

Subject Overview



Ashford Hill
Primary School

Science						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Exploring Autumn	Marvellous Machines	Winter Wonderland Dangerous Dinosaurs Lived a Long Time Ago	Signs of Spring Ready, Steady, Grow	Animal Safari Shadows and Reflections	Big, Wide World On the Beach
Year 1	Human Senses What can you remember? Humans; Labelling body parts; Counting body parts; Similarities and differences in humans; Five senses – sight, hearing, touch, smell, taste; Senses and danger; Sensory loss and assistive tools; Sense of touch investigation;	Everyday Materials Materials; Natural materials; Human-made materials; Grouping materials; Properties of materials; Venn diagrams; Comparing and testing materials;	Seasonal Changes Seasons; Seasonal changes in deciduous and evergreen trees; Seasonal changes in animals; Weather; Seasonal weather; Day length; Investigating the Sun; Measuring wind; Measuring temperature; Measuring precipitation; Weather forecasting;		Plant Parts Wild and garden plants; Seasonal changes; Plant parts; Seeds and bulbs; Investigating leaves; Importance of plants;	Animal Parts Animals' body parts; Animal groups – amphibians, birds, fish, invertebrates, mammals, reptiles; Carroll and Venn diagrams; Pets; Carnivores, herbivores and omnivores; Earthworms;
Year 2	Human Survival Human life cycle; Human needs for health and survival; Healthy lifestyle; Bodily hygiene routines; Handwashing investigation; How germs spread;	Habitats Exploring habitats; Living and non-living things; Identifying plants and animals in a habitat; Animal shelter and food; Food chains; Animal adaptations; Camouflage investigation; Plant adaptations;	Use of Materials Identifying materials and their properties; Shaping materials; Uses of materials; Linking properties to use; Sustainability and recycling;	Plant Survival Plant parts; Seasonal changes in plants; Investigating germination; Investigating plant growth; Unusual plants;	Animal Survival Habitats; Invertebrates and invertebrate groups; Microhabitats; Animal needs for survival; Food chains; Human impact on habitats; Animal offspring; Lifecycles – amphibians, birds, invertebrates, mammals and reptiles; Seasonal changes in animals; Habitat improvements;	
Year 3 & 4 Cycle A	Animal Nutrition and The Skeletal System Living things; Carnivores, herbivores and omnivores; Human diet; Human nutrition and food groups; Fatty foods; Seasonal changes in animals' diets; Human skeleton; Joints; Muscles; Skeleton types – endoskeletons and exoskeletons		Rocks Fossils and Soils Identifying and classifying, Pattern seeking, Comparative tests, Research	Forces and Magnets Pushing and pulling forces; Contact forces; Friction; Force meters; Bar charts; Non-contact forces; Magnetic attraction and repulsion; Magnetic fields; Magnetic Earth; Uses of friction and magnetism;	Light and Shadow Light sources and reflectors; Reflective and non-reflective materials; Sun safety and protection; Shadows; Opaque, transparent and translucent materials; Changes in shadows	Plant Nutrition and Reproduction Root systems; Stems; Water transport; Investigating leaves; Life cycle of flowering plants; Flower parts; Researching pollination; Seed formation and dispersal; Variation in plant needs
Year 3 & 4 Cycle B	Digestive System Producers and consumers; Ecosystems; Food chains and food webs; Changes in ecosystems; Digestive system; Teeth types – incisors, canines, premolars, molars; Teeth health and dental hygiene	Sound Sound facts; Investigating sound; Sound waves; How we hear sounds; Muffling sound investigation; Volume and distance investigation; Changing the volume of sound investigation; Changing the pitch of sound investigation; Investigating sound	States of Matter Classifying solids, liquids and gases; Unusual materials; Particle theory; Change of state; Melting, freezing, evaporation and condensation; States of water; temperature; melting; Line graphs; Researching melting and boiling points	Group/Classifying Types of classification; Taxonomy; Understanding and creating classification keys; Animal kingdom; Plant kingdom; Classifying new discoveries	Electrical Circuits and Conductors Sources of electricity; Electrical devices; Electrical components; Series circuits; Complete and incomplete circuits; Conductivity; Conductors and insulators; Wired plugs; Incandescent light bulbs; Future of electricity	
Year 5 & 6 Cycle A	Forces and Mechanism Contact and non-contact forces; Gravity; Mass and Weight; Discovering gravity – important scientists; Friction; Air resistance; Water resistance; Mechanisms – levers, pulleys, gears	Earth and Space The Solar System; The Earth, Sun and Moon; Planets and stars are spherical; Daytime and night time; Sundials; Day length/seasons; Times of the day around the world; The phases of the Moon; Lunar and solar eclipses	Human Reproduction and Aging Animal life cycles; Stages and processes; Classifying mammals; Mammalian life cycles; Interpreting scatter graphs; Human life cycle; Human gestation stage; Human juvenile stage; Human adolescent stage; Puberty; Venn diagrams; Interpreting line graphs; Human sexual reproduction; Human ageing		Properties and Changes of Materials Properties of materials; Thermal conductivity; Measuring temperature; Thermal insulators; Solubility; Heterogeneous and homogeneous mixtures; Sieving; Filtration; Evaporation; Separating unusual mixtures; Reversible and irreversible changes; Innovative materials;	
Year 5 & 6 Cycle B	Circulatory System Bodily systems; Circulatory system – role and main parts; Heart – structure and function; Blood – components and functions; Blood vessels – structure and function; Measuring heart rate; Proving a hypothesis; Heart rate investigation; Classifying foods; Effects of smoking, alcohol and drugs; Heart rate recovery investigation		Electrical Circuits and Components Series circuits; Circuit components; Recognised circuit symbols; Investigating circuit components; Electric current; Voltage; Researching cells and batteries; Investigating voltage changes- Sensors and monitoring; Designing and making home devices; Incorporating programming and circuits in products		Light Theory Light facts; How light travels; Light, sight and the human eye; Visible light; Perceiving colour; Shadows; Reflections; Plane, concave and convex mirrors; Measuring light; Refraction	Evolution and Inheritance Five kingdoms, microorganisms and viruses; Classifying fossils; evolution/ free diagrams; continuous and discontinuous variation; Natural/artificial selection; Adaptation: birds/plants