

Norwich Road Academy – Long Term Plan for Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Magical Me Our bodies Features of our body Senses	Colours and Light Shadows Light/dark	Journeys Chick life cycle – egg in incubator Egg experiment in vinegar	Green Fingers Plant life cycle Human life cycle	All Creatures Great and Small Butterfly life cycle	All Change Observe changes in our bodies
Reception	All About Me The human body: Facial features, body parts, the senses. Seasons of the year; Autumn. Deciduous and evergreen trees. Observing leaves using magnifying glasses, leaves changing colour.	Transport Air transport, Water transport Seasons of the year: Autumn/Winter. Transport in the winter; snow ploughs, gritting roads, snow tyres. Changing state of matter; frost and ice- looking closely at ice, what happens when it warms?	Space Seasons of the year: Winter Our planet Earth, land and sea, plants and animals, weather, gravity. The moon, the sun, the planets in our solar system, space travel, astronauts.	Growing and Changing Growing and changing -how people change as they grow, how animals change as they grow. Life cycles of a butterfly. Identify animals and their young. Plants; how they grow from seeds and bulbs. What plants need to grow. Identify parts of plants including roots, stem and leaves. Identify trees and plants growing locally on the school grounds or in local parks.	Kings and Queens Seasons of the Year: Summer. Signs of summer; flowers, warmer days, light evenings, butterflies, bees, birds. Design a garden for the Queen; what could we grow? What would we include? Sketch some ideas and write about the design.	Stories from the Past Seasons of the Year: Summer. How we stay safe in the sun; sunscreen, hats, sunglasses. Safety around water. Changing state of matter; Why do our ice lollies melt?
Year 1 / 2	The Human Body 1. Introduction to Our Body and Our Senses 2. Eyes and Sight 3. Ears and Hearing 4. Touch, taste and smell	Seasons and Weather 1. The four seasons 2. Tools to record the weather	Animals and Their Needs 1. Amazing Animals (Introduction to Animals) 2. Grouping animals: Fish, amphibians,	Taking Care of the Earth 1. Taking Care of the Earth 2. Earth's Natural Resources 3. Logging	Plants 1. What plants need 2. Parts of plants 3. Seeds 4. Deciduous and evergreen plants 5. Plants we eat	Materials and Magnets 1. Everyday Materials 2. Properties of Materials 3. Uses of Materials 4. Magnets

	5. Understanding Sensory Impairment 6. Assessment	3. Using a graph to show information about the weather 4. Clouds and what they tell us: cirrus, cumulus and stratus 5. Weather forecasting 6. Dangerous weather around the world 7. Assessment	reptiles, birds and mammals 3. Grouping animals: carnivores, herbivores and omnivores 4. Animals as pets 5. Describing animals 6. Assessment	4. Pollution 5. Recycling 6. Assessment	6. Assessment	5. Investigation 6. Assessment
Year 3	The Human Body 1. The Muscular System 2. The Skeletal System 3. The Nervous System 4. Preparing to Eat 5. The Digestive System 6. Assessment	Rocks 1. Sorting rocks 2. How Rocks are Formed 3. Permeability 4. Fossils 5. Soil 6. Assessment	Light 1. Light and Dark 2. Transparent and Opaque Surfaces 3. Mirrors and Reflection 4. Part 1—Shadows 5. Part 2—Finding Patterns in Changing Shadows 6. Assessment	Forces and Magnets 1. Forces (Gravity) 2. Friction 3. Magnet 4. Magnetic Poles and Fields 5. Investigating the strength of magnets 6. Assessment	Plants 1. Botany and Flowering Plants 2. Requirements for Life and Growth 3. Water Transportation in Plants 4. Pollination in Flowering Plants 5. Seed Dispersal 6. Assessment	Cycles in Nature 1. The Four Seasons (prior learning) 2. Seasonal Cycles in Plants 3. Life Cycle of a Plant 4. Animal Migration 5. Life Cycle of a Frog 6. Assessment
Year 4 / 5	The Human Body 1. Cells and Nutrients 2. Teeth and Senses 3. Digestion 4. A Healthy Diet 5. Vitamins and Minerals 6. Assessment	The Water Cycle 1. States of Matter 2. Evaporation 3. Condensation 4. Precipitation 5. The Water Cycle 6. Assessment	Sound 1. What is sound? 2. Speed of sound 3. Qualities of sound—Pitch and Volume 4. Human Voice 5. Ears— How we Hear 6. Assessment	Ecology 1. Living Things and Habitats 2. Natural Cycles 3. Web of Living Things 4. Air Pollution—A Human Threat to the Environment 5. Ecology in our Local Areas 6. Assessment	Classification of Plants and Animals 1. Introduction to classification 2. Classes of vertebrates: Fish and Amphibians 3. Classes of vertebrates: Reptiles, Birds and Mammals 4. Classes of invertebrates: Insects, Arachnids and Molluscs 5. Classification of plants 6. Assessment	Electricity 1. Electrical Safety 2. Parts of a circuit 3. Switches 4. Thomas Edison and Lewis Latimer 5. Investigating conductive and non-conductive materials 6. Assessment

Year 6	The Human Body	Light	Electricity	Evolution	Classification of Living Things	Reproduction
	1. The Heart: Circulation of the Blood 2. Blood Vessels and Transport 3. Blood Pressure and Heart Rate 4. Heart Rate- an Investigation 5. Heart Rate– an Investigation continued 6. Assessment 7. Optional extra lesson: components of blood	1. How Light Travels 2. How We See 3. Shadows and Their Shapes 4. The Colour of Light 5. Making a Periscope 6. Assessment	1. Switched 2. Simple series circuits 3. Voltage 4. & 5. Creating a circuit for a purpose 6. Assessment	1. Fossils and Mary Anning 2. Inheritance 3. Adaptation 4. Charles Darwin 5. Alfred Wallace 6. Assessment	1. Classifying organisms 2. Cells: Plant and Animal cells 3. Taxonomy 4. Vertebrates 5. Invertebrates 6. Assessment	1. Asexual reproduction 2. Sexual reproduction in non-flowering plants 3. Sexual reproduction in flowering plants 4. Reproduction in animals 5. Growth stages 6. Assessment

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