Avondale Primary School

Support for parents – Science

What is Primary Science?

At Avondale, we wish to create a sense of excitement and curiosity around Science. Our vision is to ensure that children develop an understanding of the world around them and be able to explain scientific concepts using the correct vocabulary. We will provide opportunities for children to work independently, and collaboratively, to develop their skills by posing questions, analysing causes and creating explanations about what has occurred. They will develop an understanding of how scientific enquiry helps to establish scientific knowledge. We want to inspire our Scientists of the future by developing their knowledge and understanding and highlighting the integral part that science plays in all our lives.

The curriculum covers a variety of science concepts such as:
Materials
States of Matter
Animals including Humans
Living Things and their Habitats
Forces
Electricity and Light
Seasonal Changes

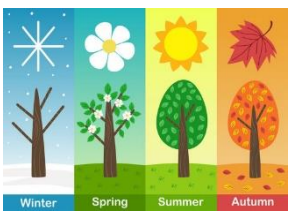
Science projects you could try at home:

EYFS

What you do: Try out different concepts at home such as sinking and floating. Go for a walk and explore the seasonal changes. When reading, discuss animals and names of parts of the body. Make comparisons and share differences.

Suggestions for EYFS activities: https://www.firstdiscoverers.co.uk/early-years-science-activities-eyfs/

They're learning about... Focus on developing vocabulary linked to plants, animals, everyday materials, seasonal changes and the environment around them. This will help them to understanding and build on their knowledge of scientific concepts as they progress through school.



KS1

What you do: The STEM Primary Website has lots of great activities that can be done to support learning. Some of the activities are labelled with 'suitable for home learning'.

Take part in a wildlife watch:

https://www.stem.org.uk/resources/collection/417951/wildlife-watch-suitable-home-learning

Exploring the uses of everyday materials:

https://www.stem.org.uk/resources/elibrary/resource/35385/materials-suitable-home-teaching

Parts of plants and their functions:

https://www.stem.org.uk/elibrary/resource/34257

You could also have a go at growing your own plants at home.

They're learning about... Understanding of different animal types and their habitats, how materials are used in everyday life and their properties, the parts of the plants. Gives children chance to ask questions, collect data and give explanations.

Lower KS2

What you do:

Year 3 includes a focus on how we can keep our bodies healthy and the importance of eating a varied and balanced diet. Use the Change 4 Life website to explore different ways in which we can look after our bodies https://www.nhs.uk/healthier-families/

You could also explore the different parts of the skeleton and have a go at making a bendy backbone!

Discover how the backbone is able to bend, even though it's made of rigid elements, by creating a model backbone from vertebrae and cartilage!

You will need:
A 5 cm paperclip
A drinking straw
Scissors

A ruler
Sticky tack or Plasticine

Year 4 includes a focus on States of Matters. Have a go at cooking/ baking at home. Rice crispy or cornflake cakes are great for this! Explore which items are solids and liquids. Can they spot when we have a gas if water is boiling? Can they spot when a solid melt into a liquid? Can they turn the liquid back to a solid?

They're learning about... Keeping healthy for the future, and exploring scientific concepts which as used in everyday life. This will get the children asking their own questions and planning to test out their theories to find an answer.

Upper KS2

What you do:

Year 5- Properties and changes of materials. This activity looks a separating a mixture. https://www.stem.org.uk/resources/elibrary/resource/35390/properties-and-changes-materials-suitable-home-teaching

Year 6 – Grouping and classifying using keys. This focuses on the children exploring different living and non-living things and creating classification keys for them.

https://www.stem.org.uk/resources/elibrary/resource/34255/grouping-and-classification-suitable-home-teaching

They're learning about... Developing scientific enquiry skills by posing questions, trialling different methods, collecting data, presenting data and creating conclusions.

Scientists

The children will learn about a variety of Scientists as they progress through school. You may wish to find out more about:

Mary Anning

Charles Darwin

Copernicus

Benjamin Franklin

Isaac Newton

Useful Websites:

- https://www.stem.org.uk/primary-science (Great for an idea of the different units covered per year group and it has activities to support)
- https://www.bbc.co.uk/teach/terrific-scientific
- KS1 Science - https://www.bbc.co.uk/bitesize/levels/z3g4d2p
- KS2 Science - https://www.bbc.co.uk/bitesize/levels/zbr9wmn
- https://www.natgeokids.com/uk/teacher-category/science/
- Purple Mash – children have a login