

# YEAR 3 SCIENCE CURRICULUM FRAMEWORK

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 3
<b>Tremors</b>	<b>Scrumdidlyumptious</b>	<b>Mighty Metals</b>
<p><b>KS2 Sc R 1 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</b> <b>Sc WS 4</b></p> <p>Children find out about different types of rocks including those that are igneous, sedimentary and metamorphic. Children observe a range of rock types and how they are different, using this to classify them in various ways.</p> <p><b>KS2 Sc WS 2 Set up simple practical enquiries, comparative and fair tests.</b> <b>Sc WS 1, 3, 4, 5, 7</b></p> <p>Children carry out investigations into the properties of rocks. Children make predictions before testing whether a rock is permeable or non-permeable, durable or non-durable and able or unable to float.</p>	<p><b>Sc WS 4 Gather, record, classify and present data in a variety of ways to help in answering questions.</b></p> <p>Children explore a range of foods using touch, smell and taste. They sort and classify items according to their own criteria and explain their ideas.</p> <p><b>Sc A 1 Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</b> <b>Sc WS 4</b></p> <p>Children find out about the food pyramid before sorting foods into the main 'food groups', using hoops and baskets. They create a plan for a nutritional picnic which is balanced using foods from the different food groups.</p> <p><b>Sc WS 8 Identify differences, similarities or changes</b></p>	<p><b>Sc FM 2 Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</b> <b>Sc FM 1</b></p> <p>Children explore playground apparatus before annotating a picture with words that describe the forces (push, pull, gravity, friction) needed to make the apparatus work. They will consider why a roundabout slows down when it is no longer pushed and whether they would continue to slide if a slide was horizontal and why.</p> <p><b>Sc FM 1 Compare how things move on different surfaces.</b> <b>Sc WS 1, 2, 7, 9</b></p> <p>Children will investigate whether clothing material affects how fast an object can slide down a slide. They will think about why the surface of a slide is smooth</p>

	<p><b>related to simple scientific ideas and processes.</b></p> <p>Children investigate how food can be altered. Making alterations such as bouncy eggs, edible slime, green pancakes, exploding chocolate drops, fruit putty, fizzing soda.</p>	<p>and shiny and discover which materials make for a faster or slower slide and consider why. They will consider how to ensure their test is fair and record their results using a digital spreadsheet.</p> <p><b>Sc FM 3 Observe how magnets attract or repel each other and attract some materials and not others.</b> <b>Sc WS 3, 5; Sc FM 4</b></p> <p>Children will work in teams to find and list 10 different magnetic objects from around the school, working out what each listed item is made of and identifying its properties.</p> <p><b>Sc FM 6 Predict whether two magnets will attract or repel each other, depending on which poles are facing.</b> <b>Sc WS 3, 9; En SL 7</b></p> <p>Children test a range of magnets to investigate which poles attract and which repel. They will use floating magnets to find out which pole points in which direction. Specify the direction in which the magnet's north pole points. Using what they know about polar attraction, they will explain what this tells them about the Earth's magnetic poles.</p> <p><b>Sc WS 8 Identify differences, similarities or changes related to simple scientific ideas and processes.</b> <b>Sc WS 3, 6, 7</b></p> <p>Children investigate what happens to tarnished pennies when soaked in water, vinegar, coke, ketchup and lemon juice. They will also notice what happens to the pennies when they are removed from the liquids and find out if rinsing the pennies in water after soaking changes the final effect.</p>
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SPRING TERM 4	SUMMER TERM 5	SUMMER TERM 6
Gods and Mortals	Predator	Flow

**Working scientifically**

Pupils are taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings