



## Whitehall Infant School curriculum for **Science**

Early Years Foundation Stage	Attainment Targets for Key Stage One	
<p><i>Early Learning Goal</i> The world: Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.</p> <p><u>Prior Learning</u> Children:</p> <ul style="list-style-type: none"> <li>▫ Have practical opportunities to grow plants, including plants for food.</li> <li>▫ Explore different materials and their properties</li> <li>▫ Observe and describe the world around them, including materials, habitats, plants</li> <li>▫ Observe and talk about animals, including looking for animals in the school environment</li> <li>▫ Learn the names of parts of the body</li> <li>▫ Begin to learn about keeping healthy and healthy food.</li> </ul> <p><u>Experiences and Enrichment Activities</u></p> <ol style="list-style-type: none"> <li>1. One World Week</li> <li>2. Visit to Urban Farm</li> <li>3. Local area walks</li> </ol>	<p><b>Year One</b></p> <p><i>Plants</i>  <input type="checkbox"/> identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  <input type="checkbox"/> identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p><i>Animals including omnivores</i>  <input type="checkbox"/> identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  <input type="checkbox"/> identify and name a variety of common animals that are carnivores, herbivores and Omnivores  <input type="checkbox"/> describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)  <input type="checkbox"/> 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><i>Everyday Materials</i>  <input type="checkbox"/> distinguish between an object and the material from which it is made  <input type="checkbox"/> identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock  <input type="checkbox"/> describe the simple physical properties of a variety of everyday materials  <input type="checkbox"/> compare and group together a variety of everyday materials on the basis of their simple physical properties</p> <p><i>Seasonal Changes</i>  <input type="checkbox"/> observe changes across the four seasons  <input type="checkbox"/> observe and describe weather associated with the seasons and how day length varies.</p> <p><u>Across the Key Stage - Working Scientifically</u>  <input type="checkbox"/> asking simple questions and recognising that they can be answered in different ways  <input type="checkbox"/> observing closely, using simple equipment  <input type="checkbox"/> performing simple tests  <input type="checkbox"/> identifying and classifying  <input type="checkbox"/> using their observations and ideas to suggest answers to questions  <input type="checkbox"/> gathering and recording data to help in answering questions.</p>	<p><b>Year Two</b></p> <p><i>Living things and their habitats</i>  <input type="checkbox"/> explore and compare the differences between things that are living, dead, and things that have never been alive  <input type="checkbox"/> 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  <input type="checkbox"/> identify and describe a variety of plants in their habitats, including micro-habitats  <input type="checkbox"/> 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.</p> <p><i>Plants</i>  <input type="checkbox"/> observe and describe how seeds and bulbs grow into mature plants  <input type="checkbox"/> find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p><i>Animals, including humans</i>  <input type="checkbox"/> notice that animals, including humans, have offspring which grow into adults  <input type="checkbox"/> find out about and describe the basic needs of animals, including humans, for survival (water, food and air)  <input type="checkbox"/> describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p><i>Uses of everyday materials</i>  <input type="checkbox"/> identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses  <input type="checkbox"/> find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>

## Year One Overview for Science

### Theme 1: Animals, including humans

#### Objectives covered

##### *Animals including omnivores*

- identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

##### *Working scientifically*

- performing simple tests
- identifying and classifying

#### *Context*

### Theme 2: Everyday Materials

#### Objectives covered

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties

##### *Working scientifically*

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying

#### *Context*

### Theme 3: Animals, including omnivores

#### Objectives covered

- identify and name a variety of common animals that are carnivores, herbivores and Omnivores
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

##### *Working scientifically*

- asking simple questions and recognising that they can be answered in different ways
- identifying and classifying

### Theme 4: Seasonal Changes

#### Objectives covered

- observe changes across the four seasons
- observe and describe weather associated with the seasons and how day length varies.

##### *Working scientifically*

- gathering and recording data to help in answering questions.

#### *Context*

### Theme 5: Plants

#### Objectives covered

- 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.

##### *Working scientifically*

- identifying and classifying
- observing closely, using simple equipment

### Theme 6: School Curriculum

#### Objectives covered

## Year Two Overview for Science

### Theme 1: Animals, including humans

#### Objectives covered

##### *Animals, including humans*

- 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)
- describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

##### *Working Scientifically*

- 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.

##### *Context*

Children learn about life cycles, including humans and how to care for babies. They consider healthy lifestyles and what humans need for survival.

### Theme 2: Living things and their habitats

#### Objectives covered

- explore and compare the differences between things that are living, dead, and things that have never been alive
- 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
- Identify and describe a variety of plants in their habitats, including micro-habitats
- 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.

##### *Working Scientifically*

- asking simple questions and recognising that they can be answered in different ways
- using their observations and ideas to suggest answers to questions

##### *Context*

Children investigate different animals and plants in their habitats in the school environment. They learn about minibeasts. Pupils are introduced to the concept of food chains.

### Theme 3: School Curriculum (electricity)

#### Objectives covered

##### *Working Scientifically*

- asking simple questions and recognising that they can be answered in different ways
- using their observations and ideas to suggest answers to questions

##### *Context*

Children identify uses of electricity. They are able to make simple circuits.

### Theme 4: Uses of everyday materials

#### Objectives covered

- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

##### *Working Scientifically*

- 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.

##### *Context*

Children identifying materials, properties and their uses. They explore changes in materials.

### Theme 5: Plants

#### Objectives covered

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

##### *Working Scientifically*

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

##### *Context*

Children plant seeds. They plan and carry out investigations to find out what plants need in order to grow.

### Theme 6: School Curriculum (forces)

#### Objectives covered

##### *Working Scientifically*

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

##### *Context*

Children investigate forces using rocket mice, cars and ramps. They plan how to perform a fair test.

