St Mark's CE Primary School - Science Curriculum Roadmap

Biology | Chemistry | Physics

EYFS

Reception (ELGs)
Explore the natural world around them; understand the effect of changing seasons; recognise some different environments.

Nursery (3-4 Year-Olds)
Explore materials; explore how things work; plant seeds and care for plants; explore and talk about forces they can feel.

KS1

Why are humans not like tigers?
Living and non-living things; animals and their habitats; senses and the human body; herbivores and carnivores

YEAR 1

What birds and plants would you find in our local area?
Identify plants and birds found in the local area; make simple observations

How does your garden grow?
Grow seeds, observing what they need to grow successfully.

How are the seasons different?
Name the seasons and describe the conditions associated with each; observe how the length of the day changes

What would aliens think of life on Planet Earth?
Name everyday materials; describe and compare materials in simple terms

YEAR 2

How can we be green-fingered?
Observe how seeds grow into plants; understand how to keep the plant healthy as it matures

Where did that racket come from?
Observe and name a variety of sources of sound; know how sound gets fainter with distance

What could be inside this egg?
Compare living, non-living and never alive; how animals are suited to habitats; simple food chains

How will 5-a-day keep me healthy?
Understanding the basic needs of animals for survival and health (e.g. diet and exercise)

What is our school made of?
Identify and compare different materials and their suitability for given tasks; bending, twisting and stretching of materials

KS2

What's on the menu?
Identify food groups and how they help us; understand the need for a balanced diet

How did that blossom become an apple?
Parts of a plant; pollination and seed dispersal; how water is transported in plants

YEAR 3

What do rocks tell us about how the Earth was formed?
Metamorphic, igneous and sedimentary rocks; formation of fossils; how soil is made

How far can you throw your shadow?
Learn how shadows are formed when light source is blocked; observe how shadows change

Are you attractive enough?
Investigate how magnets attract and repel materials; predict with reasoning whether magnets will attract or repel each other

How can Lionel Messi move so fast?
Human skeletal and muscular system; and how these help with movement

YEAR 4

What happens to the food we eat?
Describe the human digestive system including teeth; construct food chains

Which wild animals and plants thrive in our locality?
Group and classify living things; begin to use classification keys; look at how changing environments pose risks to living things

Why is the sound of music enjoyed by so many?
Know how sounds are made, including how vibration is involved;

How could we survive without water?
Solids, liquids and gases; condensation and evaporation linked to water cycle

YEAR 5

Do all living things start life as an egg?
Look at different life cycles; the process of reproduction in animals and plants

Could you be the next CSI investigator?
Group materials; dissolving, separating and filtering; reversible and irreversible changes

How could we cope without electricity for one day?
Construct simple circuits including switches; identify conductors and insulators

How different will you be when you are as old as your grandparents?
How humans change as they grow into old age

Will we ever send another human to the moon?
How the Earth moves in relation to the sun; how the moon moves in relation to the Earth; explaining day and night

Could you be the next Nintendo apprentice?
Use of circuit diagrams; understand how voltage influences how components work

Have we always looked like this?
Use fossils to learn about how life on Earth has changed over time; inherited characteristics; identify how animals are adapted

Can you feel the force?
Understand the impact of gravity; investigate friction, air resistance and water resistance; explore levers and pulleys

What would a journey through your body be like?
Explain the circulatory system in humans; diet, exercise and healthy lifestyles

YEAR 6

Could Spiderman really exist?
Classify living things including microorganisms; give reasons for grouping based on observable characteristics

How could you light up your life?
Describe reflection and refraction; describe how the eye works to see objects; concave and convex surfaces

KS3