# Science KS1
## National Curriculum Content Mapping

# Progression in **Science**
# I am a Scientist

- To experience and observe phenomena,
- To look closely at the world around them.
- To be curious and ask questions about what they notice.
- To develop their understanding of scientific ideas by using different types of scientific enquiry
- To use simple scientific language to talk about what they have found out
- Communicate their ideas to a range of audiences in a variety of ways.

| | Working Scientifically | Plants | Animals including Humans | Everyday Materials and their uses | Seasonal Changes | Living things and their habitats |
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| National Curriculum KS1 | • Asking simple questions and recognising that they can be answered in different ways.<br>• Observing closely, using simple equipment performing simple tests.<br>• Identifying and classifying<br>• using their observations and ideas to suggest answers to questions.<br>• Gathering and recording data to help in answering questions. | **Year 1**<br>• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.<br>• Identify and describe the basic structure of a variety of common flowering plants, including trees.<br>• Explore and answer questions about plants growing in their habitat. Observe the growth of flowers and vegetables that they have planted. Know common names of flowers<br>• Know names of plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem). Observe closely, using magnifying glasses, Compare and contrast familiar plants; describing how they were able to identify and group them, and draw diagrams showing the parts of different plants including trees.<br>• Keep records of how plants have changed over time, for example the leaves falling off trees and buds opening.<br>• Compare and contrast what they have found out about different plants.<br>**Year 2**<br>• Observe and describe how seeds and bulbs grow into mature plants.<br>• Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.<br>• Use the local environment throughout the year to observe how different plants grow. Know requirements of plants for germination, growth<br>• Know processes of reproduction and growth in plants. Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them. observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy. | **Year 1**<br>• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.<br>• Identify and name a variety of common animals that are carnivores, herbivores and omnivores.<br>• Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).<br>• Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.<br>• Use the local environment throughout the year to explore and answer questions about animals in their habitat.<br>• Understand how to take care of animals taken from their local environment and the need to return them safely after study.<br>• Become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets.<br>• Use their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.<br>**Year 2**<br>• Notice that animals, including humans, have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).<br>• Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.<br>• Understand the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans.<br>• Understand the processes of reproduction and growth in animals.<br>• The following examples might be used: egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb, sheep. Growing into adults can include reference to baby, toddler, child, teenager, adult.<br>• Observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions. | **Year 1**<br>• Distinguish between an object and the material from which it is made.<br>• Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.<br>• Describe the simple physical properties of a variety of everyday materials.<br>• Compare and group together a variety of everyday materials on the basis of their simple physical properties.<br>• Explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent.<br>• Explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil. Sc1 – Perform simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?'<br>**Year 2**<br>• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.<br>• Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.<br>• Identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass).<br>• Think about the properties of materials that make them suitable or unsuitable for particular purposes and they should be encouraged to think about unusual and creative uses for everyday materials.<br>• Find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.<br>• Sc1 – Compare the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs)<br>• Observe closely, identify and classify the uses of different materials, and record their observations. | **Year 1**<br>• Observe changes across the four seasons.<br>• Observe and describe weather associated with the seasons and how day length varies.<br>• Observe and talk about changes in the weather and the seasons.<br>• Sc1 - Make tables and charts about the weather.<br>• Make displays of what happens in the world around them, including day length, as the seasons change. | **Year 2**<br>• Explore and compare the differences between things that are living, dead, and things that have never been alive.<br>• Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.<br>• Identify and name a variety of plants and animals in their habitats, including micro-habitats.<br>• Describe 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. |

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| **Year A Y1/2** | | | | | | |
| **Year B Y1/2** | | | | | | |
| **Year C Y1/2** | | | | | | |
| **Year D Y1/2** | | | | | | |