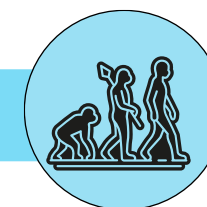
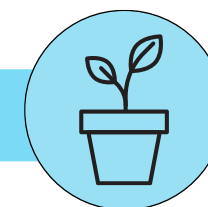
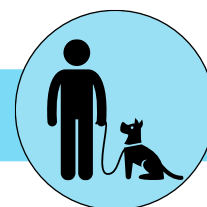
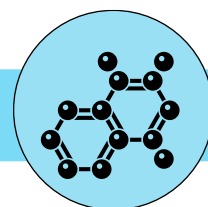
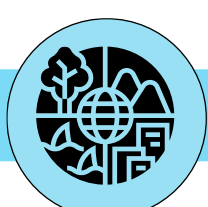
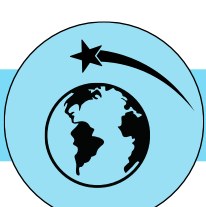
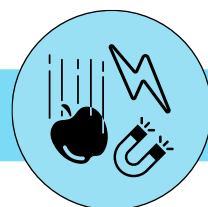
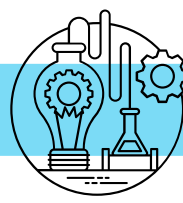
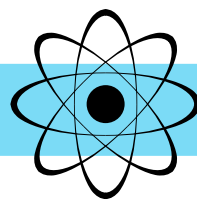
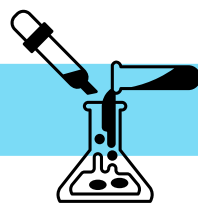


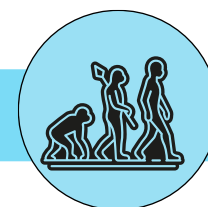
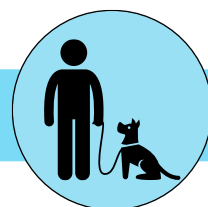
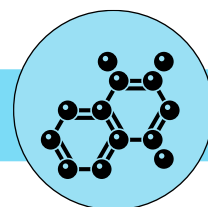
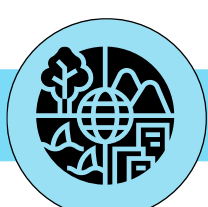
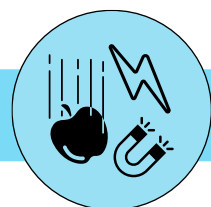
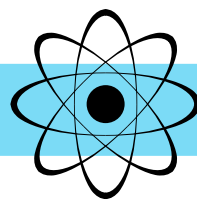
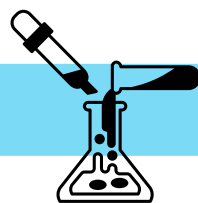
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|--------------|--|--|--|---|--|--|
| Weeks 1 - 6 | <p>Animals Including Humans</p> <p>Children learn about the human body. They name and identify different body parts and understand which body part is associated with each of our five senses.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Children will conduct practical experiments to find out more about our senses. | <p>Living things and their habitats</p> <p>Children learn about the life processes that all living things must do to survive. They learn about things that are dead, alive or have never been alive. Children learn about different habitats in their local area and around the world.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Children will use iPads to identify different habitats in their local area – use an aerial map. May use VR technology to learn about habitats around the world. | <p>Animals Including Humans</p> <p>Children learn that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food. They will learn about the different nutrients animals gain from eating foods. They will learn about different diets – herbivores, carnivores and omnivores.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Children learn about the nutrients required to maintain a healthy, balanced diet. | <p>Animals Including Humans</p> <p>Children will learn about the simple functions of the basic parts of the digestive system in humans. They will identify the different types of teeth in humans and learn their simple functions. Children will construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Keeping teeth clean and healthy VR technology: investigating digestive system. | <p>Forces</p> <p>Children will learn about the force of gravity and other forces such as air resistance, water resistance and friction. They will learn about mechanisms including levers, pulleys and gears.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Practical investigations e.g. designing levers, pulleys, gears and springs. | <p>Animals including Humans</p> <p>Children learn about the different parts of the circulatory system. They will learn how nutrients and water are transported in animals.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Identifying parts of the circulatory system and digestive system – looking at models/VR technology |
| | <p>Animals Including Humans</p> <p>Children learn about the different animal groups, naming animals from each group and identifying their features. They learn about the structure of different animals. They learn about animal diets – carnivores, herbivores and omnivores.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Opportunity to visit a zoo to make observations about different animals. VR technology could be used to expose children to animals in different habitats around the world. Zoolab visit to school so children can experience exotic animals. | <p>Living things and their habitats</p> <p>Children will identify and name a variety of plants and animals in different habitats. They will learn about the basic needs of living things to survive. Children learn about how living things are adapted to suit their habitat. Children describe how animals obtain their food from plants and other animals, using the idea of a simple food chain.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Visit local habitat to conduct investigation. | <p>Animals Including Humans</p> <p>Children learn that humans and some other animals have skeletons and muscles for support, protection and movement. They will name the different bones and muscles in the human body. They will begin to learn about different bone disorders that can affect our movement.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Observing a model of the human body to understand skeleton and muscles. Opportunity for VR technology. | <p>Electricity</p> <p>Children will learn about common appliances that run on electricity. They will construct a simple series electrical circuit. They will learn how to work safely with electricity.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Learn about electrical safety Explore the career of an electrician Hands on exploration of electrical circuits | <p>Earth and Space</p> <p>Children will learn about the movement of the Earth and other planets relative to the sun in the solar system. They will explain day and night using ideas of Earth's rotation.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Visit to Jodrell Bank Learn about sun safety Ogden Trust Astro camp experience Solar system model VR technology to explore the solar system | <p>Evolution and inheritance</p> <p>Children will learn that living things have changed over time. They will learn about the theory of natural selection by adaptation. They will learn about evolution and the work of Charles Darwin.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Exploring real-life fossils |
| Weeks 7 - 12 | | | | | | |



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---------------|---|---|--|--|---|--|
| Weeks 13 - 18 | Seasonal Change: Autumn to Winter Children will observe seasonal changes between the seasons of autumn and winter. They will observe the weather and learn about hibernating animals. Children will understand how day length varies <i>Cultural capital:</i> <ul style="list-style-type: none"> Environmental walk: use senses to describe the weather etc. Weather investigations using different equipment Hibernating animals: visit from hedgehog rescue | Animals Including Humans Children learn that animals, including humans, have offspring which grow into adults. They learn about the basic needs of animals. <i>Cultural capital:</i> <ul style="list-style-type: none"> Animal offspring: hatching and rearing chicks | Light Children learn that they need light in order to see things and that light is reflected from surfaces. They learn that light from the sun can be dangerous and that there are ways to protect their eyes. Children find out that shadows are formed when the light from a light source is blocked by an opaque object. <i>Cultural capital:</i> <ul style="list-style-type: none"> Exploring time lapse of the sun <ul style="list-style-type: none"> Using sun dials Visit to Science museum Learning about nocturnal animals and seasonal change Learn about career of an optician | States of Matter Children learn about different states of matter. They will observe that some materials change state when they are heated or cooled. <i>Cultural capital:</i> <ul style="list-style-type: none"> Practical investigations to explore changes of state using different apparatus/materials | Properties and changes of materials Children learn about material properties. They will learn that some materials will dissolve in liquid to form a solution. <i>Cultural capital:</i> <ul style="list-style-type: none"> Practical investigations using different materials and equipment Finding out about chemists who discovered brand new materials | Light Children learn that light appears to travel in straight lines and explain how objects are seen. They will use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <i>Cultural capital:</i> <ul style="list-style-type: none"> Design and making a periscope Create and use shadow puppets Investigate rainbows and colours |
| | Everyday Materials Children will learn to distinguish between an object and the material from which it is made. They will identify and name a variety of everyday materials, and describe their properties. <i>Cultural capital:</i> <ul style="list-style-type: none"> Exploring different materials/their properties through investigation | Animals Including Humans Children will learn the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. <i>Cultural capital:</i> <ul style="list-style-type: none"> How to maintain a healthy lifestyle. | Forces and Magnets Children will learn about forces, including magnetic forces. They will observe how magnets attract or repel each other and attract some materials and not others. They will explore the magnetism of everyday materials. <i>Cultural capital:</i> <ul style="list-style-type: none"> Investigations using magnets and everyday materials Science museum/workshop | States of Matter Children will identify the part played by evaporation and condensation in the water cycle <i>Cultural capital:</i> <ul style="list-style-type: none"> Understanding of water cycle – where our water comes from and how it is recycled. Investigation about evaporation and condensation | Properties and changes of materials Children use knowledge of states of matter to decide how mixtures can be separated. They will learn about reversible and irreversible reactions. <i>Cultural capital:</i> <ul style="list-style-type: none"> Finding out about chemists who discovered brand new materials Investigations to separate mixtures in different ways | Electricity Children learn about the different components of a circuit and find out about voltage. They use recognised symbols when representing a simple circuit in a diagram. <i>Cultural capital:</i> <ul style="list-style-type: none"> Creating and drawing series circuits with correct apparatus and symbols Working safely with electricity |

Science

Cultural Capital



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---------------|--|--|---|---|---|---|
| Weeks 26 - 31 | <p>Seasonal Change: Spring to Summer</p> <p>Children will observe seasonal changes between the seasons of spring and summer. They will observe the weather. Children will understand how day length varies.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Environmental walk: use senses to describe the weather etc. Weather investigations using different equipment Understand where our food comes from – fruits, vegetable, crops. | <p>Plants</p> <p>Children will learn about seeds and bulbs and will find out how they grow into a mature plant. They will find out how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Planting bulbs/seeds and observing plant growth Understanding that we grow some of our food from plants | <p>Plants</p> <p>Children learn about the functions of different flowering plants. They learn what plants need for life and growth. Children find out how water is transported in plants. They will learn about the parts of a flower.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Dissecting flowers to identify their parts and understand functions Investigate the requirements of plants for growth, link to farming | <p>Sound</p> <p>Children learn how sounds are made. They will find patterns between the pitch of a sound and features of the object that produced it. Children will also find patterns between the volume of a sound and the strength of the vibrations that produced it. They will recognise that sounds get fainter as the distance from the sound source increases.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Exploring a range of musical instruments from around the world Children could make their own instruments | <p>Living things and their habitats</p> <p>Children will learn about the differences in the life cycles of a mammal, an amphibian, an insect and a bird. They will describe the life process of reproduction in some plants and animals.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Observations of life cycles of different plants/animals e.g. vegetable garden/flower border. Hatching and rearing chicks Grow plant from different parts of a parent plant <ul style="list-style-type: none"> Observations of local environment throughout the year – links to seasonal changes | <p>Living things and their habitats</p> <p>Children learn how living things are classified into broad groups. They will give reasons for classifying plants and animals based on specific characteristics</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Direct observations to classify vertebrates and invertebrates. Use classification keys to identify plants/animals in immediate environment. |
| | Weeks 32 - 37 | <p>Plants</p> <p>Children will learn about common wild and garden plants, including deciduous and evergreen trees. They will identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Learning where food comes from e.g. vegetables/fruit, link to farming Learning how to grow our own plants Learning about plants that grow outside of school – visit to nature reserve/park | <p>Uses of Everyday Materials</p> <p>Children will learn about the suitability of everyday materials for particular uses. They will find out how the shapes of solid objects made from some materials can be changed.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Exploring different materials/objects and investigating their uses. Understanding how recycling is achieved: recycling centre | <p>Rocks and soils</p> <p>Children learn about different kinds of rocks on the basis of their appearance and simple physical properties. They find out how fossils are formed. They will learn that soil is made from rock and organic matter.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Walk to look at rocks in the local environment Make close observations of different rock samples and fossils | <p>Living things and their habitats</p> <p>Children will learn that living things can be grouped in a variety of ways. They will find out about classification keys. Children will recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Walk around local environment/trip to wider environment: use classification keys | <p>Animals Including Humans</p> <p>Children learn about the changes that happen as humans develop to old age.</p> <p><i>Cultural capital:</i></p> <ul style="list-style-type: none"> Learning about puberty links to PSHCE Researching gestation periods of different animals, comparing with animals. |