



Lord Blyton Primary School

Progression of Knowledge and Skills- End Points

End Points EYFS	At the end of Nursery children will know that plants have seeds and care for a growing plant. Understand the key features of the life cycle of a plant and animal. Begin to understand the need to respect and care for the natural environment and all living things. Talk about the differences between materials and changes they notice, Explore and talk about the different forces they can feel. At the end of Reception children will be able to explore the natural world around them, making observations and drawing pictures of animals and plants. Understand some important process and changed in the natural world, including the seasons and changing states in matter. Describe what they see, hear and feel whilst outside. 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.
End Points KS1	Year 1 and 2 pupils , will be able to ask simple questions, use simple equipment and observe closely, perform simple tests, identify and classify, use their observations to suggest ideas and answer questions. Year 1 will be able to name a variety of common wild and garden plants, know what deciduous and evergreen trees are. Identify and describe the Basic structure of common flowering plants. Identify and name common animals: fish, amphibians, reptiles, birds and mammal, identify and name a variety of common animals that are carnivores, herbivores and omnivores. Draw and label the basic parts of the human body and say which part of the body is associated with each sense. Distinguish between an object and the material from which it is made, name a variety of every day materials, and describe the simple physical properties of a variety of everyday materials. Observe changes across the four seasons, observe and describe the weather associated with the seasons and how day length varies. Year 2 will be able to 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. Identify and name a variety of plants and animals in their habitats, including micro-habitats. Describe how animals obtain their food and show an understanding of food chains. 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. Know that animals, including humans have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans for survival. Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene. Identify and compare the suitability of a variety of everyday materials and find out how the shapes of solid objects made from some materials can be changed.
End Points KS2	During Year 3 and 4 , pupils will be able to ask relevant questions, using different types of scientific enquiries. Set up simple practical enquiries, comparative and fair tests, make systematic and careful observations, take accurate measurements, gather, record, classify and present data. Record findings using simple scientific language, make drawings, label diagrams,



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produce keys, bar charts and tables. Report findings, use results to draw simple conclusions, make predictions and raise further questions. **Year 3** – identify and describe the functions of different parts of flowering plants, roots, stem, trunk, leaves and flowers. Know what a plant needs to survive, investigate the way water is transported in plants, explore the life cycle of plants, including pollination, seed formation and seed dispersal. Identify that animal, including humans, need the right amount of nutrition and they cannot make their own food. Know that humans and some animals have skeletons and muscles for support, protection and movement. Pupils will be able to compare and group together rocks on appearance and simple physical properties, describe how fossils are formed, recognise that soils are made from rocks and organic matter. Recognise that they need light in order to see, notice that light is reflected from surfaces, recognise that shadows are formed when the light from a light source is blocked by an opaque object, find patterns in the way that the size of shadows change. Compare how things move on different surfaces, notice that some forces need contact between two objects, know magnets, repel and attract, describe magnets as having two poles. **Year 4** – recognise that living things are grouped in a variety of ways, use classification keys, recognise that some environments may change. Describe the simple functions of the basic parts of the digestive system in humans, identify the different types of teeth in humans and their simple functions, construct and interpret food chains. Compare and group materials together, according to solid, liquid or gas. Observe that some materials change state, identify the part played by evaporation and condensation in the water cycle. Identify how sounds are made, recognise that vibrations from sounds travel through a medium to the ear, find patterns between pitch and sound and the volume of sound. Recognise that sounds get fainter as the distance of the sound source increases. Construct a simple circuit, identifying and naming basic parts, recognise that a switch opens and closes a circuit, recognise common conductors and insulators. During **Year 5 and 6**, pupils will be able to ask relevant questions, plan different types of scientific enquiries, recognising and controlling variables. Set up practical enquiries, comparative and fair tests, make systematic and careful observations, take accurate measurements, using a range of scientific equipment, gather, record, classify and present data. Record data and results of increasing complexity, using simple scientific language, make drawings, classification keys, scatter graphs, produce keys, bar charts and tables. Report findings, use results to draw simple conclusions, make predictions and raise further questions. Identify scientific evidence that has been used to support or refute ideas or arguments. **Year 5** – describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird, describe the process of reproduction in some plants and animals. Describe the changes as humans develop to old age, learn about the changes experienced in puberty, research gestation periods of other animals and compare them to humans. Compare and group everyday materials on the basis of their properties, know that some materials will dissolve in liquid to form a solution, use knowledge of solids, liquids and gases to decide how mixtures might



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be separated, give reasons for the particular uses of everyday materials, take about materials and the formation of new materials. Describe the movement of the Earth and other planets, relative to the Sun, describe the movement of the Moon relative to the Earth, use the term approximately spherical bodies, use the idea of the Earth's rotation to explain day and night. Explain that unsupported objects fall towards the Earth because of the force of the gravity, discuss the effects of air resistance, water resistance and friction, recognise that some mechanisms including pulleys and gears, allow a smaller force to have a greater effect. **Year 6** – describe how living things are classified into broad groups according to observable characteristics, give reasons to classify plants and animals. Identify the name and main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood, recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function, describe the ways in which nutrients and water are transported within animals including humans. Recognise that living things have changed over time and that fossils provide information about living things, recognise that living things produce offspring, identify how animals and plants are adapted to suit their environment. Recognise that light travels in straight lines and that as light travels in straight lines, explains why shadows have the same shape as the objects that cast them. Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit, compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and on/off position of switches, recognise symbols when representing a simple circuit in a diagram.