

British Science Week at Bramfield Primary School.

9th – 13th March 2020.

During the week commencing 9th of March, we celebrated British Science Week at Bramfield Primary School and what a week it was! Each day began with a science assembly, during which many different practical demonstrations and experiments were shared with the children. We had convection spirals, red cabbage experiments, reactions which created carbon dioxide to extinguish candles and send mini rockets shooting across the hall. Not only did these experiments enthuse and engage pupils throughout foundation to year 6, they sparked off some interesting discussions and questions about convection currents, chemical reactions and the gases they produce and pH.



The highlight of the week had to be the school science fair. It was fantastic to see the many different experiments which children had brought into the fair to show to their peers and families from our school. It was clear that children, with help from parents and grandparents, had been working very hard at home on various projects, quizzes and demonstrations. Pupils' projects were displayed around the school and all children and adults had the opportunity to travel around to view the work of others and find out about all kinds of things from circuits to squishy eggs and seeds.

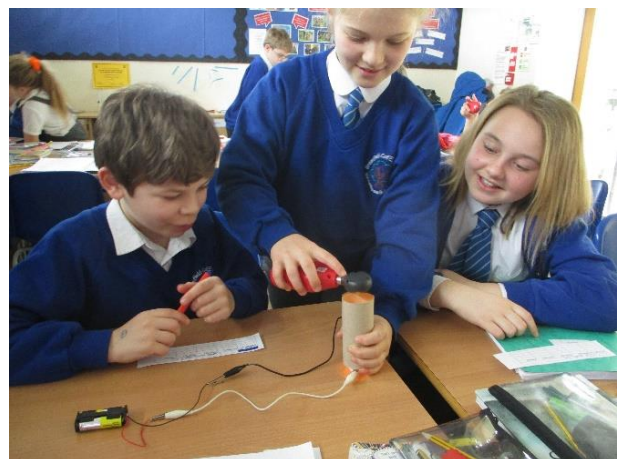
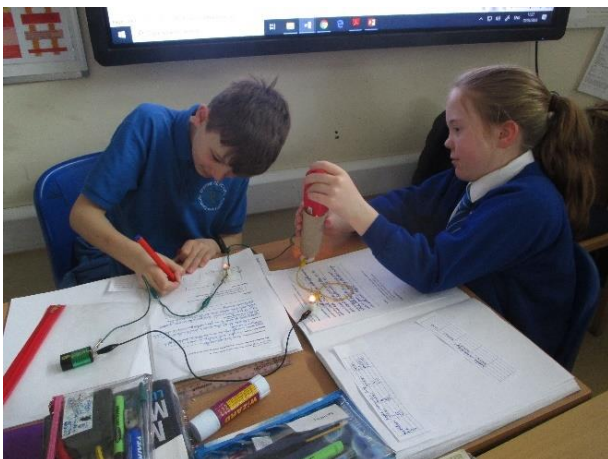


Throughout the week, children had lots of opportunities in their classrooms to take part in many different science activities. In Ash



class, our topic was electricity. We carried out practical investigations to find out the answers to questions such as 'How does voltage affect the components in a series circuit?' and 'Does the number of components in a circuit affect the brightness of the bulb?'. We carried out our own investigations deciding upon variables to test, measure and keep the same to ensure a fair test. We produced our own tables and recorded results, including repeat readings enabling us to calculate an average to increase the reliability of our results. Once the practicals were complete, we discussed our conclusions and looked at the science behind what we had discovered. We found out that increasing the voltage in a series circuit increased the light intensity of the bulb and we worked hard to explain the reasoning behind this, both in words, models and through drama - acting out what happens to electrons as they complete their journey through a battery and around the wires in a circuit on the playground.

Children in Ash class said that they had really enjoyed using science equipment to find things out for themselves and having a much longer science lesson, so that they could really get stuck into the investigations and get it completed in one day.





Cherry tree

class focussed on

Sound as their topic. They explored how sound works and how we hear it. The week began with an amazing workshop provided by The Red House and The Britten Pears Foundation. During just one morning 6 investigations were introduced to the class, enabling them to explore and find out all about sound waves. The class were shown how sound creates vibrating waves that move through the air to our ears. It was amazing to see how different sounds replicated through a speaker produced different wave shapes. They explored sound vibrations in salt and rice patterns through drum skins, found out about the Doppler effect (how pitch of sound changes as it moves past you), replicated sound waves, explored echo location sound and controlled sound using light sensors, they saw sound waves on a computer screen and learnt about how sound is measured in Hertz, they found out that we hear in stereo and how our detection of sound would be effected if we only had one ear and then explored an ear model and found out about the detailed parts of our ear structure. It was an incredible amount of learning completed in one morning, even the teachers learnt a lot! For the rest of the week Cherry Class continued to explore sounds, looking closely at the effect of vibrations on how sound travels, recording careful observations. The children planned and designed investigations and had to decide on how to make a fair test, Children said they felt just like real scientists. Children also worked on drawing conclusions before exploring more. During these sessions Cherry tree class continued to learn about pitch, volume and sound vibrations.



Willow class took a trip through the senses, exploring the 5 human senses of sight, touch, taste, hearing and smell. With a focus on parts of the body and biological vocabulary to build up scientific skills. As a class they worked hard to make careful observations to answer questions and to set up investigations to compare ideas. They played games to help them learn the names of the correct body parts, completed sense exploration games and tested materials and objects for their sound blocking properties

We started the week by thinking of questions that we would like to find out answers to during our learning and assessing our prior knowledge and consolidated this with body parts bingo, using a friend in the class as a live bingo boards!



We carried on exploring our senses by going on a sound walk around the school, making sure we listened carefully to all the different sounds around us. We then categorised these sounds, discussing whether they were loud or quiet sounds and talked about whether the sounds were naturally occurring (birds, a bee and the wind) or man-made (cars, trains and an alarm), which lead to an interesting debate about the human voice! "It's found in nature because we are natural!" against "It's man made because we make the sound!".



Later in the week we explored each of our senses by doing a 'senses detective' investigation, predicting which part of the body and which sense we would need to use to solve each activity. We had lots of discussion about our sense of touch in particular, with some members of Willow being able to deduce that it is actually our skin that we can sense touch with, not just our hands and our fingers. Talking about humans and our 5 senses naturally led us to talk about animals and their adapted senses, as one member of Willow pointed out that "humans are animals too".

By completing all of these investigations we learnt a lot about how our senses and how our body parts work together to give us information about the world around us.

In Oak class we kicked off science week with a letter from 'Supertato' asking for our help to find a new cape. The children were given samples of a range of different materials to test. They were looking for strength and flexibility and it had to be washable! The children came up with their own tests and made a recommendation to Supertato based on their results.



Inspired by the water travelling down the string experiment in assembly, the children had a go at building a water cascade, working out which factors affected how the water travelled. There were some great discoveries.

"If you put lots down, the water goes faster and shoots off the end."

"I need to hold this up so its flatter, then the water will go slower."



We then went on to explore which type of liquid travelled fastest. Everyone knew water went fast, but what about oil or hand soap? And what could we do to make the liquid travel faster? We answered all of these questions by setting up a series of ramps and pouring different liquids down them. One pupil even worked out that if the ramp had water on it already the liquid would travel faster. Super science!

In the middle of the week, there was the opportunity to use science to save the day when a car got stuck fast in a jug. We added a little oil to each side and whoosh! The car was freed, thank goodness.



We also readied our gardens for planting by weeding and digging over the soil and we sowed some seeds indoors, ready for planting out later on. We have been recording the process of their growth all week on a class chart, observing the size and shape of the seedlings and carefully watering as needed. We planted peas, carrots and cress.

Finally, our Breakfast Bar this week was full of vegetables. We have been learning about the good things each of the different vegetables give us to help our bodies grow. We learnt that courgettes are good for big muscles, red peppers are brilliant at helping us fight off bugs and carrots really *are* good for our eye sight!

