



# SANDRINGHAM INFANT AND NURSERY ACADEMY

## Progression of Skills



### SCIENCE

#### Exploring and Observing

##### EYFS

- Looks closely at similarities and differences between things in the world.
- Explores and notices patterns in the natural world e.g. all the birds we can see in the sky have wings.
- Explores and notices patterns in the results of experimenting e.g. every time I drop the marbles in the water, they sink.
- Looks closely at changes e.g. the way a caterpillar changes into a butterfly or a leaf changes colour.
- Makes observations of animals and plants through pictures, words or photographs.

#### Knowledge and Understanding

##### EYFS

- Has a developing understanding of growth, decay and changes over time.
- Knows about similarities and differences in relation to places.
- Knows about similarities and differences in relation to objects and materials.
- Knows about similarities and differences in relation living things.

#### Communicating

##### EYFS

- Comments and ask questions about aspects of my familiar world such as the place where I live or the natural world.
- Talks about some of the things I have observed such as plants, animals, natural and found objects.
- Talks about why things happen and how things work.
- Talks about the features of my own immediate environment and how environments might vary from one another.
- Talks about changes.

Working Scientifically	
Year 1	Year 2
<ul style="list-style-type: none"> <li>Asks simple questions and recognises that they can be answered in different ways.</li> <li>Observes closely, using simple equipment.</li> <li>Performs simple tests.</li> <li>Identifies and classifies.</li> <li>Uses their observations and ideas to suggest answers to questions. Gathers and records data to help in answering questions.</li> </ul>	<ul style="list-style-type: none"> <li>Asks simple questions and recognise s that they can be answered in different ways.</li> <li>Observes closely, using simple equipment.</li> <li>Performs simple tests.</li> <li>Identifies and classifies.</li> <li>Uses their observations and ideas to suggest answers to questions.</li> <li>Gathers and records data to help in answering questions.</li> </ul>
Vocabulary	
Question, answer, observe, observing, equipment, identify, classify, sort, diagram, chart, map, data, compare, contrast, describe, biology, chemistry, physics, group, record.	

Plants	
Year 1	Year 2
<ul style="list-style-type: none"> <li>Identifies and names a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>Identifies the basic structure of a variety of common flowering plants, including trees.</li> <li>Describes the basic structure of a variety of common flowering plants, including trees.</li> </ul>	<ul style="list-style-type: none"> <li>Observes and describes how seeds and bulbs grow into mature plants.</li> <li>Finds out and describes how plants need water, light and a suitable temperature to grow and stay healthy.</li> </ul>
Vocabulary	
Plant, flower, stem, trunk, leaf, branch, deciduous, evergreen.	Seed, bulb, seedling, temperature, water, light, grow

Animals Including Humans	
Year 1	Year 2
<ul style="list-style-type: none"> <li>Identifies and names a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li> <li>Identifies and names a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>Describes and compares the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li> <li>Compares the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li> </ul>	<ul style="list-style-type: none"> <li>Notices that animals, including humans, have offspring which grow into adults.</li> <li>Finds out about and describes the basic needs of animals, including humans, for survival (water, food and air).</li> <li>Describes the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li> </ul>

<ul style="list-style-type: none"> <li>Identifies, names, draws and labels the basic parts of the human body.</li> <li>Say which part of the body is associated with each sense.</li> </ul>	
<b>Vocabulary</b>	
Fish, amphibians, reptiles, birds, insects and mammals including pet., Herbivore, carnivore, omnivore. Sense; taste - tongue, mouth; sight - eyes; hearing - ears, sound; touch - fingers, skin, nerves; smell – nose. Hands, feet, arms, legs, head, neck, torso, chest, back.	Offspring, young, adult, calf, foal, kitten, baby, puppy, piglet. Survival, water, food, air, needs, hygiene, nutrition, exercise, food.

<b>Everyday Materials</b>	
<b>Year 1</b>	<b>Year 2</b>
<ul style="list-style-type: none"> <li>Distinguishes between an object and the material from which it is made.</li> <li>Identifies and names a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</li> <li>Describes the simple physical properties of a variety of everyday materials. Compares and groups together a variety of everyday materials on the basis of their simple physical properties.</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and compares the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> <li>Finds out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>
<b>Vocabulary</b>	
Object, material, wood, plastic, glass, metal, water, rock, property, rough, smooth, hard, soft, strong, weak.	Suitable, unsuitable, wood, metal, plastic, glass, brick, rock, paper, cardboard, squashing, bending, twisting and stretching.

<b>Seasonal Changes</b>	
<b>Year 1</b>	<b>Year 2</b>
<ul style="list-style-type: none"> <li>Observes the changes across the four seasons. Observes and describe weather associated with the seasons and how day length varies.</li> </ul>	
<b>Vocabulary</b>	
Season, Summer, Autumn, Winter, Spring. Weather, snow, rain, sun, temperature, longer, shorter, light.	

Living Things and Habitats	
Year 1	Year 2
	<ul style="list-style-type: none"> <li>• Explores and compares the differences between things that are living, dead, and things that have never been alive.</li> <li>• Identifies that most living things live in habitats to which they are suited and describes how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</li> <li>• Identifies and names a variety of plants and animals in their habitats, including microhabitats.</li> </ul> <p>Describes how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identifies and names different sources of food.</p>
Vocabulary	
	<p>Living, dead, never lived, movement, respiration, sensitivity, nutrition, excretion, reproduction, growth.</p> <p>Habitat, suitability, adapted, plants, animals, habitats, micro-habitats.</p> <p>Food chain, food source, predator, prey, producer.</p>