

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
EY1	Under The Sea: Floating and sinking. Parent speaker visits. School maps, family history and traditions. 6.1, 6.2, 7.1 Theme week tech challenge: boats (floating & speed) Study of: Jacques Cousteau Sylvia Earle	Fairy Tales & Festivals: materials - ice investigation, dissolving, 6.2, 7.1, 7.2 Technology - making houses from straw, sticks and brick. Food Tech: making gingerbread men	Space: Rocket role-play. Investigating materials. Making alien slime. Star navigation. Solar system. History of Space Travel and exploration. Constellation maps. 6.2, 6.3, 7.2 Technology – Making rockets	Dinosaurs: Extinction. Fossils. Dinosaur museum trip. 6.2, 7.1 Food Tech - Melting chocolate and making Dinosaur cookies.	Around The Globe: Habitats. Northern lights. Climates around the world. Cultures and customs. 6.1, 6.2, 7.1, 7.2 Food Tech: Making ice lollies.	(POND UNIT) Insects: Lifecycles, Investigating the pond area. Making fruit kebabs. Braywick Nature Reserve Trip. 6.2, 7.1 Technology - Making bug sweeping nets.
Year 1	Animals including Humans: Identifying, comparing and describing different animals. Parts of the human body 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 3.1, 3.2, 3.3, 3.4 Theme week tech challenge: cars (distance & weight) Study of: Dr Lucy Jones Thomas Edison	Seasonal Changes: Light and Shade 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 5.1, 5.2 Technology – Make wind socks	Everyday Materials: Identify and name a variety of everyday materials and describe their properties 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 4.1, 4.2, 4.3, 4.4 Food Tech: Jam sandwich using strawberries	Everyday Materials: Forces 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 Technology - Build a catapult plane Study of: The Wright Brothers Food Tech: Welsh Cakes	(POND UNIT) Seasonal Changes: Animal life cycles & Seasonal Change 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 3.1, 3.2, 3.3, 3.4 Technology – 'toad abode'/ frog hotel	Plants: Green Plants 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 2.1, 2.2 Food Tech: Vegetable ratatouille
Year 2	Plants: Plants and Animals: Keeping a plant diary 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 2.3, 2.4 Theme week tech challenge: dioramas of rainforest Study of: Michaela Strachan David Attenborough	Use of Everyday Materials: Suitability of a variety of everyday materials 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 4.5, 4.6 Technology – making waterproof capes	Animals, including humans: Healthy Living: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 3.5, 3.6, 3.7 Food Tech: Making smoothies	(POND UNIT) Living Things & Their Habitats: Habitats 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 6.1, 6.2, 6.3, 6.4 Technology - Designing own animal and habitat Study of: The invention of the mobile phone (Steve Jobs)	Animals including Humans: Life Processes (Ducks) 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 3.5, 3.6, 3.7 Food Tech: Cheese scones (duck and chick eggs compare)	Use of Everyday Materials: squash, bend, twist, stretch 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 4.5, 4.6 Technology - Paper bridges Food Tech: Make salsa

Lowbrook Academy

Science and Technology Long Term Plan

<p>Year 3</p>	<p>Animals (including humans): Food and Keeping healthy</p> <p>1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 3.8, 3.9</p> <p>Technology - Making a skeleton out of cardboard / Make a stomach using a zip locked bag. Theme week tech challenge: cars powered by elastic band (distance & time)</p> <p>Study of: Jane Goodall Charles Darwin</p>	<p>Impact of Plastic on the World! Looking at impact of plastic, Blue planet II, Thinking about alternatives 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 Technology – making a thermal cup holder</p> <p>Food Tech: Stained glass biscuits</p>	<p>Forces and Magnets: Attract, repel, comparisons 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 9.1, 9.2, 9.3, 9.4, 9.5, 9.6 Technology – Making a Compass</p> <p>Food Tech: Vegetable soup</p>	<p>Rocks: Rocks and soils 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 7.1, 7.2, 7.3 Technology – Design and make an eco-friendly container</p> <p>Study of: Evolution of motor cars (Henry Ford)</p>	<p>Light: Light and shadows. 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 8.1, 8.2, 8.3, 8.4, 8.5 Technology – Design and make a shadow puppetry theatre</p> <p>Food Tech: Stuffed vegetables</p>	<p>(POND UNIT) Plants: Functions of different Parts of flowers, requirements for life and growth Technology – Grow beanstalks, design and build beanstalk towers 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 2.5, 2.6, 2.7, 2.8</p>
<p>Year 4</p>	<p>(POND UNIT) Living Things & Their Habitats: Looking at local wildlife. (kite story. Urban fox and squirrel) Environmental impact of panda's habitat, effect of climate change and impact of man 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 6.5, 6.6, 6.7 Theme week tech challenge: paper aeroplane (value of money & distance)</p> <p>Study of: Stephen Hawking Helen Sharman</p>	<p>States of Matter: Changing states, types of gas, grouping materials and water cycle. 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 10.1, 10.2, 10.3 Technology - Building a Tudor House</p> <p>Food Tech: Tudor biscuits</p>	<p>Electricity: Building circuits, circuit symbols, potato/lemon batteries 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 12.1, 12.2, 12.3, 12.4, 12.5</p> <p>Food Tech: Making a sandwich using salad leaves planted</p>	<p>Sound: Anatomy of the ear, investigation in to sound proofing, linked to materials, how sound travels 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 11.1, 11.2, 11.3, 11.4, 11.5 Technology – Making ear defenders</p> <p>Study on: Isambard Kingdom Brunel</p>	<p>Animals including Humans: Teeth and the digestive system, tooth decay – egg investigation, digestion through excretion 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 3.10, 3.11, 3.12</p> <p>Food Tech: A cultural dish linked to Egypt/</p>	<p>Animals including Humans: Growth, nutrition for different sportspeople e.g. ballerina opposed to an Olympic rower, looking at relation to height and distance of jumping, effect of sport on our body – heart rate, perspiration etc 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15 Technology - Textiles Design a team badge for 4D or 4L., use fabrics, sequins, beads, buttons., different stitches e.g. cross-stitch, blanket stitch, back stitch</p>

<p>Year 5</p>	<p>(POND UNIT) Living Things and their Habitats: Life cycles of amphibians, birds and mammals. Reproduction of plants. 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 6.8, 6.9 Theme week tech challenge: marble run (gravity & time) Study of: Marianne North Sir Isaac Newton</p>	<p>Earth and Space: The planets of the solar system, The sun 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 13.1, 13.2, 13.3, 13.4 Technology - Design Sundials Food Tech: Cracking potato cake</p>	<p>Properties of materials: Properties of materials 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12 Technology - Designing and making volcanoes.</p>	<p>Changing Materials: Changing states (Irreversible & reversible) 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12 Food Tech: Spanish tortilla Study on: Galileo Galilei – study of the sky with telescope</p>	<p>Forces: Types of Force. 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 9.7, 9.8, 9.9 Technology - Design boats for boat challenge</p>	<p>Animals Including Humans: Life Explorers - Human lifecycle, growth, development, puberty and old age 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 3.13 Technology - Making Parachutes and Planes. 3D printing Food Tech: Chicken Tikka</p>
<p>Year 6</p>	<p>(POND UNIT) Living Things and their habitats: Classifying plants and animals 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 6.8, 6.9 Theme week tech challenge: boats (floating & weight) Study of: Marie Curie Alessandro Volta</p>	<p>Animals Including Humans: Human circulatory system and impact of exercise, drugs and diet 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 3.14, 3.15, 3.16 Technology – Making own template for biscuits Food Tech: Christmas biscuits</p>	<p>Electricity: circuits and components 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 12.6, 12.7, 12.8 Technology – making an electric board game</p>	<p>Light: Light and Sight 1.16, 1.17, 1.18, 1.19, 1.20, 1.21 8.1, 8.2, 8.3, 8.4 Food Tech: Making bread, linked to methods used across the world (including yeast) Study on: The invention of the computer (Bill Gates, Alan Turing, The Enigma Code)</p>	<p>WeDo Lego: Unit 5 Plants and Pollinators Unit 4 Frog metamorphosis Unit 8 Sort to recycle 1.18, 1.20, 14.2, 14.3 Technology - Design and make Greek inspired papier mache pottery</p>	<p>Animals Including Humans: Evolution, inheritance and reproduction 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 14.1, 14.2, 14.3 Food Tech: Making pizza (fresh tomato sauce using home-grown tomatoes and a scone base)</p>