

**Nyewood CE Infant School**  
**Skills Progression**  
**Subject**  
**Science**

**Curriculum Intent:**

At Nyewood CE Infant School each unique child will see themselves as a scientist; they will ask questions, observe, investigate and record their findings about the world around them.

**EYFS**

	<b>Emerging</b> Towards End of Year Expectations	Working At <b>Expected</b> End of Year Expectations	<b>Exceeding</b> End of Year Expectations
<b>Skill Area</b>  <b>The World</b>	<p>Pupils will be able to...</p> <p>Comment and ask questions about aspects of their familiar world such as the place where they live or the natural world.</p> <p>Talk about some of the things they have observed such as plants, animals, natural and found objects.</p> <p>Talk about why things happen and how things work.</p> <p>Develop an understanding of growth, decay and changes over time.</p> <p>Show care and concern for living things and the environment.</p>	<p>Pupils will be able to...</p> <p>Know about similarities and differences in relation to places, objects, materials and living things.</p> <p>Talk about the features of their own immediate environment and how environments might vary from one another.</p> <p>Make observations of animals and plants and explain why some things occur, and talk about changes.</p>	<p>Pupils will be able to...</p> <p>Know that the environment and living things are influenced by human activity.</p> <p>Describe some actions which people in their own community do that help to maintain the area they live in.</p> <p>Know the properties of some materials and can suggest some of the purposes they are used for.</p> <p>Be familiar with basic scientific concepts such as floating, sinking, experimentation</p>

<b>Key Vocabulary</b> <b>The World</b>	Water Sunshine Flower Sun, Rain, Snow, Ice, Wind, Cold Hot, Head, Legs, Body,	Growth Soil Plant Seed Leaf Roots Stem Weather, Warm, Mini-beast Wings, Antenna	Float Sink Experiment Hard Soft Rough Smooth
<b>Skill Area</b> <b>Health and Self-Care</b>	Pupils will be able to...  Tell adults when hungry or tired or when they want to rest or play.  Observe the effects of activity on their bodies. Understand that equipment and tools have to be used safely.	Pupils will be able to...  Eat a healthy range of foodstuffs and understand the need for variety in food.  Show some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health.  Show understanding of the need for safety when tackling new challenges, and considers and manages some risks.  Show understanding of how to transport and store equipment safely.  Practice some appropriate safety measures without direct supervision.  Know the importance for good health of physical exercise, and a healthy diet.  Talk about ways to keep healthy and safe.	Pupils will be able to...  Know about, and make healthy choices in relation to healthy eating and exercise.
<b>Key Vocabulary</b> <b>Health and Self-Care</b>	Sleep Cleaning Washing	Healthy Unhealthy Vegetable Fruit Exercise Heart Breathing Personal hygiene Being Happy	
<b>Skill Area</b>	Pupils will be able to...	Pupils will be able to...	Pupils will be able to...

<p><b>Working Scientifically</b></p>	<p><b>Asking Questions</b> Question why things happen Comment and ask questions about aspects of their familiar world such as the natural world</p> <p><b>Observing Closely</b> Show curiosity about objects, events and people. Make observations Closely observes what animals, people and vehicles do Use senses to explore the world around them</p> <p><b>Performing Tests</b> Take a risk, engage in new experiences and learn by trial and error Handle equipment and tools effectively Engage in open-ended activity</p> <p>Build up vocabulary that reflects the breadth of their experience</p> <p><b>Identifying and classifying</b>  Sort objects</p> <p><b>Recording Findings</b> Create simple representations of events, people and objects</p>	<p><b>Asking Questions</b> Ask questions about their experiences</p> <p>Answer how and why questions about their experiences</p> <p><b>Observing Closely</b> Make observations of animals and plants and explain why some things occur, and talk about changes Look closely at similarities, differences, patterns and change.</p> <p><b>Performing Tests</b> Find ways to solve problems / find new ways to do things / test their ideas</p> <p>Choose the resources they need</p> <p><b>Identifying and classifying</b> Know about similarities and differences in relation to places, objects, materials and living things Develop ideas of grouping, sequences, cause and effect</p> <p><b>Recording Findings</b> Develop their own narratives and explanations by connecting ideas or events</p>	<p><b>Asking Questions</b> Explore the world around them and raise their own simple questions Ask people questions and use simple secondary sources to find answers</p> <p><b>Observing Closely</b> Find out by watching, listening, tasting, smelling and touching Observe closely using simple equipment With help, observe changes over time</p> <p><b>Performing Tests</b> Begin to recognise different ways in which they might answer scientific questions Experience different types of science enquiries, including practical activities Use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data</p> <p><b>Identifying and classifying</b> Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them</p> <p>With guidance, they should begin to notice patterns and relationships</p> <p><b>Recording Findings</b></p>
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			With help, record and communicate their findings in a range of ways and begin to use simple scientific language
Key Vocabulary		Science Experiment Test Fair Find out Explain Reason Why Record Senses	

# Year 1

	<b>Working Towards</b> End of Year Expectations	Working At <b>Expected</b> End of Year Expectations	Working at <b>Greater Depth</b> Within End of Year Expectations
<b>Skill Area</b>  <b>Plants</b>	<p>Pupils will be able to...</p> <p>Identify and name some familiar plants.</p> <p>Begin to Identify and name the main parts of a plant.</p>	<p>Pupils will be able to...</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Compare and contrast familiar plants.</p> <p>Describe how to identify and group them,</p> <p>Draw diagrams showing the parts of different plants including trees.</p> <p>Keep records of how plants have changed over time, for example the leaves falling off trees and buds opening.</p> <p>Compare and contrast what they have found out about different plants.</p>	<p>Pupils will be able to...</p> <p>Begin to describe what each part of a plant does? (e.g. roots, stem, leaves, petals, pollen) on a range of plants.</p>
<b>Key Vocabulary</b> <b>Plants</b>	Leaf, flower, roots	Evergreen, deciduous, leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem, buds	
<b>Skill Area</b>	Pupils will be able to...	Pupils will be able to...	Pupils will be able to...

<p><b>Seasonal Changes</b></p>	<p>Name some of the seasons.</p> <p>Observe and describe the current weather.</p> <p>Demonstrate some understanding of how the weather changes with the seasons.</p>	<p>Name the seasons and describe seasonal changes.</p> <p>Observe and describe the types of weather associated with the four different seasons</p> <p>Observe and describe how day length varies with the seasons.</p>	<p>Observe features in the environment and explain that these are related to a specific season</p> <p>Observe and talk about changes in the weather</p> <p>Talk about weather variation in different parts of the world</p>
<p><b>Key vocabulary</b></p> <p><b>Seasonal Changes</b></p>	<p>rain sun snow wind cloud hot cold day, night</p>	<p>As previous plus Season, spring, summer, autumn, winter, weather, warm, cool, sunny, cloudy, windy, rainy, snowing, hailing, sleet, frost, fog, mist, icy, rainbow, thunder, lightning, storm, light, dark,</p>	
<p><b>Skill Area</b></p> <p><b>Animals, including humans</b></p>	<p>Pupils will be able to...</p> <p>Name and identify some familiar animals.</p> <p>Describe some observable features of familiar animals noticing some similarities and differences.</p> <p>Identify what some familiar animals eat.</p> <p>Name and locate some parts of the body.</p> <p>Name some of the different senses and begin to relate them to parts of the body.</p>	<p>Pupils will be able to...</p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals, including pets</p> <p>Describe and compare the observable features of animals from a range of groups</p> <p>Identify what different animals eat.</p> <p>Group animals based on what they eat.</p> <p>Identify, draw, name and locate the basic parts of the body.</p>	<p>Pupils will be able to...</p> <p>Begin to classify animals according to a number of given criteria</p> <p>Point out differences between living and non-living things</p> <p>Name some parts of the human body that cannot be seen</p> <p>Say why certain animals have certain characteristics</p> <p>Name a range of wild animals</p>

		<p>Identify, draw, name and locate parts of the body related to the senses.</p> <p>Use their senses to compare and contrast different tastes, textures, sounds and smells.</p>	
<p><b>Key vocabulary</b> <b>Animals, including humans</b></p>	<p>head, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth</p>	<p>Body, head, neck, arms, elbows, legs, knees, face, ears, eyes, eyebrows, eyelashes, nose, hair, mouth, teeth, tongue, feet, toes, fingers, nails, ankle, calf, thigh, hips, waist, trunk, chest, shoulders, back, hands, wrist, tail, wing, claw, fin, scales, feathers, fur, beak, senses, hearing, seeing, touching, smelling, tasting, smooth, bright, dim, loud, quiet, high, low</p>	
<p><b>Skill Area</b> <b>Everyday Materials</b></p>	<p>Pupils will be able to...</p> <p>Name some materials</p> <p>Know the properties of some materials and can suggest some of the purposes they are used for.</p>	<p>Pupils will be able to...</p> <p>Distinguish between an object and the material from which it is made</p> <p>Describe materials using their senses, using specific scientific words</p> <p>Explain what material objects are made from</p> <p>Explain why a material might be useful for a specific job</p> <p>Name some different everyday materials wood, plastic, metal, water and rock</p> <p>Sort materials into groups by a given criteria?</p> <p>Explain how solid shapes can be changed by squashing, bending, twisting and stretching</p>	<p>Pupils will be able to...</p> <p>Describe things that are similar and different between materials</p> <p>Explain what happens to certain materials when they are heated, e.g. bread, ice, chocolate</p> <p>Explain what happens to certain materials when they are cooled, e.g. jelly, heated chocolate</p>

<p><b>Key Vocabulary Everyday Materials</b></p>		<p>wood, plastic, glass, metal, water, and rock, brick, paper, fabrics, elastic, foil, hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy,</p>	
<p><b>Skill Area  Working Scientifically</b></p>	<p>Pupils will be able to...</p> <p><b>Asking Questions</b> Ask questions about their experiences</p> <p>Answer how and why questions about their experiences</p> <p><b>Observing Closely</b> Make observations of animals and plants and explain why some things occur, and talk about changes Look closely at similarities, differences, patterns and change.</p> <p><b>Performing Tests</b> Find ways to solve problems / find new ways to do things / test their ideas</p> <p>Choose the resources they need</p> <p><b>Identifying and classifying</b> Know about similarities and differences in relation to places, objects, materials and living things Develop ideas of grouping, sequences, cause and effect</p> <p><b>Recording Findings</b></p>	<p>Pupils will be able to...</p> <p><b>Asking Questions</b> Ask simple questions when prompted Suggest ways of answering a question</p> <p><b>Observing Closely</b> Discuss what they can see, touch, smell, hear or taste</p> <p>Use simple equipment to help them make observations</p> <p><b>Performing Tests</b> Perform a simple test</p> <p>Describe/ explain what they have done</p> <p><b>Identifying and Classifying</b> Identify and classify things they observe</p> <p>Think of some questions to ask</p> <p>Answer some scientific questions</p> <p>Give a simple reason for their answer</p> <p>Explain what they have found out</p>	<p>Pupils will be able to...</p> <p><b>Asking Questions</b> Ask simple questions Recognise that questions can be answered in different ways</p> <p><b>Observing Closely</b> Find out by watching, listening, tasting, smelling and touching</p> <p><b>Performing Tests</b> Give reasons for their answers</p> <p><b>Identifying and Classifying</b> Discuss similarities and differences</p> <p>Explain what they have found out using scientific vocabulary?</p>

	Develop their own narratives and explanations by connecting ideas or events	<p><b>Recording Findings</b> Show their work using pictures, labels and captions</p> <p>Record their findings using standard units</p> <p>Record some information in a chart or table, or using ICT</p>	<p><b>Recording Findings</b> Make accurate measurements using nonstandard measurements i.e. unifix</p>
<b>Key Vocabulary Working Scientifically</b>	Science Experiment Test Fair Find out Explain Reason Why Record Senses	Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, observe, compare, describe, similar/ities, different/ces, beaker,	Previous vocab plus observe changes over time, notice patterns, secondary sources, hand lenses, egg timers, identify, classify, data,

## Year 2

	<b>Working Towards</b> End of Year Expectations	Working At <b>Expected</b> End of Year Expectations	Working at <b>Greater Depth</b> Within End of Year Expectations
<b>Skill Area</b>  <b>Plants</b>	<p>Pupils will be able to ...</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Compare and contrast familiar plants.</p> <p>Describe how to identify and group them,</p> <p>Draw diagrams showing the parts of different plants including trees.</p> <p>Keep records of how plants have changed over time, for example the leaves falling off trees and buds opening.</p> <p>Compare and contrast what they have found out about different plants.</p>	<p>Pupils will be able to ...</p> <p>Describe what plants need to survive</p> <p>Observe and describe how seeds and bulbs grow into mature plants</p> <p>Investigate and describe the impact of removing light, soil or water from a growing or germinating plant</p>	<p>Pupils will be able to ...</p> <p>Describe what plants need to survive and link it to where they are found</p> <p>Explain that plants grow and reproduce in different ways</p>
<b>Key Vocabulary</b> <b>Plants</b>	Evergreen, deciduous, leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem, buds	seeds, bulbs, water, light, growth, healthy, shoot, seedling	

<p><b>Skill Area</b></p> <p><b>Living Things and their Habitats</b></p>		<p>Pupils will be able to ...</p> <p>Explain the differences between living and non-living things</p> <p>Match certain living things to the habitats they are found in</p> <p>Describe some of the life processes common to plants and animals, including humans</p> <p>Describe how a habitat provides for the basic needs of things living there</p> <p>Describe how some animals get their food using basic food chains</p> <p>Describe how plants and animals are suited to their habitat</p>	<p>Pupils will be able to ...</p> <p>Name some characteristics of an animal that help it to live in a particular habitat</p> <p>Describe what animals need to survive and link this to their habitats</p>
<p><b>Key vocabulary</b></p> <p><b>Living Things and their Habitats</b></p>		<p>Suited suitable habitat micro-habitat food chain shelter feature leaf litter</p>	
<p><b>Skill Area</b></p> <p><b>Animals, including humans</b></p>	<p>Pupils will be able to ...</p> <p>Name and identify some familiar animals.</p> <p>Describe some observable features of familiar animals noticing some similarities and differences.</p> <p>Identify what some familiar animals eat.</p> <p>Name and locate some parts of the body.</p>	<p>Pupils will be able to ...</p> <p>Describe what animals need to survive</p> <p>Explain that animals grow and reproduce</p> <p>Explain why animals have offspring which grow into adults</p> <p>Describe the life cycle of some living things (e.g. egg, chick, chicken)</p>	<p>Pupils will be able to ...</p> <p>Explain that animals reproduce in different ways</p>

	Name some of the different senses and begin to relate them to parts of the body.	Explain the basic needs of animals, including humans for survival (water, food, air)  Describe why exercise, balanced diet and hygiene are important for humans	
<b>Key Vocabulary</b>	Body, head, neck, arms, elbows, legs, knees, face, ears, eyes, eyebrows, eyelashes, nose, hair, mouth, teeth, tongue, feet, toes, fingers, nails, ankle, calf, thigh, hips, waist, trunk, chest, shoulders, back, hands, wrist, tail, wing, claw, fin, scales, feathers, fur, beak, senses, hearing, seeing, touching, smelling, tasting, smooth, bright, dim, loud, quiet, high, low	As previous plus offspring, life cycles, basic needs air, survival, exercise, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans), hygiene allergy vitamins portion balanced active perspire germs grow, change, adults, water, food,	As previous plus Nutrition, food types, carbohydrates, protein, vitamins and minerals, fat, sugar, fruits and veg, dietary fibre, water, balanced diet, skeleton, muscles, support, protection, movement, names of bones, vertebrate, invertebrate
<b>Skill Area</b> <b>Uses of Everyday Materials</b>	Pupils will be able to ...  Distinguish between an object and the material from which it is made Describe materials using their senses, using specific scientific words Explain what material objects are made from Explain why a material might be useful for a specific job Name some different everyday materials wood, plastic, metal, water and rock Sort materials into groups by a given criteria? Explain how solid shapes can be changed by squashing, bending, twisting and stretching	Pupils will be able to ...  Investigate a variety of everyday materials including plastic, wood, metal, glass, water and rock  Consider and experiment with materials for creating outfits for Sunny the Meerkat  Explore fabrics for a particular use  Investigate how materials can be shaped  Identify a recyclable material to replace a plastic product  Investigate whether a paper boat would float forever.	Pupils will be able to ...  Describe the properties of different materials using words like, transparent or opaque, flexible, etc.  Sort materials into groups and say why they have sorted them in that way  Say which materials are natural and which are manufactured

<b>Key Vocabulary Uses of Everyday Materials</b>	wood, plastic, glass, metal, water, and rock, brick, paper, fabrics, elastic, foil, hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy,	Suitable/unsuitable, use, object, material, property, wood, plastic, glass, metal water, rock, fabrics, hard, soft, stretchy, shape, change, twist, squash, bend, stretch, roll, squeeze	transparent or opaque, flexible, natural, manufactured
<b>Skill Area Scientific Understanding</b>	<p>Pupils will be able to...</p> <p><b>Asking Questions</b> Ask simple questions when prompted Suggest ways of answering a question</p> <p><b>Observing Closely</b>  Discuss what they can see, touch, smell, hear or taste  Use simple equipment to help them make observations</p> <p><b>Performing Tests</b> Perform a simple test  Describe/ explain what they have done</p> <p><b>Identifying and Classifying</b> Identify and classify things they observe  Think of some questions to ask  Answer some scientific questions</p>	<p>Pupils will be able to...</p> <p><b>Asking Questions</b> Explore the world around them and raise their own simple questions</p> <p><b>Observing Closely</b>  Use - sight, touch, smell, hearing or taste to help answer questions Use some scientific words to describe what they have seen and measured Compare several things</p> <p><b>Performing Tests</b> Carry out a simple fair test Explain why it might not be fair to compare two things Say whether things happened as they expected Suggest how to find things out Use prompts to find things out</p> <p><b>Identifying and Classifying</b> Organise things into groups</p>	<p>Pupils will be able to...</p> <p><b>Asking Questions</b> Raise their own relevant questions about the world around them Participate in a range of scientific experiences including different types of science enquiries to answer questions</p> <p>Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions</p> <p><b>Observing Closely</b>  Suggest ways of finding out through listening, hearing, smelling, touching and tasting</p> <p><b>Performing Tests</b> Say whether things happened as they expected and if not why not</p>

	<p>Give a simple reason for their answer</p> <p>Explain what they have found out</p> <p><b>Recording Findings</b> Show their work using pictures, labels and captions</p> <p>Record their findings using standard units</p> <p>Record some information in a chart or table, or using ICT</p>	<p>Find simple patterns (or associations) Identify animals and plants by a specific criteria, e.g. lay eggs or not; have feathers or not</p> <p><b>Recording Findings</b> Use text, diagrams, pictures, charts, tables to record their observations Measure using simple equipment</p>	<p><b>Identifying and Classifying</b> Suggest more than one way of grouping animals and plants and explain their reason</p> <p><b>Recording Findings</b> Use information from books and online information to find things out</p>
<p><b>Key Vocabulary Working Scientifically</b></p>	<p>Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, observe, compare, describe, similar/ities, different/ces, beaker</p>	<p>Previous vocab from Year 1 plus observe changes over time, notice patterns, secondary sources, hand lenses, egg timers, identify, classify, data,</p>	