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|  | **Reception** | **Year 1** | **Year 2** |
| **Scientific enquiry** | To explore the world around them using their senses.  Make observations  Compare similarities and differences | explore the world around them and raise their own simple questions  experience different types of science enquiries, including practical activities  begin to recognise different ways in which they might answer scientific questions  carry out simple tests  use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying)  ask people questions and use simple secondary sources to find answers  observe closely using simple equipment  with help, observe changes over time  with guidance, they should begin to notice patterns and relationships  use simple measurements and equipment (e.g. hand lenses, egg timers) to **gather** data  record simple data  use their observations and ideas to suggest answers to questions  talk about what they have found out and how they found it out    with help, they should record and communicate their findings in a range of ways and begin to use simple scientific language | explore the world around them and raise their own simple questions  experience different types of science enquiries, including practical activities  begin to recognise different ways in which they might answer scientific questions  carry out simple tests  use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying)  ask people questions and use simple secondary sources to find answers  observe closely using simple equipment  with help, observe changes over time  with guidance, they should begin to notice patterns and relationships  use simple measurements and equipment (e.g. hand lenses, egg timers) to **gather** data  record simple data  use their observations and ideas to suggest answers to questions  talk about what they have found out and how they found it out  with help, they should record and communicate their findings in a range of ways and begin to use simple scientific language |
| **Physics** | | | |
| **Properties of materials and how they change** | Materials  To use senses to describe and explore a range of different materials.  To describe a range of materials and understand that they are different.  To be able to observe what happens when we combine different mixtures together. | Materials  To distinguish between an object and the material from which it is made.  To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.  To describe the simple physical properties of a variety of everyday materials.  To compare and group together a variety of everyday materials on the basis of their simple physical properties. | Materials  To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.  To classify materials according to their properties (reflective, light, rough smooth etc.).  To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. |
| **Earth and Space** | Earth and Space  To know we live on planet earth.  To know features of day and night.  To use vocabulary earth, moon, sun and stars.    To understand that space is far away. |  |  |
| **Forces and Magnets** |  |  |  |
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| **Chemistry** | | | |
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| **Rocks** |  |  |  |
| **Biology** | | | |
| **Animals including humans** | Animals including humans  They should understand how to take care of animals taken from their local environment.  Make observations and drawings of animals and explain why some things occur, and talk about changes.  Name some animals and basic features.  To manage their own basic hygiene and personal needs.  To understand the importance of healthy food choices. | Animals including humans  To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  To identify and name a variety of common animals that are carnivores, herbivores and omnivores  To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)  To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. | Animals including humans  To know that animals, including humans, have offspring which grow into adults.    To understand the lifecycle of a simple organism (caterpillar / frog etc.).    To find out about and describe the basic needs of animals, including humans, for survival.    To investigate anthropometry (measuring proportions of humans)    To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. |
| **Plants** | Plants  To make observations and drawings of plants.  To know the names of some plants.  To name some parts of plants. | Plants  To identify and name a variety of common wild and garden plants.  To understand and describe the plants and trees that thrive in a local habitat.  To identify and describe the basic structure of a variety of common flowering plants.  To observe the growth of flowers and vegetable planted. | Plants  To observe and describe how seeds and bulbs grow into mature plants.  To understand how plants are germinated and how they reproduce.  To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.  To plant grow and observe a seed or bulb |
| **Seasonal changes** | Seasonal changes  To know the names of different seasons.  To observe and understand changes that happen in the natural world according to seasons.  To make links to seasons and different animals. | Seasonal Changes  To observe changes across the four seasons  To observe and describe weather associated with the seasons and how day length varies.  To observe and describe seasonal weather.  To explore how seasonal changes affect animals.  To gather and record data a linked to seasonal changes |  |
| **Living things and their habitats / Animals** |  |  | Living things and their habitats  To explore and compare the differences between things that are living, dead, and things that have never been alive.    To identify that most living things live in habitats to which they are suited.  To describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.  To identify and name a variety of plants and animals in their habitats, including micro-habitats.  To understand how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. |