

## Year 1 Science

By the end of Year 1 children will be able to...	NC PoS	Key Learning & Vocabulary
<p><b>Humans</b></p> <ul style="list-style-type: none"> <li>• Talk about and describe their body.</li> <li>• Talk about how they are the same as and different from others e.g. physical appearance, things you like, things you believe, how we do things etc.</li> <li>• Talk about their senses and how they use them in everyday life.</li> <li>• Talk about how they've changed during year one</li> <li>• Measure themselves over the year and compare to others</li> <li>• Look after their own health e.g. handwashing, brushing teeth, choosing clothes</li> </ul>	<ul style="list-style-type: none"> <li>• identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li> </ul>	<p><b>Key Learning</b></p> <p>Humans have keys parts in common, but these vary from person to person. Humans (and other animals) find out about the world using their senses. Humans have five senses – sight, touch, taste, hearing and smelling. These senses are linked to particular parts of the body.</p> <p><b>Key Vocabulary</b></p> <p>Senses, touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue</p>
<p><b>Scientific enquiries for humans</b></p> <ul style="list-style-type: none"> <li>• Can the children with the biggest hands grab the most sweets? (Pattern seeking)</li> <li>• How have I changed since I was a baby? Observing changes in humans – e.g. photographing children when first coming into the year and then throughout the year. Look at changes to faces, hair, hobbies etc. Encourage children to collect some data e.g. height, weight, shoe size, number of teeth etc. Repeat at the beginning of each term and end the year with a piece of writing 'Look how much I've changed/grown!' (Observing over time)</li> <li>• Where does the food in my pack lunch come from?</li> </ul> <p><b>Topic Questions</b></p> <ul style="list-style-type: none"> <li>• How do I care for a baby? (visit from baby; research)</li> </ul>		
<p><b>Key Experiences</b></p> <ul style="list-style-type: none"> <li>• Going for walks around the school grounds, local park or woods to experience the seasons – each term preferably</li> <li>• Recording the weather daily as a class and discussing it</li> <li>• Visit the residential home in Clayton to meet and talk to the residents</li> <li>• Visit from a baby in school</li> </ul>		

<p><b>Animals</b></p> <ul style="list-style-type: none"> <li>• Talk about animals that they are interested in.</li> <li>• Talk about and describe different animals.</li> <li>• Talk about what animals eat.</li> <li>• Talk about where animals live.</li> <li>• Talk about how to look after a pet.</li> <li>• Compare animals</li> <li>• Measure animals</li> <li>• Talk about how they can look after animals/pets</li> </ul>	<ul style="list-style-type: none"> <li>• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>• identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>• describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</li> </ul>	<p><b>Key Learning</b></p> <p>Animals vary in many ways having different structures e.g. wings, tails, ears etc. They also have different skin coverings e.g. scales, feathers, hair. These key features can be used to identify them.</p> <p>Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals.</p> <p><b>Key Vocabulary</b></p> <p>Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves</p>
<p><b>Scientific enquiries for animals</b></p> <ul style="list-style-type: none"> <li>• How many birds visit our garden? RSPB Big Garden Birdwatch in January. (Identifying and classifying)</li> <li>• Whose poo is this? (identifying and classifying)</li> </ul> <p><b>Topic Questions</b></p> <ul style="list-style-type: none"> <li>• What makes a fantastic beast? (animals and their features and diets)</li> <li>• Which ‘monsters’ live in our school ground? (mini beasts)</li> <li>• How do I care for a baby animal, plant and human?</li> </ul> <p>Spend all year identifying animals as you encounter them in stories, in the wild, in non-fiction books, through the news etc. (Identifying and classifying)</p>		
<p><b>Key Experiences</b></p> <ul style="list-style-type: none"> <li>• Go bird watching and on a bug hunt</li> <li>• Bringing pets in to school</li> <li>• Making a home for animals (hedgehog, insects)</li> <li>• Exploring the garden to find different mini beasts</li> <li>• Hatching eggs and looking after class fish</li> <li>• Create bird feeders</li> <li>• Look at different types of ‘animal poo’</li> </ul>		
<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Talk about and notice objects throughout the year.</li> <li>• Talk about and describe different objects/materials.</li> </ul>	<ul style="list-style-type: none"> <li>• distinguish between an object and the material from which it is made</li> <li>• identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> </ul>	<p><b>Key Learning</b></p> <p>All objects are made of one or more materials. Some objects can be made from different materials e.g. plastic, metal or wooden spoons. Materials can be described by their properties e.g. shiny, stretchy,</p>

<ul style="list-style-type: none"> <li>• Talk about and describe objects that we use every day.</li> <li>• Talk about how everyday objects are made (in a simple way).</li> <li>• Compare objects.</li> <li>• Talk about how we look after our objects or belongings.</li> </ul>	<ul style="list-style-type: none"> <li>• describe the simple physical properties of a variety of everyday materials</li> <li>• compare and group together</li> </ul>	<p>rough etc. Some materials e.g. plastic can be in different forms with very different properties.</p> <p><b>Key Vocabulary</b> Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see through, not see through</p>
<p><b>Scientific enquiries for materials</b></p> <ul style="list-style-type: none"> <li>• There's a hole in my bucket – what can I use to fix it? (Comparative/fair test)</li> <li>• What is the best paper for wrapping a present? (Comparative/fair test)</li> <li>• How can I make a paper fish go further? (Comparative/fair test)</li> <li>• Floating and sinking – what happens to different objects when they are put into water? (Identifying and classifying)</li> </ul> <p>Reinforce materials vocabulary by constantly talking about the objects we use in our everyday experiences (strong links with DT and discovery learning)</p>		
<p><b>Key Experiences</b></p> <ul style="list-style-type: none"> <li>• Exploring different types of materials (4 senses)</li> <li>• Using different types of materials in construction and DT area</li> </ul>		
<p><b>Seasonal change</b></p> <ul style="list-style-type: none"> <li>• Name the seasons and the time of year associated with them.</li> <li>• Talk about and notice the seasons throughout the year.</li> <li>• Talk about and describe the seasons.</li> <li>• Talk about what we do to adapt to different seasons e.g. clothes, activities, physical environment, food</li> <li>• Talk about the plants and animals of different seasons and what they do.</li> <li>• Compare seasons.</li> </ul>	<ul style="list-style-type: none"> <li>• observe changes across the four seasons</li> <li>• observe and describe weather associated with the seasons and how day length varies.</li> </ul>	<p><b>Key Learning</b> In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again. The weather also changes with the seasons. In the UK, it is usually colder and rainier in Winter and hotter and dryer in the Summer. The change in weather causes many other changes; some examples are numbers of minibeasts found outside, seed and plant growth, leaves on trees and type of clothes worn by people.</p> <p><b>Key Vocabulary</b> Weather (sunny, rainy, windy, snowy etc.), seasons (Winter, Summer, Spring, Autumn), sun, sunrise, sunset, day length, temperature</p>
<p><b>Scientific enquiries for seasonal change</b></p>		

- Observing seasonal changes – monthly/seasonal stroll looking at school grounds. Noticing the changes in plants, animals, weather and what we are wearing. (Observing over time)
- What happens in autumn, spring and summer? What is the weather like in these seasons? (observing over time)

**Key Experiences**

- Going outside in the school grounds and experiencing different types of weather and looking at different types of plants/animals that are around in different seasons
- Recording the weather daily as a class and discussing it

**Plants**

- Talk about and notice plants throughout the year.
- Talk about and describe different plants.
- Talk about what plants we eat.
- Talk about how to grow plants.
- Compare plants.
- Talk about how they can look after plants

- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- identify and describe the basic structure of a variety of common flowering plants, including trees.

**Key Learning**

Growing locally there will be a vast array of plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts but they vary between the different types of plants. Some trees keep their leaves all year whilst other trees drop their leaves during autumn and grow them again during spring.

**Key Vocabulary**

Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud.  
Names of trees in the local area  
Names of garden and wild flowering plants in the local area

**Scientific enquiries for plants**

- What plants grow in brilliant Britain? (Research)
- How does your garden grow? (Research)
- How can we sort plants? (Identifying and classifying)
- Do all apples have the same amount of seeds? (Pattern seeking)
- Do all flowers have the same number of petals? (Pattern seeking)

**Topic Questions**

- How do I care for a baby plant? (growing plants and planting them)
- What plants can I grow at home and school? (research)

**Key Experiences**

- Collect autumn seeds from trees and flowers e.g. conkers, acorns, beech nuts, poppies
- Spot autumn berries on our trees
- Cook and eat some blackberry and apple crumble
- Observe, describe and compare leaves on the trees
- Make leaf rubbings
- Growing and planting different plants

**Working Scientifically**

- Observe, describe and compare using simple science words
- Sort things
- Ask science questions
- Collect evidence to answer some questions
- Measure using non-standard units
- Test out ideas with help
- Talk about what might happen and what they found out
- Record on a simple table

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions.

observe  
 comparative language e.g. big, bigger, biggest, small, smaller, smallest, tall, taller, tallest, light, lighter, lightest, long, longer, longest  
 language of data e.g. table, pictogram, bar chart, tally