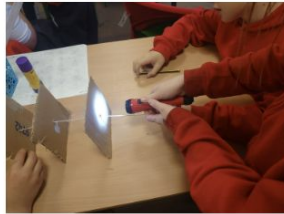


Science at Carcroft

Intent, Implementation and Impact



Intent



Our science curriculum aims to foster a lifelong curiosity and appreciation for the natural world in young learners. It's designed to introduce foundational scientific concepts in an engaging and age-appropriate manner, laying the groundwork for deeper exploration in later years.

At its core, our science curriculum seeks to ignite children's curiosity about the world around them. By exploring intriguing phenomena and asking questions, pupils develop a sense of wonder and fascination for scientific inquiry. The curriculum introduces fundamental scientific concepts and principles, such as the properties of matter, basic forces, the water cycle, and the diversity of living organisms. These concepts provide a solid foundation for understanding more complex scientific ideas in the future. Through hands-on experiments, observations, and investigations, pupils learn to think and act like scientists. They develop skills in observation, prediction, experimentation, and analysis, cultivating a mindset of curiosity and critical thinking. The curriculum encourages pupils to explore the natural world both inside and outside the classroom.



Implementation



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Science is taught across most of our expeditions, with some expeditions having a double case study of Science. Our science offer is in line with the National Curriculum, where teaching and learning show progression across all key stages within the strands of Science. Children will use a range of resources to develop their knowledge and understanding that is integral to their learning and develop their understanding of working scientifically, whilst exploring through practical investigative opportunities. Children will be able to build on prior knowledge and link ideas together, enabling them to question and become enquiry based learners. Attainment will be assessed after each case study through 'touch down' post learning tasks.

The learning environment and teaching strategies help to keep all children engaged and inspire them to want to investigate the world around them, including the school grounds, through group discussions, presentations, demonstrations, videos, practical explanations and experimental work.



Impact



The successful approach to the teaching of science at Carcroft School results in a fun, engaging, high-quality science education, that provides children with the foundations for understanding the world that they can take with them once they complete their primary education. Pupil voice is used to further develop the Science curriculum, through questioning of pupils' views and attitudes towards Science, to assess the children's enjoyment of science, and to motivate learners. Touch Downs (post assessment) assess how well the pupils have engaged with the science case study throughout their expedition, and enables teachers to identify any gaps in their knowledge, skills or understanding.



Case Studies

Each Expedition has three case study subjects...

History Geography Science
Art Design & Technology



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Science

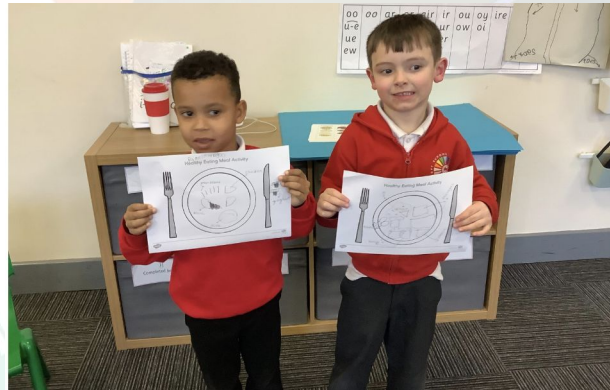
Biology



Case Studies

Science

Biology



Case Studies

Science

Biology

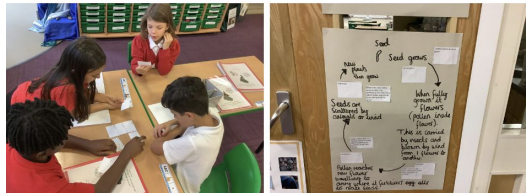
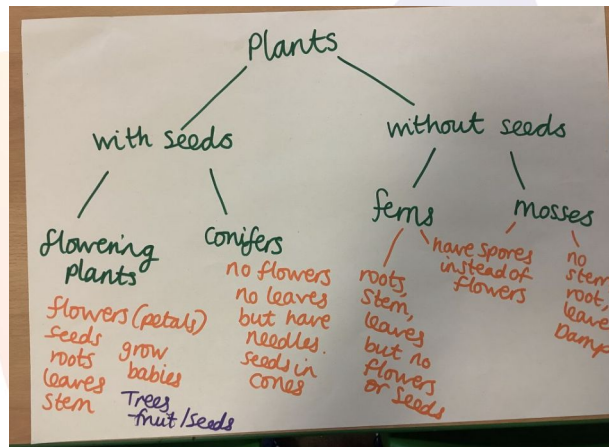
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Case Studies

Science

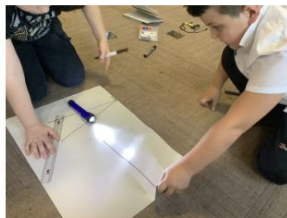
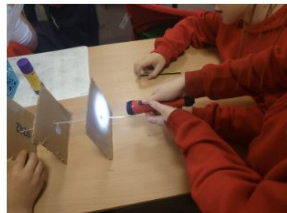
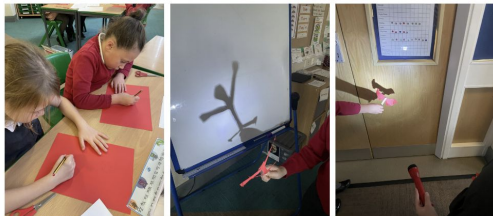
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Case Studies

Science

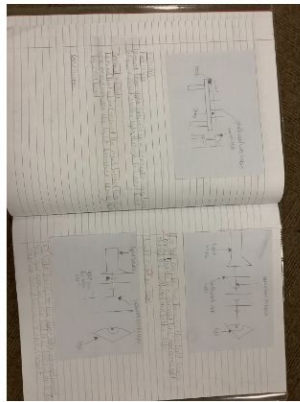
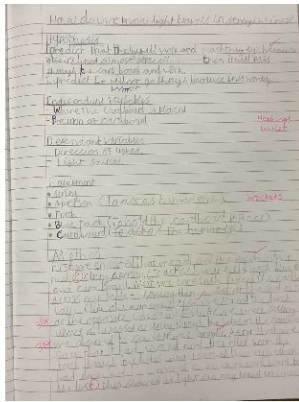
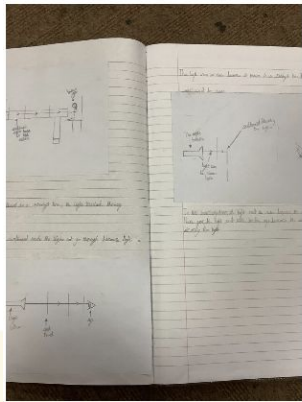
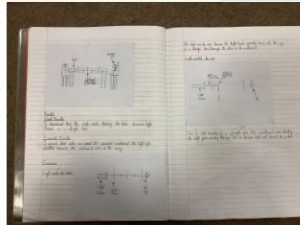
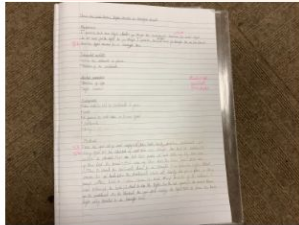
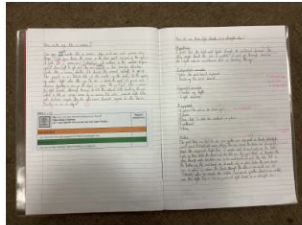
Physics



Case Studies

Science

Physics



the first piece but got blocked by the second one. Finally we compared the experiments.

Results
First result
I discovered that the light went through the holes because it was straight and light travels straight.

Second result
It was blocked by the cardboard because we moved the cardboard to the right and light only travels in a straight line and not any others.

Conclusion
Where light can be seen

The light can be seen because it travels in a straight line through the holes of the cardboard and goes into the person's eye.

Light can't be seen

When the light travels to the first piece cardboard it goes through the hole, however it gets blocked by the second due to the cardboard moving to the right.



Case Studies

Science

Chemistry

In expedition today, we set up our evaporation experiment! We can't wait to check back in a few days to see what has happened and see if our predictions were correct!



Today, we looked at what fossils are and the process of fossil formation. First, we made our own fossils in modelling clay. We found this really interesting and loved seeing the patterns appear in the clay. We then worked in mini crews to order the process of fossil formation.

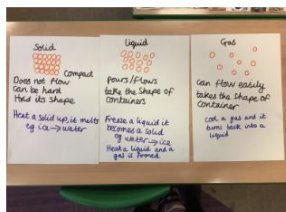
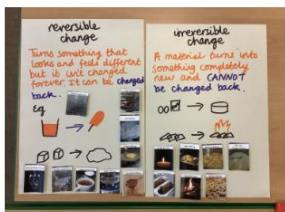


Case Studies

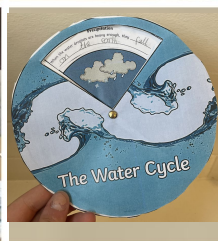
Science

Chemistry

During this week, we have recapped our learning on solids, liquids and gases and then applied this when learning about reversible and irreversible changes.



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Final products linking to Science



KS1 cookbook

How can I be the healthiest version of me?



KS1 READY STEADY GROW HOW CAN I BE THE HEALTHIEST VERSION OF ME?

KEEPING HEALTHY

Having good hygiene helps keep our bodies well and avoids germs.

Hair

I need to wash my hair because when I play with my friends outside, it gets quite dirty.



Teeth

I must always brush my teeth because if I don't then they could turn black and fall out.



Face

I should try to use soap and water to clean my face so that I don't get seeds.



Hands

I need to wash my hands to wash away the germs.



Breathing

Breathing techniques can help keep our minds healthy.

We tried finger breathing, setting thoughts and the listening game.



Final products linking to Science



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KS1 information
boards



How do animals adapt to their
habitats?



Final products linking to Science



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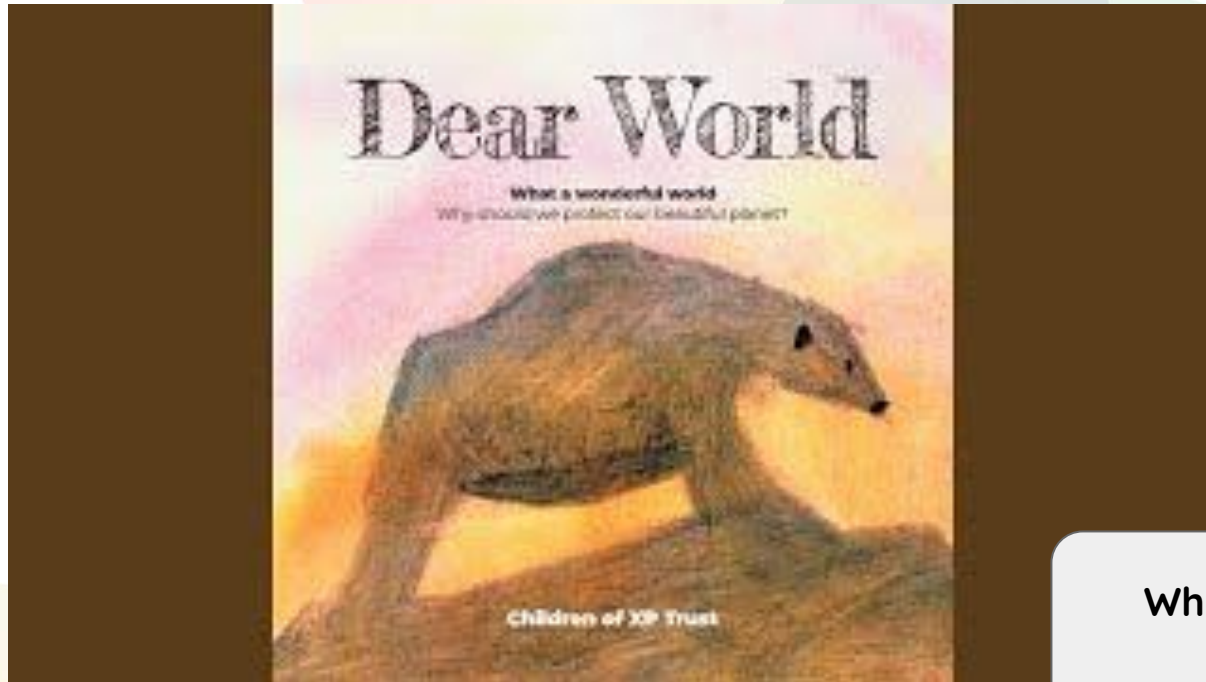
LKS2 sweet jars

Why is sugar not so sweet?

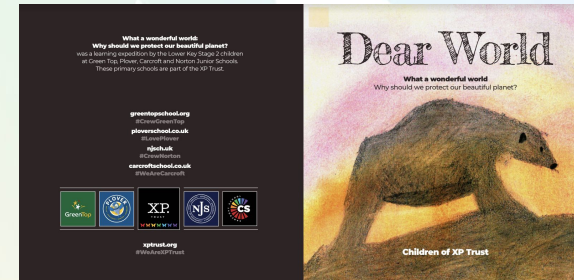
Final products linking to Science



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LKS2 song



Why should we protect our beautiful planet?

Final products linking to Science



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UKS2 exhibition



Why should we help our planet survive?

Final products linking to Science



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UKS2 informative
video



How can a healthy lifestyle
impact your body and mind?

