'ear	Progression of Skills in Science at Tweseldown Infant School	National Curriculum Requirements
R	Autumn I  Milestone 6  • Children will be able to answer simple 'why' questions	<b>EYFS ELG</b> Children understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
	<ul> <li>Milestone 7</li> <li>Children explore different materials freely in order to develop their ideas about how to use them and what to make</li> <li>Children talk about what materials look and feel like</li> </ul>	Children know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.
	<ul> <li>Milestone 8</li> <li>Children will be able to describe what they see, hear and feel whilst outside</li> <li>Children will be able to talk about and identify the patterns around them</li> <li>Children will be able to use all their senses in hands-on exploration of natural materials</li> <li>Children will be able to explore collections of materials with similar and/or different properties</li> <li>Children will be able to talk about what they see, using a wide vocabulary</li> <li>Children will be able to talk about what they notice about the weather on a daily basis and how this impacts them (need a coat, gloves, sunhat etc.)</li> </ul>	Children explore the natural world around them, making observations and drawing pictures of animals and plants.
	Autumn 2  Milestone 6  • Children understand 'why' questions	
	<ul> <li>Milestone 8</li> <li>Children will be able to talk about what they see, using a wide vocabulary</li> <li>Children will be able to talk about what they like about their own immediate environment and how environments might vary from one another (I like where I live because)</li> <li>Children will begin to understand the need to respect and care for the natural environment and all living things</li> <li>Children will be able to match clothing/objects to hot and cold weather</li> </ul>	
	<ul> <li>Spring I</li> <li>Milestone 6</li> <li>Children will be able to ask questions to find out more and to check they understand what has been said to them</li> </ul>	
	<ul> <li>Summer 2 Milestone 8 <ul> <li>Children will be able to describe their environment</li> <li>Children will be able to make observations and draw pictures of animals and plants</li> <li>Children will be able to know some similarities and differences between the natural world around them</li> <li>Children will be able to understand some important processes and changes in the natural world around them, including the seasons and changing states of matter</li> </ul> </li></ul>	

# Working Scientifically

١.

- Can ask simple questions
- Can recognise that questions can be answered in different ways

2.

- Can simply describe what they can see or what they notice
- Can observe objects/environments/experiments closely
- Can use simple equipment
- 3. Can use simple equipment to perform simple tests

4

- Can name and sort items
- Can sort items into 2 or more categories given to them or chosen by them
- 5. Can suggest answers to questions using what they have found out or what they already know
- 6. Can gather and record data to help them to answer simple questions

### **Plants**

١.

- Can identify and name a variety of common wild and garden plants (e.g. daisies, dandelions, oak, bluebell, sunflower, rose, grass, bramble, primrose).
- Identify some wild and garden plants in the surrounding area, including trees
- Can identify and name some deciduous (Horse Chestnut, Birch, Ash, Oak, Sycamore) and evergreen trees (Holly, Pine, Cedar, Willow) and can explain what these terms mean

2.

 Name and describe the basic structure of flowering plants (roots, leaves, stem, bud, petals, flower) and trees (roots, trunk, bark, branches, leaves).

### Animals, including humans

- I. Can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- 2. Can identify and name a variety of common animals that are carnivores, herbivores and omnivores
- 3. Can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- 4. Can identify, name, draw and label the basic parts of the human body (feet, legs, knees, arms, shoulders, elbows, hands, fingers, neck, head) and say which part of the body is associated with each sense.

### **Everyday materials**

Working Scientifically (must always be taught through substantive science content).

- 1. Ask simple questions and recognise that they can be answered in different ways
- 2. Observe closely, using simple equipment
- 3. Perform simple tests
- 4. Identify and classify
- 5. Use their observations and ideas to suggest answers to questions
- 6. Gather and record data to help in answering questions.

#### **Plants**

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

### Animals, including humans

- 1. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- 2. Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- 3. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- 4. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

## **Everyday materials**

- I. Can distinguish between an object and the material from which it is made (e.g. a chair is made from plastic).
- 2. Can Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- 3. Can describe the simple physical properties of a variety of everyday materials (e.g. hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy, waterproof/not waterproof, absorbent/not absorbent, opaque/transparent).
- 4. Can compare and group together a variety of everyday materials on the basis of their simple physical properties

Progression of Skills in Science at Tweseldown Infant School

# Seasonal changes

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

- 1. Distinguish between an object and the material from which it is made
- 2. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- 3. Describe the simple physical properties of a variety of everyday materials
- 4. Compare and group together a variety of everyday materials on the basis of their simple physical properties

## Seasonal changes

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

National Curriculum Requirements

Year	Progression of Skills in Science at Tweseldown Infant School	National Curriculum Requirements
2	Working Scientifically  1.  • Can ask questions • Can recognise that questions can be answered in different ways  2.  • Can simply describe what they can see or what they notice • Can observe objects/environments/experiments closely  3. Can use simple equipment and perform simple tests  4.  • Can name and sort items into 2 or more categories • Can suggest suitable categories to sort items into and explain their reasoning  5.  • Can suggest ways to find answers to their questions • Can suggest answers to questions using what they have found out or what they already know  6. Can gather and record data to help them to answer simple questions	Working Scientifically (must always be taught through substantive science content).  1. Ask simple questions and recognise that they can be answered in different ways  2. Observe closely, using simple equipment  3. Perform simple tests  4. Identify and classify  5. Use their observations and ideas to suggest answers to questions  6. Gather and record data to help in answering questions.
	Plants I. Can observe and describe how seeds and bulbs grow into mature plants	Plants  1. Observe and describe how seeds and bulbs grow into mature plants

2. Can find out, through experimentation, that plants need water, light and a suitable temperature to grow and stay healthy and describe what they observe

Animals, including humans

- I. Can explain that animals, including humans, have offspring which grow into adults and can draw a simple lifecycle
- 2. Can find out about and describe the basic needs of animals, including humans, for survival (water, food and air)

3

- Can describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene
- Can name some different types of food and describe a healthy balanced meal

Uses of everyday materials

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

### Living things and their habitats

1

- Can group things into the categories: living, dead and never been alive.
- Can explore and compare the differences between things that are living, dead, and things that have never been alive

2.

Can identify that most living things live in habitats to which they are suited Can describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

- 3. Can identify and name a variety of plants and animals in their habitats, including microhabitats
- 4. Can describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and can identify and name different sources of food.

2. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

## Animals, including humans

- 1. Notice that animals, including humans, have offspring which grow into adults
- 2. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- 3. Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

# Uses of everyday materials

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

# Living things and their habitats

- 1. Explore and compare the differences between things that are living, dead, and things that have never been alive
- 2. 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
- ${\bf 3.}\ Identify\ and\ name\ a\ variety\ of\ plants\ and\ animals\ in\ their\ habitats,\ including\ microhabitats$
- 4. 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.

Please note, 'Working Scientifically' must be taught throughout, and be clearly related to, all areas of the 'Science content 'curriculum in Key Stage 1.

At the end of KSI, teachers must make a judgement on a child's attainment in Science using the Science Framework. Where possible, teachers should draw on assessments that have been made earlier in the key stage to make their judgement against this framework.