



### **Purpose of Study**

At South Gosforth First School, we aim to give all of our pupils a strong understanding of the world around them. Pupils are able to discover 'how the world works' and our place, impact, roles and responsibilities within this world. Our pupils are encouraged to ask questions, think deeply and apply their growing scientific knowledge to investigate and learn more about the different branches of Science: Biology, Chemistry and Physics. Our skilled staff teach our children to develop a systematic and logical way of working and provide opportunities for them to reflect on investigations and apply their growing knowledge in a range of different contexts.

As part of the planning process for Science at SGFS, teaching staff give careful consideration to the delivery of 'substantive knowledge' (what we learn) running alongside 'procedural knowledge' (how we learn). The sequence of learning dictates what should be taught, when it should be taught and how it should be taught, anticipating common misconceptions and providing a rich background of detailed subject knowledge for teachers in order that all children can reach beyond core concepts. Understanding of each key block of substantive knowledge is revisited across the years to ensure genuine progression, while the curriculum details the specialist vocabulary children should be able to use to articulate their understanding accurately and precisely at each stage. Working in this way in the classroom is described as 'Working as a Scientist' to pupils – This includes the following key skills: Observing Over Time; Pattern Seeking; Identifying, Grouping and Classifying; Carrying out Research Using a Range of Sources; Comparative Testing and Fair Testing. Practical tasks are carefully considered to ensure that they promote the children's best work; are relevant to the unit studied; and make the learning journey assured.

### **Aims**

#### **In line with the National Curriculum for Science it is our aim to ensure that all pupils:**

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Use the 6 areas of working scientifically to develop enquiry skills; observing over time, pattern seeking, secondary research, identifying grouping and classifying, comparative tests and fair tests.
- Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.



| Autumn 1                                                                           | Seasonal Changes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Character</div> <div>Culture</div> <div>Creativity</div> <div>Challenge</div> | <b>Prior Learning</b><br>Early Learning Goal Objective:<br>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <b>Key Learning Intentions – Scientific Knowledge</b><br>Observe changes across the 4 seasons.<br>Observe and describe weather associated with the seasons and how day length varies.                                                                                                                                                                                                                                                                                                                                                                       | <b>Key Learning Intentions – Working Scientifically</b><br>To ask simple questions and recognise that it can be answered in different ways.<br>To observe closely using simple equipment.<br>To perform simple tests.<br>To identify and classify.<br>To use observations and ideas to suggest answers to questions.<br>To gather and record data to help in answering questions. |
|                                                                                    | <b>Overview of Scientific Knowledge (Substantive Knowledge)</b><br>In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.<br>The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter and hotter and drier in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people. |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <b>Key Vocabulary</b> <ul style="list-style-type: none"><li>weather</li><li>seasons</li><li>autumn</li><li>day length</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <b>Overview of Working Scientifically</b><br><b>Observing Over Time:</b> N/A<br><b>Pattern Seeking:</b> Do trees with bigger leaves lose their leaves first in Autumn?<br><b>Research:</b> N/A<br><b>Identifying &amp; Classifying:</b> How can we sort the leaves that we collected on our walk?<br><b>Comparative Test:</b> In which season does it rain the most?<br><b>Fair Test:</b> N/A                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <b>Milestones of Learning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <ul style="list-style-type: none"><li>Name the season Autumn.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <ul style="list-style-type: none"><li>Notice and name the key features of Autumn.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                    | <ul style="list-style-type: none"><li>Observe and record the weather in Autumn.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"><li>Describe the weather in Autumn.</li></ul>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                   |



|  |                                                                                                                                                                                                                                                    |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>Describe how day length varies in Autumn.</li></ul>                                                                                                                                                          |
|  | <b>Assessment</b><br>Retell – What do children know about the 4 seasons. Using picture prompts or children to draw their own.                                                                                                                      |
|  | <b>Enhancements</b><br>Make and record a weather forecast to present to the class.<br>Create different weather stations e.g. rainfall gauge and a windsock and make observations.<br>Investigate the weather throughout the year in our local area |

| Autumn 2                                        | Everyday Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Character<br>Culture<br>Creativity<br>Challenge | <b>Prior Learning</b><br>Early Learning Goal objective:<br>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                 | <b>Key Learning Intentions – Subject Knowledge</b> <ul style="list-style-type: none"><li>Distinguish between an object and the material from which it is made.</li><li>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</li><li>Describe the simple physical properties of a variety of everyday materials.</li><li>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</li></ul> | <b>Key Learning Intentions – Working Scientifically</b><br>To ask simple questions and recognise that it can be answered in different ways.<br>To observe closely using simple equipment.<br>To perform simple tests.<br>To identify and classify.<br>To use observations and ideas to suggest answers to questions.<br>To gather and record data to help in answering questions. |
|                                                 | <b>Overview of scientific knowledge</b><br>All objects are made of one or more materials. Some objects can be made from different materials e.g. plastic, metal or wooden spoons.<br>Materials can be described by their properties e.g. shiny, stretchy, rough etc. some materials e.g. plastic can be in different forms with very different properties.                                                                                                                                          | <b>Key Vocabulary</b> <ul style="list-style-type: none"><li>object</li><li>material</li><li>wood</li><li>plastic</li><li>glass</li><li>metal</li><li>water</li><li>rock</li><li>waterproof</li></ul>                                                                                                                                                                              |
|                                                 | <b>Overview of working scientifically</b><br><b>Observing Over Time:</b> What happens to materials over time if we bury them in the ground?<br><b>Pattern Seeking:</b> N/A<br><b>Research:</b> Which materials can be recycled?<br><b>Identifying &amp; Classifying:</b> Making an umbrella – which materials are waterproof?<br><b>Comparative Test:</b> Which materials are the most absorbent?                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                   |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                             |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
|  | <b>Fair Test:</b> N/A                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"><li>• absorbent</li></ul> |
|  | <b>Milestones of learning</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                             |
|  | <ul style="list-style-type: none"><li>• Observe and name everyday materials.</li></ul>                                                                                                                                                                                                                                                                                                                                                                      |                                                             |
|  | <ul style="list-style-type: none"><li>• Arrange objects made of the same materials and label the materials.</li></ul>                                                                                                                                                                                                                                                                                                                                       |                                                             |
|  | <ul style="list-style-type: none"><li>• Observe and name the properties of everyday materials.</li></ul>                                                                                                                                                                                                                                                                                                                                                    |                                                             |
|  | <ul style="list-style-type: none"><li>• Find out which materials in our school can be recycled.</li></ul>                                                                                                                                                                                                                                                                                                                                                   |                                                             |
|  | <ul style="list-style-type: none"><li>• Compare and contrast the properties of materials – waterproof</li></ul>                                                                                                                                                                                                                                                                                                                                             |                                                             |
|  | <ul style="list-style-type: none"><li>• Compare and contrast the properties of materials – absorbent</li></ul>                                                                                                                                                                                                                                                                                                                                              |                                                             |
|  | <b>Assessment</b><br>Show picture of playground / classroom / school – children to label as many materials as they can.                                                                                                                                                                                                                                                                                                                                     |                                                             |
|  | <b>Enhancements</b> <ul style="list-style-type: none"><li>• Investigate making an umbrella – look at a selection of materials and consider which one is best for making an umbrella.</li><li>• Share the findings from the investigation to the class.</li><li>• The box/cupboard/case full of objects has exploded and we need to sort it out. Possible detective theme.</li><li>• Investigate the materials in our school that can be recycled.</li></ul> |                                                             |



| Spring 1                                                                                  | Seasonal Changes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Character<br><br>Culture<br><br>Creativity<br><br>Challenge                               | <b>Prior Learning</b><br>Early Learning Goal objective:<br>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                           | <b>Key Learning Intentions – Subject Knowledge</b> <ul style="list-style-type: none"><li>Observe changes across the 4 seasons.</li><li>Observe and describe weather associated with the seasons and how day length varies.</li></ul>                                                                                                                                                                                                                                                                                                | <b>Key Learning Intentions – Working Scientifically</b><br>To ask simple questions and recognise that it can be answered in different ways.<br>To observe closely using simple equipment.<br>To perform simple tests.<br>To identify and classify.<br>To use observations and ideas to suggest answers to questions.<br>To gather and record data to help in answering questions. |
|                                                                                           | <b>Overview of scientific knowledge</b><br>In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.<br>The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter and hotter and drier in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people. |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                           | <b>Key Vocabulary</b> <ul style="list-style-type: none"><li>weather</li><li>seasons</li><li>winter</li><li>day length</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                           | <b>Overview of working scientifically</b><br><b>Observing Over Time:</b> N/A<br><b>Pattern Seeking:</b> Does the wind always blow the same way?<br><b>Research:</b> N/A<br><b>Identifying &amp; Classifying:</b> N/A<br><b>Comparative Test:</b> In which season does it rain the most?<br><b>Fair Test:</b> N/A                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                           | <b>Milestones of learning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                           | <ul style="list-style-type: none"><li>Name the season Winter</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                           | <ul style="list-style-type: none"><li>Notice and name the key features of each Winter.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"><li>Observe and record the weather in Winter.</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                   |



|  |                                                                                                                                                                                                                                                                                                                     |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>Describe the weather in Winter.</li></ul>                                                                                                                                                                                                                                     |
|  | <ul style="list-style-type: none"><li>Describe how day length varies in Winter.</li></ul>                                                                                                                                                                                                                           |
|  | <b>Assessment</b><br>At the end of the year                                                                                                                                                                                                                                                                         |
|  | <b>Enhancements</b> <ul style="list-style-type: none"><li>Make and record a weather forecast to present to the class.</li><li>Create different weather stations e.g. rainfall gauge and a windsock and make observations.</li><li>Investigate the weather throughout the year in our local area. (school)</li></ul> |

| Spring 2                                                                                | Plants                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Character</b><br><br><b>Culture</b><br><br><b>Creativity</b><br><br><b>Challenge</b> | <b>Prior Learning</b><br>Early Learning Goal objective:<br>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.                     |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                         | <b>Key Learning Intentions – Subject Knowledge</b> <ul style="list-style-type: none"><li>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li><li>Identify and describe the basic structure of a variety of common flowering plants, including trees.</li></ul>                                                                                                 | <b>Key Learning Intentions – Working Scientifically</b><br>To ask simple questions and recognise that it can be answered in different ways.<br>To observe closely using simple equipment.<br>To perform simple tests.<br>To identify and classify.<br>To use observations and ideas to suggest answers to questions.<br>To gather and record data to help in answering questions. |
|                                                                                         | <b>Overview of scientific knowledge</b><br>Growing locally, there will be a vast array of plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring. | <b>Key Vocabulary</b> <ul style="list-style-type: none"><li>leaf</li><li>flower</li><li>root</li><li>trunk</li></ul>                                                                                                                                                                                                                                                              |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|  | <p><b>Overview of working scientifically</b></p> <p><b>Observing Over Time:</b> How does my mustard seed change each week?</p> <p><b>Pattern Seeking:</b> Is there a pattern in where we find weeds growing in the school grounds?</p> <p><b>Research:</b> N/A</p> <p><b>Identifying &amp; Classifying:</b> N/A</p> <p><b>Comparative Test:</b> Which type of compost grows the tallest mustard plant?</p> <p><b>Fair Test:</b> N/A</p> | <ul style="list-style-type: none"><li>• stem</li><li>• evergreen</li><li>• deciduous</li></ul> |
|  | <b>Milestones of learning</b>                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                |
|  | <ul style="list-style-type: none"><li>• What are the names of some common garden and wild plants?</li></ul>                                                                                                                                                                                                                                                                                                                             |                                                                                                |
|  | <ul style="list-style-type: none"><li>• What are the names of some common trees?</li></ul>                                                                                                                                                                                                                                                                                                                                              |                                                                                                |
|  | <ul style="list-style-type: none"><li>• Which trees are evergreen and which are deciduous?</li></ul>                                                                                                                                                                                                                                                                                                                                    |                                                                                                |
|  | <ul style="list-style-type: none"><li>• What are the similarities and differences between deciduous and evergreen trees?</li></ul>                                                                                                                                                                                                                                                                                                      |                                                                                                |
|  | <ul style="list-style-type: none"><li>• What are the names of parts of flowering plants?</li></ul>                                                                                                                                                                                                                                                                                                                                      |                                                                                                |
|  | <ul style="list-style-type: none"><li>• Describe the structure of each part of a flowering plant.</li></ul>                                                                                                                                                                                                                                                                                                                             |                                                                                                |
|  | <p style="text-align: center;"><b>Assessment</b></p> <p style="text-align: center;">Match pictures and labels of common flowers and trees.</p>                                                                                                                                                                                                                                                                                          |                                                                                                |
|  | <p><b>Enhancements</b></p> <ul style="list-style-type: none"><li>• Visit – Alnwick Gardens</li><li>• Garden centre role play area – plant seeds and make observations.</li><li>• Label real flowers and plants.</li><li>• Grow and observe mustard seeds and investigate which type of compost grows the tallest plant.</li></ul>                                                                                                       |                                                                                                |



| Summer 1                                                    | Animals Including Humans                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Character<br><br>Culture<br><br>Creativity<br><br>Challenge | <b>Prior Learning</b><br>Early Learning Goal objective: <ul style="list-style-type: none"><li>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.</li></ul>                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                             | <b>Key Learning Intentions – Subject Knowledge</b> <ul style="list-style-type: none"><li>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li><li>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li><li>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</li><li>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li></ul>                                                 |  | <b>Key Learning Intentions – Working Scientifically</b><br>To ask simple questions and recognise that it can be answered in different ways.<br>To observe closely using simple equipment.<br>To perform simple tests.<br>To identify and classify.<br>To use observations and ideas to suggest answers to questions.<br>To gather and record data to help in answering questions. |
|                                                             | <b>Overview of scientific knowledge</b><br>Animals vary in many ways having different structures e.g. wings, tails, ears etc. They also have different skin coverings e.g. scales, feathers, hair. These key features can be used to identify them.<br>Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals.<br>Humans have key parts in common, but these vary from person to person. Humans (and other animals) find out about the world using their senses. Humans have five senses – sight, touch, taste, hearing and smelling. These senses are linked to particular parts of the body. |  | <b>Key Vocabulary</b> <ul style="list-style-type: none"><li>head, body, eyes, ears, mouth, teeth, leg,</li><li>tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves</li><li>names of animals</li><li>parts of the body including those linked to PSHE teaching</li><li>senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue</li></ul>  |
|                                                             | <b>Overview of working scientifically</b><br><u>Observing Over Time:</u> Does my height change over the year?<br><u>Pattern Seeking:</u> N/A<br><u>Research:</u> N/A<br><u>Identifying &amp; Classifying:</u> How can we organise all the zoo animals?<br><u>Comparative Test:</u> Is our sense of smell better when we can't see?<br><u>Fair Test:</u> N/A                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                             | <b>Milestones of learning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                   |



|  |                                                                                                                                                                         |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>Name some common animals.</li></ul>                                                                                               |
|  | <ul style="list-style-type: none"><li>Match the animals to the labels: bird, fish, amphibian, reptile, mammal and invertebrate.</li></ul>                               |
|  | <ul style="list-style-type: none"><li>Label animals as carnivore, herbivore or omnivore.</li></ul>                                                                      |
|  | <ul style="list-style-type: none"><li>Name and label the structures of common animals.</li></ul>                                                                        |
|  | <ul style="list-style-type: none"><li>Label the main parts of the human body.</li></ul>                                                                                 |
|  | <ul style="list-style-type: none"><li>Illustrate the parts of the body associated with the five senses.</li></ul>                                                       |
|  | <div><b>Assessment</b><br/>Sort animals into groups of omnivore, carnivore and herbivore – draw in different foods that they might eat.</div>                           |
|  | <div><b>Enhancements</b><ul style="list-style-type: none"><li>Animal workshop</li><li>Practical identification of parts of the body – label themselves.</li></ul></div> |



| Summer 2                                                                                          | Seasonal Changes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Character</div> <div>Culture</div> <div>Creativity</div> <div>Challenge</div>                | <b>Prior Learning</b><br>Early Learning Goal objective:<br>Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                   | <b>Key Learning Intentions – Subject Knowledge</b> <ul style="list-style-type: none"><li>Observe changes across the 4 seasons.</li><li>Observe and describe weather associated with the seasons and how day length varies.</li></ul>                                                                                                                                                                                                                                                                                                | <b>Key Learning Intentions – Working Scientifically</b><br>To ask simple questions and recognise that it can be answered in different ways.<br>To observe closely using simple equipment.<br>To perform simple tests.<br>To identify and classify.<br>To use observations and ideas to suggest answers to questions.<br>To gather and record data to help in answering questions. |
|                                                                                                   | <b>Overview of scientific knowledge</b><br>In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.<br>The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter and hotter and drier in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people. |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                   | <b>Overview of working scientifically</b><br><b>Observing Over Time:</b> N/A<br><b>Pattern Seeking:</b> N/A<br><b>Research:</b> N/A<br><b>Identifying &amp; Classifying:</b> How would you group these things based on which season you are most likely to see them in?<br><b>Comparative Test:</b> In which season does it rain the most?<br><b>Fair Test:</b> N/A                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                   | <b>Key Vocabulary</b> <ul style="list-style-type: none"><li>weather</li><li>seasons</li><li>spring</li><li>summer</li><li>day length</li></ul>                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                   | <b>Milestones of learning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                   | <ul style="list-style-type: none"><li>Name the season Spring and name the key features.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"><li>Name the season Summer and name the key features.</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                   |



|  |                                                                                                                                                                                                                                                                                                                                  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>• Observe and record the weather in Summer.</li></ul>                                                                                                                                                                                                                                      |
|  | <ul style="list-style-type: none"><li>• Describe how day length varies in Summer.</li></ul>                                                                                                                                                                                                                                      |
|  | <ul style="list-style-type: none"><li>• Compare the changes that you have noticed across all 4 seasons.</li></ul>                                                                                                                                                                                                                |
|  | <p style="text-align: center;"><b>Assessment</b></p> <p style="text-align: center;">Retell – What do they know about the 4 seasons? Using picture prompts or children to draw on own.</p>                                                                                                                                        |
|  | <p><b>Enhancements</b></p> <ul style="list-style-type: none"><li>• Make and record a weather forecast to present to the class.</li><li>• Create different weather stations e.g. rainfall gauge and a windsock and make observations.</li><li>• Investigate the weather throughout the year in our local area. (school)</li></ul> |