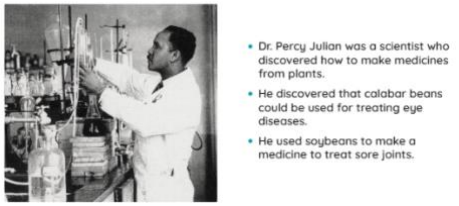
Science – Knowledge Progression Map 2026-27

"How does colour make the world the amazing place it is?"- One World, Many Colours

At Galleywood Infant School, we utilise a two-year rolling science curriculum that thoughtfully integrates Year 1 and Year 2 scientific knowledge into engaging, cross-curricular plans. While foundational Year 1 content is established before progressing to Year 2 topics, these areas remain deeply interconnected. Through this dynamic spiral curriculum, we continually review and revisit core concepts to reinforce learning and deepen scientific understanding. Within the cycle, Year A covers a significant proportion of the Year 2 National Curriculum Programme of Study, while Year B focuses more closely on the key concepts and finer details of the Year 1 Programme of Study. To ensure appropriate progression and development, our Working Scientifically Skills Progression Plan is used alongside unit plans to deepen and extend pupils' scientific enquiry skills in line with their stage of learning and level of understanding.

We enrich our science curriculum by carefully weaving significant scientists, inventors and explorers into our core units of learning. This approach helps to build children's science capital, deepen their disciplinary knowledge and inspire curiosity about the world around them. Rather than studying these individuals in isolation, pupils encounter them within meaningful scientific contexts, enabling them to see how scientific ideas have developed and how they continue to shape our lives today.

Term and Strands of Science:	**Year 1 Knowledge:**	**Year 2 Knowledge:**	**Scientific Knowledge Vocabulary:** **And** ***Working Scientifically Vocabulary:***	****Enquiry Strands and suggested enquiry activities:**	**Science in our Lives & Scientific Figures:** To know about famous scientists and their work throughout history To know about the work of modern-day scientists To know that there are a range of careers that use scientific knowledge and methods. To know there are spiritual, moral, cultural and social links with science.
Autumn 1: Orange - Biology: Plants (Y2 centred) *Link to allotment visit*	Identify and describe the basic structure of a variety of common flowering plants (including trees).	Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	<u>Year 1:</u> plant, flower, tree, leaf, stem, trunk, root, branch, petal, seed, bulb, fruit, vegetable, fruit, wild plant, garden plant, evergreen, deciduous <u>Year 2:</u> germination, shoot, seedling, growth, lifecycle, mature plant, survival, healthy, water,	  Exploring conditions for plant growth	Find out about Dr Julian Percy a 20th Century scientist who used plants to make medicines and other man-made materials. 

			light, sunlight, warmth, air, space, nutrients *WS: observe, compare, identify, test, investigate, predict, results, record, explain*		
Autumn 2: Red – Chemistry: Uses of Everyday Materials (Year 2 centred) *Link to work on London and changing materials*	Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	<u>Year 1:</u> material, object, wood, plastic, metal, glass, fabric, brick, paper, cardboard, rubber, properties, hard, soft, smooth, rough, shiny, dull, waterproof, absorbent, transparent, opaque, bend, stretch, twist, squash <u>Year 2:</u> suitable, unsuitable, purpose, use, rigid, strong, weak, durable, shape, change, bending, stretching, twisting, squashing, everyday materials *WS: observe, compare, identify, test, investigate, predict, results, record, explain*	 Investigating stretchiness of materials	Find out about Dr Shini Somara – a contemporary London born and bred mechanical engineer who investigates how forces alter materials (briges/buildings/engine parts etc). Also author of book 'A Scientist Like Me'  Dr Shini Somara 
Spring 1: White – Biology: Animals including humans *Link to work on extreme Polar	Identify, name, draw and label the basic parts of the human body and say which part of the body is	Notice that animals, including **<u>humans</u>**, have offspring which grow into adults	<u>Year 1:</u> human body, head, face, eyes, ears, nose, mouth, neck, shoulders, arms, elbows, hands, fingers, legs, knees, feet, toes,		Find out about 20th century explorer Ernest Shackleton and his discoveries in the polar regions:.

Climates and survival*	associated with each sense	Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	sight, hearing, smell, taste, touch, senses, human, animal <u>Year 2:</u> offspring, baby, child, teenager, adult, growth, lifecycle, survive, survival, food, water, air, exercise, healthy, hygiene, nutrition, balanced diet, food groups, fruit and vegetables, carbohydrates, protein, dairy. *WS: order, classify, group, compare, questions, research, investigate*	Research into stages of human life – babies and children. Asking questions. Classifying food  groups	
Spring 2: Blue - Working Scientifically Focus, Science in our Daily Lives and protecting the environment	Deepening Working Scientifically Skills - Water /ice investigations. Science in our Lives: looking after the oceans. To know there are spiritual, moral, cultural and social links with science.		*WS: observe, compare, identify, test, investigate, predict, results, record, explain, group, classify*	  Ice and water experiments	Find out about contemporary scientist Dr Charlie Veron – 'Godfather of the Coral Reef' and his work on conserving and protecting Great Barrier Reef. 
Summer 1: Yellow – Biology: Animals including humans	Identify and name a variety of common animals including fish,	Notice that animals, including humans, have	Year 1: animal, fish, amphibian, reptile, bird, mammal, pet, offspring, baby,		Find out about 20th century scientist Charles Darwin and his work on animal evolution and adaption to environment.

and Biology: Living things and their habitats *Link to trip to Hyde Hall – plants and minibeasts in microhabitats*	amphibians, reptiles, birds and mammals Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)	offspring which grow into adults Explore and compare the differences between things that are living, dead, and things that have never been alive. Identify and name a variety of plants and animals in their habitats, **including microhabitats** **I**dentify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other	adult, living, dead, never alive, habitat, minibeast, insect, garden, pond, woodland, compare, identify, observe, wings, legs, fins, scales, fur, feathers Year 2: living things, habitat, microhabitat, shelter, food chain, survive, suitability, depend, environment, adaptation, lifecycle, butterfly, caterpillar, chrysalis, snail, offspring, growth, classify, sort, tally chart, damp, dry, conditions, , evolution *WS: investigate, evidence, observe, compare, record, conclude*	Observing live minibeast life-cycle e.g: butterfly/snail etc  Sorting living, dead and never alive  Do minibeasts prefer microhabitats that are damp or microhabitats that are dry? Tally charts	
Summer 2: Green - Biology: Living things and their habitats		**I**dentify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other	Year 1: animal, carnivore, herbivore, omnivore, food, plant, habitat, living thing, woodland, ocean, pond, desert, farm, wild animal, pet, food source, prey, hunt, eat, survive, shelter, water, air, Year 2:	 Research an animal and how it is adapted to its habitat	Find out about scientist 21st century naturalist Jane Goodall and food chains in temperate and tropical rainforests* 

	Identify and name a variety of common animals that are carnivores, herbivores and omnivores	Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	habitat, microhabitat, adaptation, adapted, environment, suitability, depend, food chain, producer, consumer, predator, prey, source of food, nutrition, diet, survive, survival, interdependence/linked, rainforest, temperate rainforest, tropical rainforest, *WS: compare, identify, observe, record, compare, explain, conclude, secondary sources*	 Researching using secondary sources what animals eat to build a food chain,	

**Enquiry Strands for Key Stage 1 – linked to the National Curriculum and Plan Assessment. Icons used from Kapow Science Scheme of Learning 2023.

Comparative and fair testing	Observing over time:	Grouping and classifying:	Pattern spotting:	Researching using primary and secondary sources:
				