SCIENCE LTP

2024-25

CAREERS

Jobs connected to Science	Companies you could work for	Famous People
Health sciences (doctor, nurse, sports physiotherapist) Engineering (aerospace engineer, robotics engineer, architect) Life Sciences (veterinarian, dentist, marine biologist) Physical sciences (pilot, forensic science, geoscientist) Science teacher Forensic scientist Environmental consultancy	AstraZeneca Alder Hey hospital Cheshire police – CSI Microsoft Universal robots	David Attenborough Brian Cox Jonathan Van-Tam Dr Catherine Green Professor Sarah Gilbert Rosalind Franklin

Science progression through EYFS

UTW: The Natural World

Focus	Seasonal changes	Everyday materials	Plants	Animals including humans	Vocabulary – To be used daily.
Reception Skills	• Describe what they see, hear & feel whilst outside • Observational drawings of the natural world • Discuss how to care for the living things & their habitats • Examine change over time • Express opinions on natural & built environments & opportunities to hear different points of view on the quality of the environment. Use words such as busy, quiet, pollution • Understand the effect of changing seasons on the natural world around them	• Explore collections of materials with similar and/ or different properties. • Talk about the differences between materials and changes that they notice. •Characteristics of liquids & solids e.g. cooking eggs, melting chocolate. • Observe & interact with natural processes, such as ice melting, a sound causing a vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object & a boat floating on water.	• Extend vocabulary: blossom, buds, bulb, evergreen, deciduous. • Describe what they see, hear & feel whilst outside. • Name & describe some plants. • Draw pictures of plants.	• Shows some understanding that good practices with regard to exercise, eating, drinking water, sleeping & hygiene can contribute to good health. • Describe what they see, hear & feel. • Identify different parts of their body & animals. • Be able to show care and concern for living things. • Know the effects exercise has on their bodies. • Have some understanding of growth and change. • Talk about things they have observed including animals. • Observational drawings of animals.	Test, fair, why, senses, world, plants – leaf, stem, root, flower, animals, humans, materials - waterproof, natural, change, growth, decay, environment, heavy, light, float, sink, stretch, snap, magnetic, baby, toddler, child, teenager, adult, egg, caterpillar, chrysalis, bark, stick, branch, seasons, melt, liquid, solid, hard, soft, kitten, puppy, foal, calf etc

Reception Knowledge	**Autumn 1** Me and My Family **Autumn 2** Seasons and Celebrations	**Spring 1** The Ocean **Spring 2** Transport	**Summer 1** Growth and Change **Summer 2** Castles and Dragons
	• Can name own body parts using the text Funny Bones as a support – all above + shoulders, ribs, backbone, knees, elbow. • Can piece back together the parts of the body and locate upon request. • Can name their five senses and what each one does. • Can name the 4 seasons. • Can talk about similarities and differences between each season. • Can name the characteristics of each season. • Can talk about hibernation and migration.	• Know the effects of heating and cooling on ingredients such as melting and freezing. • Can classify a set of objects by their materials – wood, plastic, fabric, and glass. • Can name the characteristics of materials. • Can describe the most suitable materials for building and give explanations as to why.	• All plants need water, light and warmth to grow and survive. • A seed produces roots to allow water to get into the plant and shoots to produce leaves to collects the sunlight. • Use correct terms e.g. chrysalis, pupa when observing life cycle of butterfly & ladybirds. •Can describe the life cycle of a chick using correct terminology e.g. embryo, incubation, hatching. •Knows that meat is produced from animals.

Seasonal Changes	Everyday Materials	Plants	Animals including humans

N.B - These are our overarching themes that have been mapped to national curriculum subjects in KS1. The knowledge content is identified in the intent subject documents.

KS1 Science Overview 2024 2025	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**Animals including humans** **Classification of animals** Fish, amphibians, reptiles, birds, mammals	**Seasonal change** measuring changes across the four seasons, associated weather, day length ongoing across the year	**Everyday materials** Name everyday materials and their physical properties and uses	**Seasonal changes** measuring changes across the four seasons, associated weather, day length ongoing across the year	**Plants** Identify and name common wild and garden plants, basic structure of common flowering plants and trees	**Seasonal changes** measuring changes across the four seasons, associated weather, day length ongoing across the year
Year 2	**Animals including humans** life cycle and basic needs, exercise, diet, hygiene	**Living things and their habitats—living and non living** Habitats and micro habitats, simple food chain	**Uses of Everyday Materials** Identify and compare uses of everyday materials, find out some materials shape can be changed by squashing, bending, twisting and stretching		**Plants** How seeds and bulbs grow into mature plants and what plants needs to stay healthy—water, light, suitable temperature	**Energy** Introduction to light, sound, electricity and forces

KS2 Science Overview 2024 2025	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Animals including humans** Nutrition, skeletons, muscles	**Forces** Magnets	**Rocks, soils and fossils**		**Plants** Functions of different of flowering plants, requirements for growth, transporting water, life cycle	**Light** How we see, formation of shadows, safety
Year 4	**Animals including humans** Digestive system, teeth and their functions, food chains	**Sound** How sounds are made, changed, pitch, volume, parts of the ear	**Electricity** Simple series circuits, switches and common conductors and insulators	**Living things and their habitats** Classification, vertebrates, invertebrates, impact on environments	**States of matter** Solids, liquids and gases Water cycle	
Year 5	**Animals including humans** Changes as humans develop to old age Sound—hearing deteriorates	**Living things and their habitats** Life cycle of mammals, amphibian, insect and bird Reproduction—some plants and animals	**Properties and changes of materials** Properties of materials, reversible and non reversible changes		**Earth and space** Solar system plus day and night	**Forces** Understanding impact of forces including gravity and friction , air resistance, water resistance
Year 6	**Animals including humans** Circulatory system and how to keep the body healthy –diet, exercise, drugs	**Electricity** Using recognised symbols, comparing circuits, impact of voltage	**Evolution and inheritance** How living things adapt to their environments an dhow this may lead to evolution		**Living things and their habitats** Classification using observable characteristics including micro organisms , plants and animals	**Light and shadows** Travels in straight lines, how we see and shadow formation