

| Autumn 1<br>Stones and bones  | Autumn 2<br>All creatures great and small  | Spring 1<br>Iron giants!   | Spring 2<br>Food, glorious food   | Summer 1<br>Extreme Earth  | Summer 2<br>Who let the Gods out?  |
|---|--|--|---|--|--|
| <p><b>Light</b></p> <p>The children will:</p> <ul style="list-style-type: none"> <li>• recognise that they need light in order to see things and that dark is the absence of light</li> <li>• notice that light is reflected from surfaces</li> <li>• recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>• recognise that shadows are formed when the light from a light source is blocked by an opaque object</li> <li>• find patterns in the way that the size of shadows change.</li> </ul> | <p><b>Animals, including humans</b></p> <p>The children will:</p> <ul style="list-style-type: none"> <li>• identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>• identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> </ul> | <p><b>Forces and magnets</b></p> <p>The children will:</p> <ul style="list-style-type: none"> <li>• notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>• observe how magnets attract or repel each other and attract some materials and not others</li> <li>• compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials</li> <li>• describe magnets as having two poles</li> <li>• predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul> | <p><b>Plants</b></p> <p>The children will:</p> <ul style="list-style-type: none"> <li>• identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>• explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant</li> <li>• investigate the way in which water is transported within plants</li> <li>• explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul> | <p><b>Rocks</b></p> <p>The children will:</p> <ul style="list-style-type: none"> <li>• identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>• identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> </ul> | <p><b>Forces and magnets</b></p> <p>The children will:</p> <ul style="list-style-type: none"> <li>• compare how things move on different surfaces</li> </ul> |

**Pupils will be taught to use the following skills when carrying out investigations:**

- Asks relevant questions and uses past knowledge when considering new investigation
- Can set up simple practical enquiries and understand a fair test.
- Can understand that changing only one variable is the best method for testing.
- Can make careful observations using notes and simple tables and drawing.
- In drawing can consider scale and detail.
- Can take accurate measurements using standard units of length, time and heat. Use mm and cm. Use negative numbers.
- Label diagrams neatly, use keys, bar charts, and simple tables. Use headings to clarify what information is being collected.
- Draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Use scientific evidence to answer questions or to support their findings relate the results to scientific knowledge
- Use independent research including secondary sources to help them to answer questions
- Know how to use a microscope, magnifying lens, thermometer.

