



## NEXUS PRIMARY WORKSHOPS 2024-2025

Workshops are 1 hour in duration, for a maximum of one class of Year 5 students.

To book please use the Google Form on the webpage <https://www.nexuscsia.co.uk/primary-science-workshops/> or email [reception@nexuscsia.co.uk](mailto:reception@nexuscsia.co.uk)

Curriculum link	Workshop
Living things and their habitats.	<p><b><u>Life Cycles and Plant Reproduction</u></b> Learn about the life cycle of an amphibian. Flower dissection and how seeds are dispersed.</p>
Animals including humans	<p><b><u>Healthy Hearts</u></b> Students use iPads and T-shirts to visualise and identify the main parts of the human circulatory system. Students investigate the relationship between exercise and heart rate. Microscopes are used to observe slides of blood. They have the opportunity (if they wish) to observe a heart dissection and relate this to models.</p>
Evolution and inheritance	<p><b><u>Evolve</u></b> Students learn about the work of palaeontologists, Charles Darwin and natural selection. Students observe fossils to recognise that living things have changed over time, and model natural selection using forks, knives and spoons.</p>
Electricity	<p><b><u>Buzzers and Bulbs</u></b> Students build simple circuits using circuit boards and make a wire puzzle game with a buzzer. Students investigate the difference between conductors and insulators.</p>
Properties and changes of materials.	<p><b><u>Reversible and Irreversible Changes</u></b> A circus of practical activities to explore chemical reactions that may be reversible or irreversible.</p> <p><b><u>Fish and Chip SOS: Separating Mixtures</u></b> Recovering a substance from a solution. Separating mixtures by filtering, and evaporating using the Bunsen burners.</p> <p><b><u>Material Properties</u></b> Students compare and group together everyday materials on the basis of their properties, such as their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. Students work scientifically to investigate which material would be the most effective for making a warm jacket.</p>

Earth and space.	<p><b><u>Solar System Day Trip</u></b>  Movement of the Moon, Earth and other planets relative to the Sun. Students use models to explain day and night. Visit the planetarium.</p>
Forces	<p><b><u>Lego Cars</u></b>  Identify the forces on a Lego car as it travels down a ramp. Students investigate the effects of friction that act between moving surfaces.</p> <p><b><u>Parachutes and Submarines</u></b>  Students work scientifically to explore the effect of water resistance by making model plasticine submarines. Air resistance is explored by comparing different shaped parachutes.</p> <p><b><u>Levers, Pulleys and Gears</u></b>  Students are introduced to levers, pulleys and gears. Students work scientifically to investigate how increasing the length of a lever allows a smaller force to have a greater effect.</p>
Light	<p><b><u>Light and Rainbows</u></b>  Students explore light using prisms, mirrors and coloured filters. Students sort objects into transparent, translucent and opaque, and explain how shadows are formed. Students work scientifically to investigate the effects of coloured filters on light.</p>