YEAR 1

Animals Including Humans:
- Identify and name animals
- Identify carnivores/herbivores/ omnivores
- Describe and compare structure
- Identify parts of the body including the senses

Everyday Materials:
- Explore a variety of different objects and materials
- Identify and name objects and materials
- Describe the properties of objects and materials
- Compare and group different objects and materials

Seasonal changes:
- Observe changes across the seasons
- Observe and describe the weather and how day length varies.

Plants:
- Identify and name plants
- Explore the basic structure of plants
- Identify and use terminology such as deciduous/Evergreen

YEAR 2

Living Things and Habitats:
- Recognise the terms living, dead and alive
- Understand what is meant by the term habitat
- Explore how habitats provide basic needs
- Identify and name plants and animals within different habitats
- Be able to read basic food chains and understand that animals eat plants.

Animals Including Humans:
- Recognise animal offspring
- Understand the basic needs of animals
- Recognise the importance of exercise, a balanced diet and hygiene.

Plants:
- To understand that seeds turn into plants
- Understand what plants need in order to stay healthy

Uses of Everyday Materials:
- Recognise and explain the suitability of materials for different jobs
- Explore and understand the changing shapes of objects

YEAR 3

Animals Including Humans:
- Recognise and explore different types of skeletons and muscles
- Understand that there are different types of nutrition.

Rocks:
- Grouping rocks based on both appearance and their properties
- Explore fossils
- Identify different types of soils

Plants:
- Explain the functions of different parts of plants
- Understand the requirements needed to keep a plant alive
- Recognise how water is transported in a plant
- Explore how pollination and seed dispersal occurs in plants.

Forces and Magnets
- Understand how objects move on surfaces
- Recognise contact and distance forces
- Understand that magnets attract and repel poles
- Group materials based on whether they are magnetic or not.

Light
- Understand that we need light in order to see
- Know that light is reflected
- Recognising the dangers of the sun and the need for protection e.g. sunglasses
- Understand how shadows are formed and how their sizes change.

YEAR 4

Living Things and Their Habitats

- Group living things (animals and plants)
- Understand and use the terms 'vertebrate' and 'Invertebrate'
- Use classification keys
- Recognise the dangers in changing environments for living things

Animals Including Humans

- Understand the function of the digestive system
- Know the different types of teeth and their roles
- Use food chains effectively to identify producers, predators, prey

Sound:

- Knowing that sounds are caused by vibrations
- Recognise that sounds travel in medium
- Explore patterns in pitch and volume
- Know that sounds get fainter with distance

States of Matter

- Be able to group according to solids, liquids and gasses
- Understand the term particles
- Know what is meant by changes of state
- To know how the water cycle works and be able to explain terms such as evaporation and condensation

Electricity:

- Recognise different appliances which use electricity
- Understand simple circuits and their components
- Debate and reason whether a bulb will light in a circuit
- Use switches effectively in a circuit
- Understand the difference between conductors and insulators

YEAR 5

Living Things and Their Habitats

- Recognise the life cycles of mammals, birds, insects, amphibians
- Explore the life processes of reproduction in terms of both plants and animals

Animals Including Humans:

- Recognise the changes which take place as humans develop to old age
- Explore the changes which take place during puberty

Properties and Changes of Materials:

- To compare and group materials
- Understand the terms dissolving and separating
- Recognise the difference between reversible and irreversible changes
- Test materials based on their properties and uses

Forces:

- Recognise that objects fall because of gravity
- Explore resistance (air/water) and friction
- Know that levers, pulleys and gears are force multipliers

Earth and Space:

- Recognise the movement of Earth, the planets and the moon
- Describe the Earth, Sun and Moon
- Explain how we get day, night and the changing seasons

Electricity:

- Understand that the brightness of a bulb, loudness of buzzers and speed of a motor are affected by cells and voltage
- Use circuit symbols
- Apply what I know to understand and explain how traffic lights/ burglar alarms work

Animals Including Humans

- Understand the role of the circulatory system
- Explore the impact of diet, exercise and drugs on the body
- Know how nutrients and water are transported around the body

Light:

- To know that light travels in straight lines
- Understand how we are able to see
- Recognise that light is reflected
- Explain how shadows are formed and why they increase/ decrease in size

YEAR 6

Living Things and Their Habitats

- Classifying living things into broad groups
- Classifying plants and animals
- Using keys effectively

Evolution and Inheritance

- Understand that living things change over time
- Know that fossils are used as evidence of this change
- Recognise that offspring vary
- Understand that adaptation leads to evolution

Working Scientifically

EYFS

- I have my own ideas
- I question why things happen
- I begin to use science words
- I can ask about things like plants, animals, natural and found objects
- I can test my own ideas

- I can create simple representations of people and objects
- I use equipment and tools carefully
- I can use my senses and look closely

KS1

- I recognise that questions can be answered in different ways
- I ask simple questions
- I use simple scientific language
- I talk about what I have found out
- I gather and record simple data in different ways

- I perform simple tests
- I can compare things
- I can sort and group them
- I observe closely
- I use simple equipment to make measurements

LKS2

- I ask my own questions and I use different ways to answer them
- I set up my own simple tests
- I make careful observations
- I use different equipment to measure accurately in standard units
- I gather, record, classify and present data in different ways including drawings, labelled diagrams, keys, bar charts, and tables

- I suggest improvements and raise further questions
- I use relevant scientific language
- I draw simple conclusions and make predictions for new values
- I explain what I have found out using speaking and writing

UKS2

- I ask different types of questions
- I plan different types of scientific enquiries to answer questions
- I can set up fair tests when necessary
- I decide what observations and measurements to make
- I use different scientific equipment to measure with precision.
- I take repeat readings when appropriate.

- I can use results to make predictions and set up more tests (including fair tests)
- I use relevant scientific language and illustrations
- I report and present findings using speaking and writing including displays and presentations
- I decide how to record data and results.
- I can use scientific diagrams, labels, classification, keys, tables, scatter, bar and line graphs.