumn and winter. They enjoyed looking at autumn leaves and making rubbings from them. They have been learning to name the main parts of their bodies and to describe their function.

This term Year 1 have learnt about ‘using their senses’ to help them to find out about the world around them and link those senses to particular parts of their body. They have begun ‘looking at animals ‘ where they have learnt about a variety of familiar and less familiar animals, including fish, amphibians, reptiles, birds and mammals.

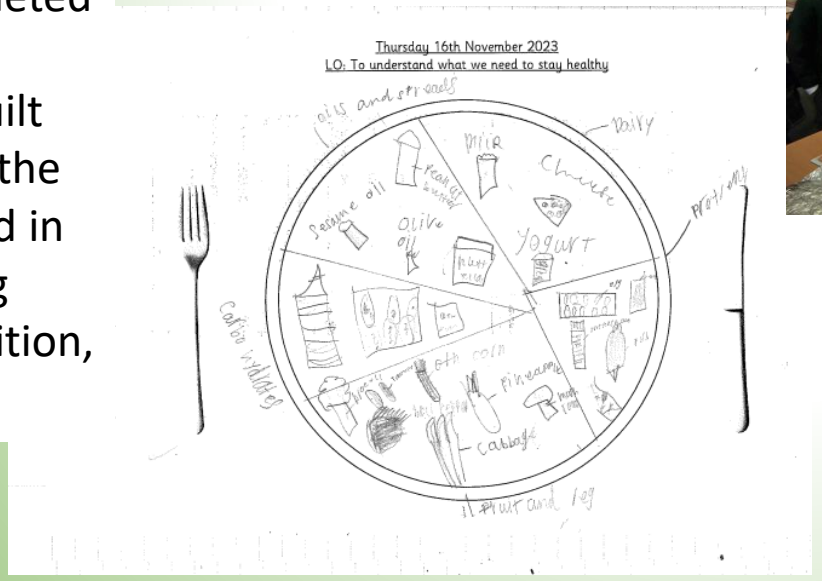
Year 2 children have begun to learn about different ways to keep themselves healthy in the topic ‘take care’. They have been learning about ‘growing up’ considering the basic needs of humans for survival (food, water, air), the need for warmth and shelter, and additional needs for health and wellbeing. They even had special visit from Mrs Perryman’s twin babies!

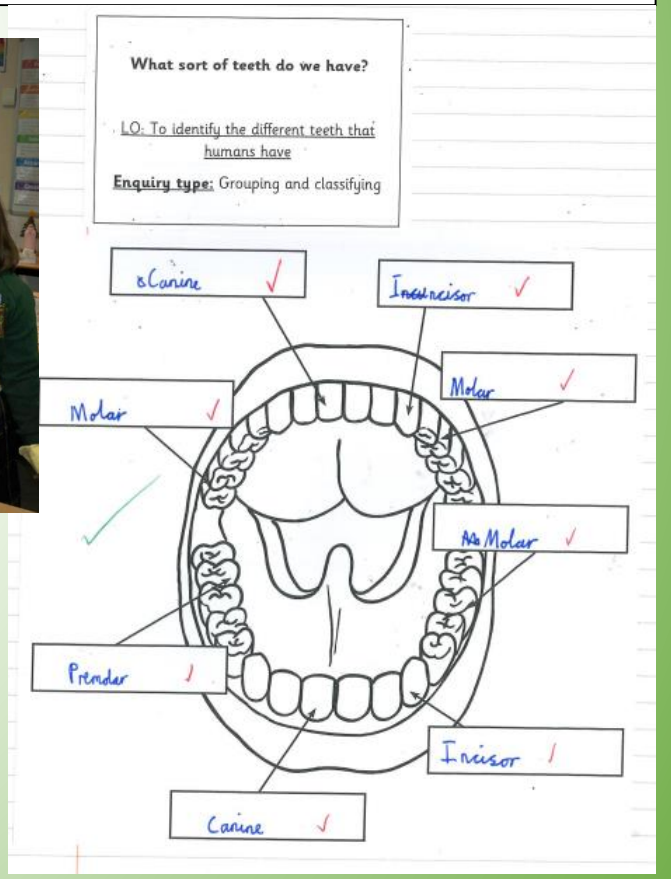


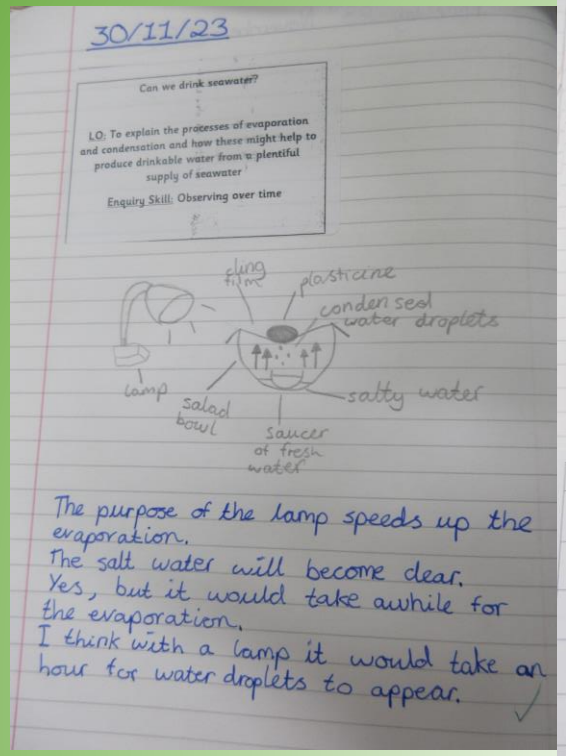


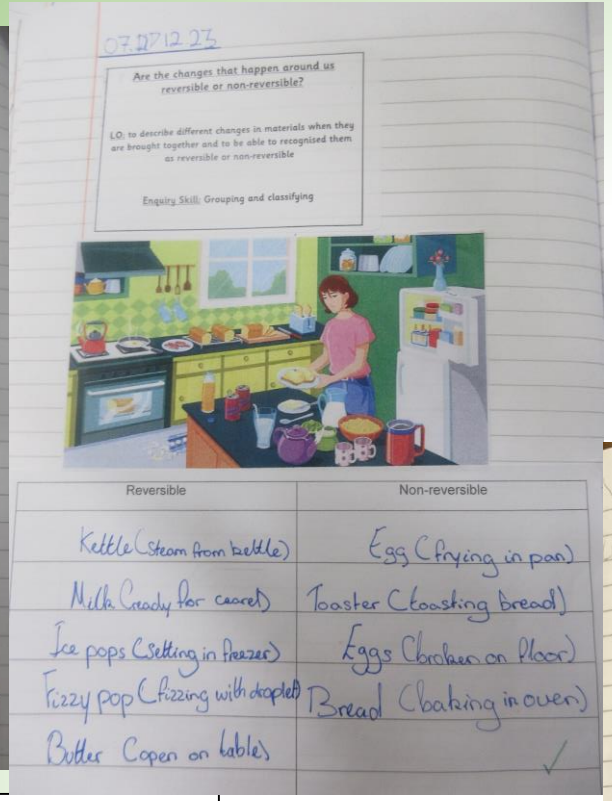
Year 4 have been learning about 'digestion and food chains'. They have been looking at the simple functions of the basic parts of the digestive system in humans, identifying the different types of teeth in humans and their simple functions. They have also constructed and interpreted a variety of food chains, identifying producers, predators and prey. In the topic 'electricity: circuits' they have identified common appliances that run on electricity, constructed simple series electrical circuits, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. They then used this to make light up eyes for their robots.

Year 3 children have explored 'the power of forces' and have completed investigations using magnets. They have built on their knowledge of the human body developed in Key Stage 1 in 'amazing bodies' looking at nutrition, skeletons and muscles.



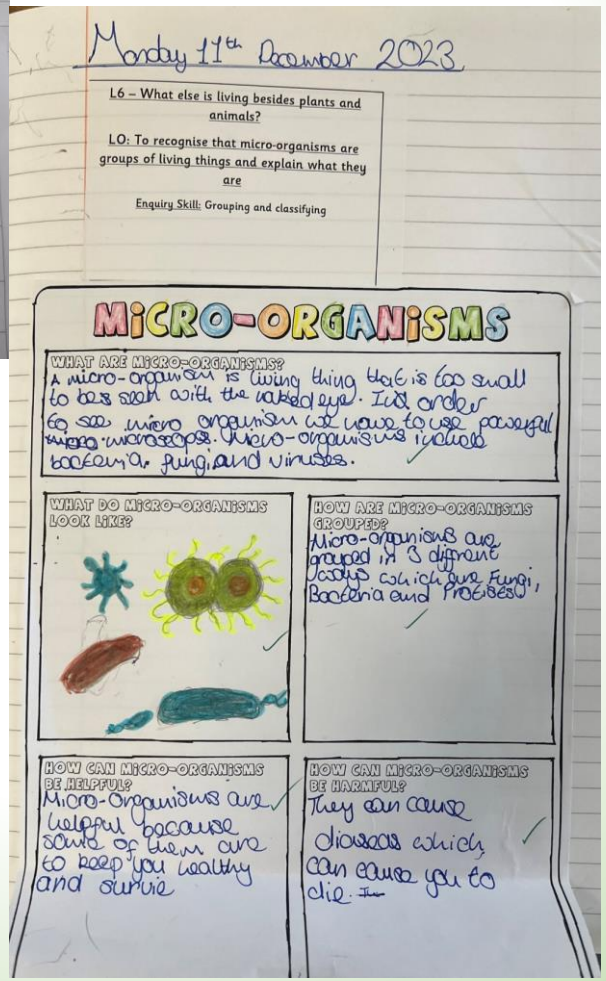


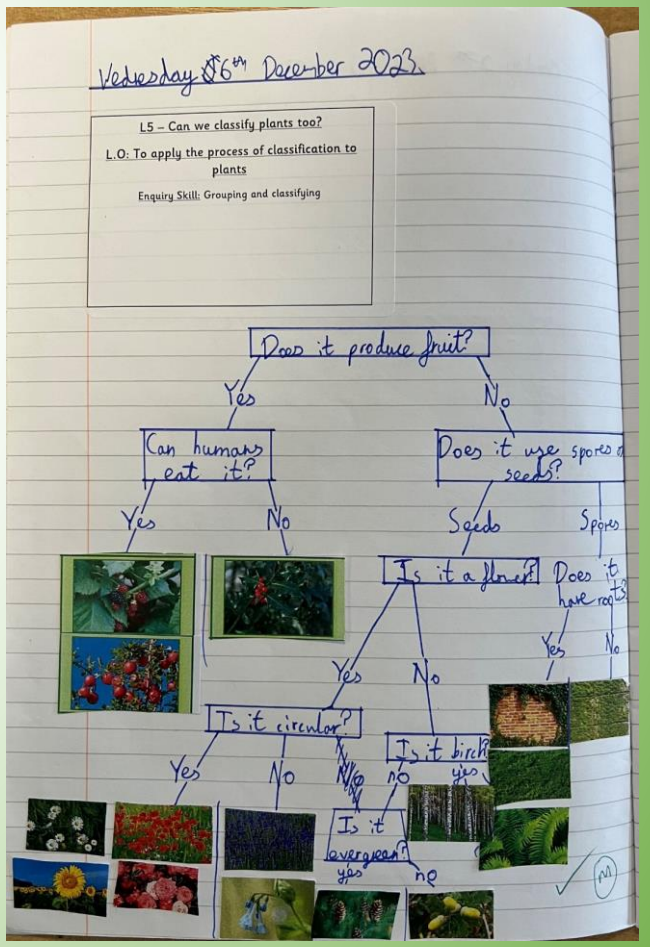




Year 5 children have identified, compared and classified a variety of materials according to both their properties and their uses in the topic ‘get sorted.’ They have also developed their knowledge and understanding of how different mixtures of solids and liquids might be separated in ‘marvellous mixtures.’

Year 6 have built upon the work about light sources and have developed a more detailed understanding of mirrors and the reflections that they form in the topic ‘light up your world.’ In ‘the nature library’ the children have developed their knowledge of living things to deepen their understanding of why and how organisms are classified.





SCIENCE FUN AT HOME

Have some fun at home with these science activities from **Science Sparks** and the **Primary Science Teaching Trust**

BEFORE YOU START! 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**

SPINNING SCIENCE

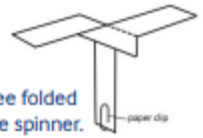
You will need

- paper
- paper clips
- Scissors
- different types of paper or card

1 TRY THIS INDOORS .... MAKE A SPINNER

1. Cut out the spinner - you can download a template **here**.

2. CUT along the solid lines and **FOLD** along the dotted lines.



3. PAPER CLIP the three folded pieces of the tail of the spinner.

4. FOLD the two 'wings' of the spinner in opposite directions. Hold the spinner high up, let go and watch what happens!

5. MAKE more spinners .... you could make different sizes, use different types of paper, use more paper clips or change the length of the wings.

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

What happens when you let the spinner go? Can you slow the spinner down? How? What happens if you use different sorts of paper? Does tissue paper fall fast or slower than cardboard? What happens when you make the wings longer or shorter? What if you make a giant one? A tiny one?

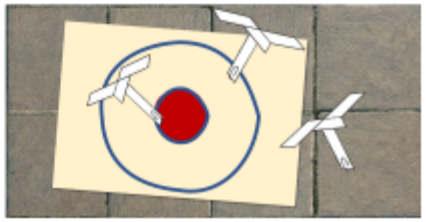
Why not try these science activities at home!
We would love to see any photos from any science related activities you complete at home. You may even appear in the next newsletter! Please email these to the school office FAO Science leaders.

2 TRY THIS OUTDOORS ....

Take your spinner outside. Make a target on the ground – you could do this by drawing a circle on a large sheet of paper, or you could use a big shallow bowl. Hold your spinner up and drop it, trying to get it to land on your target. Have ten goes and count how many times you hit the target. Try moving the target to a different place outside and see if your score increases or decreases.

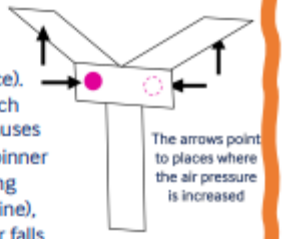
WHAT DO YOU NOTICE? Things to talk about ...

Where outside is it easiest to get the spinner to hit the target? Why do you think that is? What happens if you make the target bigger or smaller?



3 WHAT IS THE SCIENCE?

The paper spinner spins as it falls. When it starts its fall, the air pressure under the wings increases (air resistance). This causes an upward force underneath the wings which slows the spinner down. The increased pressure also causes a sideways push on the vertical part at the top of the spinner (where the pink dot is). The same thing will be happening diagonally opposite under the other wing (dotted pink line), which causes the spinner to spin. The faster the spinner falls the greater the sideways push, and so the more it spins.



4 MORE ACTIVITIES YOU COULD TRY

MAKE A DIFFERENT KIND OF SPINNER! https://www.science-sparks.com/easy-paper-spinners/

MAKE A PARACHUTE AND FIND OUT MORE ABOUT AIR RESISTANCE
https://wowscience.co.uk/resource/bitz-and-bob-parachute/

HAVE A LOOK AT DR CHIP'S WONDER WEDNESDAY - PAPER HELICOPTERS
https://www.youtube.com/watch?v=RurbAsctWrk

TAKE A SCIENCE SELFIE! Maybe you could show other people what you have been doing?

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SCIENCE WITH ICE

You will need

- A container
- Small plastic toy
- Water
- Freezer (or ice compartment in the fridge)
- Salt
- Warm water
- Ice cubes

1 TRY THIS INDOORS .... ICE RESCUE

Place a small plastic toy or figure (Lego works well) into the container and fill to almost the top with water. Leave in a freezer or ice compartment in the fridge until the water is frozen. Remove the container and leave for 5-10 minutes until the ice loosens and then tip it out onto a plate or tray.

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

What happens when you pour a little bit of warm water onto the ice? What happens if you put salt onto the ice? What do you think would be the fastest way to rescue your toy from the ice? What could you do to find out? Are bigger toys easier to rescue from the ice than smaller toys?

RSPB Big Garden Birdwatch

Join the world's largest garden wildlife survey from the 26-28th January 2024. Count and record the number of different birds that visit your garden and send the results to RSPB Big Garden Birdwatch (rspb.org.uk)

We will also take part in the RSPB Big schools birdwatch.

2 TRY THIS OUTDOORS .... MELTING ICE

Freeze several small ice cubes or shapes of the same size. Put them in separate containers and choose different places to leave them. If you can go outside, you could put one in the shade, one in the sunshine and also leave one inside. You could also try making ice cubes out of different liquids like milk, vinegar or cooking oil.

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

Where does the ice cube melt the most quickly? Why might that be? Can you find the place where the ice cube will take the longest time to melt? Or the shortest time to melt? What happens with frozen cubes made from different liquids?

3 WHAT IS THE SCIENCE?

Water can be a solid, liquid or a gas. A liquid turns into a solid (freezes) when its temperature drops below its freezing point. For water this is at zero degrees Celsius. Ice melts when its temperature rises above its freezing point. Ice melts faster when salt is added as the salt makes the freezing point of the ice lower. Different liquids have different freezing points. Oil freezes at a lower temperature than water, so an 'ice cube' made of oil will melt faster than one made of water.

Did you know? Fresh ice feels sticky because it immediately freezes the moisture in your skin, making it feel sticky to touch.

4 MORE ACTIVITIES YOU COULD TRY

MAKE ICE CREAM IN A BAG! https://www.science-sparks.com/how-to-make-ice-cream-with-ice-and-salt/

WATCH A VIDEO ABOUT HOW PLANTS SURVIVE IN ICY CONDITIONS
https://wowscience.co.uk/resource/adaptation-of-plant-life-to-extreme-cold-temperatures/

FIND OUT ABOUT ICEBERGS AND WHAT HAPPENED TO THE TITANIC
http://www.nicurriculum.org.uk/docs/key_stages_1_and_2/areas_of_learning/the_world_around_us/activity5.pdf

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