**Swain House Primary School Science - Long Term Plan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year group** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **EYs** | **Little Acorns –** To talk about what they see and what they feel like e.g. conkers, leaves, sticks, stones, pine cones**Great Oak Nursery –** using senses. Exploring materials. Talk about what they see. Talk about the signs of autumn. **Reception –** talk about changes they observe. To respect and care for the planet. To discuss daily weather. Recognise the signs of autumn. | **Little Acorns –** To talk about what they see and what they feel like e.g. conkers, leaves, sticks, stones, pine cones**Great Oak Nursery –** using senses. Exploring materials. Talk about what they see. Observe changes over time. Talk about the signs of winter.**Reception –** talk about changes they observe. To respect and care for the planet. To discuss daily weather. Recognise the signs of winter. | **Little Acorns –** To talk about what they see and what they feel like e.g. conkers, leaves, sticks, stones, pine cones**Great Oak Nursery –** using senses. Exploring materials. Talk about what they see. Talk about the signs of winter. **Reception –** talk about changes they observe. To respect and care for the planet. To discuss daily weather. Recognise the signs of winter. | **Little Acorns –** To talk about what they see and what they feel like e.g. conkers, leaves, sticks, stones, pine cones**Great Oak Nursery –** using senses. Exploring materials. Talk about what they see. Plant seeds and care for them. Understand a lifecycle. Talk about the signs of spring.**Reception –** talk about changes they observe. To respect and care for the planet. To discuss daily weather.Observe the growth of seeds. Recognise the signs of spring. | **Little Acorns –** To talk about what they see and what they feel like e.g. conkers, leaves, sticks, stones, pine cones**Great Oak Nursery –** using senses. Exploring materials. Talk about what they see. Plant seeds and care for them. Understand a lifecycle. Talk about the signs of spring.**Reception –** talk about changes they observe. To respect and care for the planet. To discuss daily weather. Understand a lifecycle. Observe the growth of seeds. Recognise the signs of spring. | **Little Acorns –** To talk about what they see and what they feel like e.g. conkers, leaves, sticks, stones, pine cones**Great Oak Nursery –** using senses. Exploring materials. Talk about what they see. Plant seeds and care for them. Understand a lifecycle. Talk about the signs of summer.**Reception –** talk about changes they observe. To respect and care for the planet. To discuss daily weather. Understand a lifecycle. Observe the growth of seeds .Harvest fruit and vegetables. Recognise the signs of summer. |
| **Y1** | **Seasonal changes** | **Seasonal changes****Animals including humans** | **Seasonal changes****Everyday materials** | **Seasonal changes****Everyday materials** | **Seasonal changes****Plants** | **Seasonal changes****Plants** |
| **Y2** | **Everyday materials** | **Animals, including humans** | **Living things and their habitats** | **Living things and their habitats** | **Plants** | **Plants** |
| **Y3** | **Animals including humans** | **Forces and magnets** | **Rocks and soils** | **Light** | **Plants** | **We are Scientists** |
| **Y4** | **Sound** | **Electricity** | **Animals, including humans** | **Living things and their habitats** | **States of Matter** | **We are Scientists** |
| **Y5** | **Earth and space** | **Earth and space**  | **Forces** | **Forces** | **Properties and changes of materials** | **Living things, life cycles Animals, including humans** |
| **Y6** | **Evolution and inheritance** | **Animals, including humans**  | **Electricity** | **Living things and their habitats**  | **Light** | **We are Scientists** |

|  |
| --- |
| **Working scientifically taught throughout the year** |
| **Years 1 and 2** | **Lower key stage 2** | **Upper key stage 2** |
| * asking simple questions and recognising that they can be answered in different ways
* observing closely, using simple equipment
* performing simple tests
* identifying and classifying
* using their observations and ideas to suggest answers to questions
* gathering and recording data to help in answering questions
 | * asking relevant questions and using different types of scientific enquiries to answer them
* setting up simple practical enquiries, comparative and fair tests
* making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
* gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
* recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
* reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
* using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
* identifying differences, similarities or changes related to simple scientific ideas and processes
* Using straightforward scientific evidence to answer questions or to support their findings.
 | * planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
* taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
* recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
* using test results to make predictions to set up further comparative and fair tests
* reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
* identifying scientific evidence that has been used to support or refute ideas or arguments
 |