

## Galleywood Infant School Science Curriculum Coverage 2024-25

### “How Does the World Change and How Do We Know?”


|   | Aut 1  | Aut 2   | Spr 1  | Spr 2   | Sum 1   | Sum 2  |
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| Topic title   | Where did you come from pebble?  | What will you grow into egg?  | What was your home like?   | Who did you belong to?  | What do you do with an idea?  | How high will you fly?   |
| Wow points<br>Experiences<br>Visits visitors<br>Environment links | Visit to Parklands Farm<br><br>Exploring the school pond habitat<br><br>A rock/ fossil museum  | Y1: Animal skeletons<br>Mammals, fish, reptiles and birds to visit<br>Y2:<br><br>Exploring the pond habitat and fauna of school grounds | History off the Page-Victorian Home Day<br><br>Exploring the flora of the school grounds | A box of old toys from Oaklands Museum<br><br>Toy making workshop/ showcase | Amazing human body machine – what can your body do?   | Visit to Cudmore Grove<br><br>Exploring the school pond  |
| Meet the Scientist  | Mary Anning  |   |  |   |   |  |
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| <u>Science Areas:</u>   | Y1: Seasonal Change, weather<br>Class tree<br>Brief materials recap before touching on soil & rocks<br><br>Y2: Differences between alive and dead<br>Brief materials recap before touching on soil & rocks (Y3 link) | Y1: Classifying Animals & lifecycles<br><br>Y2: Survival and development of animals.<br>Life-cycles                                     | Y1: Growing plants<br><br>Y2: Structure of plants<br>Conditions for plant growth         | Y1: Everyday Materials<br><br>Y2: Uses of Everyday Materials                | Y1: Healthy eating & Exercise<br>Life cycle of humans<br><br>Y2: Human body is an amazing machine!<br>Healthy eating, exercise. | Y1: Seasonal Change<br>Exploring school pond<br><br>WS investigation skill development<br><br>Y2: Living things and their habitats incl<br>micro-habitats cont'd<br>Adaptation & survival<br>Food chains |

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| <p><u>Substantive Knowledge</u></p> | <p>Year 1 (24-25)</p> | <p><u>Physics: Seasonal changes and weather in seasons</u><br/>(Autumn/winter)<br/>Observe changes across the 4 seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p> <p><u>Chemistry: Materials (brief)</u><br/>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> | <p><u>Physics: Seasonal changes and weather in seasons</u><br/>(Autumn/winter)<br/>Observe changes across the 4 seasons</p> <p><u>Biology: Animals including humans</u><br/>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Notice that animals, including humans, have offspring which grow into adults.<br/>Life Cycles</p> | <p><u>Biology: Plants</u><br/>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees<br/>Labelling basic parts of the plant.<br/>Healthy plants- water and no water.</p> <p>Whole class projects – indoor gardens.<br/>Caring for plants</p> | <p><u>Physics: Seasonal changes and weather in seasons</u><br/>(Spring)<br/>Observe changes across the 4 seasons</p> <p><u>Chemistry: Materials</u><br/>Distinguish between an object and the material from which it is made .<br/>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>Describe the simple physical properties of a variety of everyday materials</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Pre-assess – Talking/Exploring materials.<br/>Categorising materials – based on</p> | <p><u>Physics: Seasonal changes and weather in seasons</u><br/>(Summer)<br/>Observe changes across the 4 seasons</p> <p><u>Biology: Animals including humans</u><br/>Identify, name draw and label the basic parts of the human body<br/>Say which part of the body is associated with which sense.</p> <p>Notice that animals, including humans, have offspring which grow into adults.<br/>Life Cycles</p> <p>Investigate and describe the basic needs of animals, including humans for survival (water, food and air)<br/>Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p> | <p><u>Physics: Seasonal changes and weather in seasons</u><br/>(Summer)<br/>Observe changes across the 4 seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p> <p>Strengthening WS skills through investigations – round up</p> |
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|                       |                                      |   |  |  | name/physical properties. Why are the materials good for...?<br>I -Best material for...TESTING materials for purpose e.g. towel, raincoat for teddy.<br>I – Transparent, opaque, translucent materials. | I – Balanced diets – food groups.<br>Parts of the human body.                                   |  |
| WS                    | <u>Year 1 Working scientifically</u> | Asking simple questions and recognising that they can be answered in different ways<br><br>Observing closely, using simple equipment<br><br>Identifying and classifying<br><br>Gathering and recording data to help in answering questions. | Identifying and classifying<br><br>Using their observations and ideas to suggest answers to questions<br><br>Performing simple tests | Using their observations and ideas to suggest answers to questions   | Asking simple questions and recognising that they can be answered in different ways<br><br>Using their observations and ideas to suggest answers to questions   | Gathering and recording data to help in answering questions.<br><br>Identifying and classifying | Gathering and recording data to help in answering questions.<br><br>Performing simple tests  |
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| Substantive Knowledge | <u>Year 2 (24-25)</u>                | <u>Biology: Y2 – Living things and their habitats</u><br>Explore and compare the differences between  | <u>Biology: Re-visit again Living things and their habitats</u><br>Explore and compare the   | <u>Biology: Plants Y1 Identify, classify and describe their basic structure of a variety of common flowering plants,</u> | <u>Uses of Everyday Materials</u><br>Identify and compare the suitability of a variety of everyday  | <u>Biology: Living things and their habitats</u><br>Explore and compare the differences         | <u>Biology: Living things and their habitats</u><br><br>Focus on animals that live up high – |
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|  |  | <p>things that are living, dead, and things that have never been alive.</p> <p><u>Chemistry: Y1: Everyday Materials (brief intro to link to Rocks)</u></p> <p>Describe the simple physical properties of a variety of everyday materials.</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> | <p>differences between things that are living, dead, and things that have never been alive.</p> <p><u>Biology: Animals including humans</u></p> <p>Investigate and describe the basic needs of animals, including humans for survival (water, food and air)</p> <p>Notice that <u>animals</u> including humans have offspring which grow into adults.</p> <p>I – observe animals over time (bugs/fish?)<br/>I – animal life cycles<br/>I – different types of animals (reptile, mammal, fish etc) from eggs<br/>Interview pet owners – how do you ensure a healthy /thriving animal?</p> <p><b>Meet the Scientist:</b></p> | <p><u>including roots, stem/trunk, leaves and flowers.</u></p> <p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Labelling a variety of plants in school and local environments</p> <p>I – conditions for growth- light/water/temperature<br/>I – seed diary- bean plant- runner bean</p> <p><b>Meet the Scientist:</b><br/>Talk to a botanist<br/>Research a plant specialist</p> | <p>materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>I – investigating the best ball material for bouncing<br/>I – the best stuffing for a cuddly toy?</p> <p><b>Y3 Forces: touch upon</b></p> <p>I – paper/card aeroplane investigation</p> | <p>between things that are living, dead, and things that have never been alive.</p> <p><u>Biology: Animals including humans</u></p> <p>Investigate and describe the basic needs of animals, including humans for survival (water, food and air)</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p> <p>I – exercise/heart rates.<br/>I – Sugar contents – predicting/measuring weighing the amount of sugar.<br/>I – Germs - Bread experiment<br/>I – Balanced diets<br/>* English link*<br/>I – Egg shell teeth experiment.</p> | <p>squirrels/ bats/birds etc and their habitats</p> <p>Identify 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.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>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.</p> <p><b>Meet the Scientist:</b></p> |
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| WS |                                      | <p><u>Y3</u><br/> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.<br/> Describe in simple terms how fossils are formed when things that have lived are trapped within rock.<br/> Recognise that soils are made from rocks and organic matter</p> <p><b>Meet the Scientist:</b><br/> Mary Anning</p> <p>I – observing, describing &amp; classifying rocks<br/> I – Starburst Rock cycle – sedimentary rock formation<br/> I – making your own fossil</p> | Interview a vet  |  |   | <p><b>Meet the Scientist:</b><br/> Interview a doctor or nurse</p> | Interview a conservationist/habitat specialist – bird/bat specialist |
|    | <u>Year 2 Working scientifically</u> | Asking simple questions and recognising that they can be answered in different ways  | Identifying and classifying<br><br>Using their observations and ideas to suggest | Using their observations and ideas to suggest answers to questions | Asking simple questions and recognising that they can be answered in different ways | Gathering and recording data to help in answering questions.       | Gathering and recording data to help in answering questions.         |

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|                                      |   | <p>Identifying and classifying</p> <p>Observing closely, using simple equipment</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Performing simple tests</p> | <p>answers to questions</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> | <p>Gathering and recording data to help in answering questions.</p> <p>Performing simple tests</p> | <p>Performing simple tests</p> | <p>Performing simple tests</p> | <p>Performing simple tests</p> |
| SMSC Links – to do                   | <p>Environmental Impact </p> |  |  |  |                                |                                |                                |
|                                      |   |  |  |  |                                |                                |                                |
| Cross curricular maths opportunities |   |  |  |  |                                | Heart rates, timing – maths    |                                |