

WITHINFIELDS PRIMARY SCHOOL

SCIENCE CURRICULUM – KS1

To prepare children for the Science curriculum in KS1, Early Years teaching and provision provides opportunities to gain an interest in Science and develop the Characteristics of Effective Learning which are relevant to the subject. The statements that are most relevant to Science are:

- Thinking of ideas
- Finding ways to solve problems
- Finding new ways to do things
- Making links and noticing patterns in their experience
- Making predictions
- Testing their ideas
- Developing ideas of grouping, sequences, cause and effect
- Taking a risk, engaging in new experiences, and learning by trial and error

Nursery and Reception continuous provision contains opportunities for children to explore Science resources and equipment in child initiated activities as well as Science activities in adult led learning through some topics e.g. 'Animals' in Reception and 'Growing and Changing' in Nursery.

Throughout Science teaching in KS1, and through specific Enquiry skills topics, teachers will provide opportunities for children to:

- 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
- 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

| | Y1 | Y2 |
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| Chemistry | <p><u>Materials</u> Know the name of the materials an object is made from Know about the properties of everyday materials Be able to compare and group materials on the basis of their physical properties</p> | <p><u>Materials</u> Identify and compare the suitability of a variety of everyday materials for particular uses Know that the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> |
| Biology | <p><u>My Body</u> Be able 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</p> <p><u>Seasons</u> Know the seasons and what type of weather occurs in each season</p> <p><u>Animals</u> Know how to classify a range of animals by amphibian, reptile, mammal, fish and birds Know how to classify animals by what they eat (carnivore, herbivore, omnivore)] Know how to sort living and non-livings</p> <p><u>Plants</u> Know the names of a variety of common wild and garden plants including deciduous and evergreen trees Know the basic structure of a variety of common flowering plants, including trees – petals, stem, leaves, root, trunk, branches</p> | <p><u>Animals</u> Know that animals, including humans, have offspring which grow into adults Know about the basic needs of animals, including humans, for survival (water, food and air) Know about the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p> <p><u>Living Things</u> Know the difference between things that are living, dead and the things that have never been alive Know that most living things live in habitats to which they are suited and describe how they depend on each other Know the names of a variety of plants and animals in their habitats, including micro-habitats Know how animals obtain their food from plants and other animals, using their understanding of a simple food chain, and know some sources of food</p> <p><u>Plants</u> Know that seeds and bulbs grow into mature plants Know that plants need water, light and suitable temperature to grow and stay healthy</p> |