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|  | **Year R** | **Year 1** | **Year 2** |
| Expectations  SC1 | **Understanding the world** involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment  **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. | **Working scientifically**  The pupil can, using appropriate scientific language from the national curriculum:   1. ask their own questions about what they notice    1. use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions: observing changes over time    2. noticing patterns    3. grouping and classifying things    4. carrying out simple comparative tests    5. finding things out using secondary sources of information    6. communicate their ideas, what they do and what they find out in a variety of ways | |
| Expectations  PLANTS |  |  | describe the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants (year 2) |
| PLANTS | * They make observations of plants and explain why some things occur. | Pupils should be taught to:  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.  plant structures -  leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem | Pupils should be taught to:  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.  Pupils should be introduced to the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants.  Pupils should use the local environment throughout the year to observe how different plants grow.  Confidently name plants and their key features  Find and explain the best conditions for a plant to survive.  Describe how plants plant new seeds to grow. |
| Expectations  ANIMALS inc HUMANS |  | name and locate parts of the human body, including those related to the senses (year 1)  describe and compare the observable features of animals from a range of groups (year 1)  group animals according to what they eat (year 1 | describe the importance of exercise, a balanced diet and hygiene for humans (year 2)  describe the basic needs of animals for survival and the main changes as young animals, including humans, grow into adults (year 2) |
| ANIMALS INC HUMANS | * They make observations of animals | Pupils should be taught to:  identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  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)   identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.  main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes.  They should understand how to take care of animals taken from their local environment and the need to return them safely after study. Pupils should become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets. | Pupils should be taught to:  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.  Describe the importance of eating the right amount of food groups.  Describe the importance of hygiene  Know how different types of food support the body  Explain how animals use their senses to survive |
| Expectations  MATERIALS |  | distinguish objects from materials, describe their properties, identify and group everyday materials (year 1) | compare suitability of materials for different uses (year 2) |
| EVERYDAY MATERIALS | * children know about similarities and differences in relation to objects * children know about similarities and differences in relation to materials | Pupils should be taught to:  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.  become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent.  explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil. | Pupils should be taught to:  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.  identify and discuss the uses of different everyday materials  think about the properties of materials that make them suitable or unsuitable for particular purposes  List the properties that make a material suitable for its purpose  Name awide range of materials and their properties  Identify and compare materials for their suitability for a purpose |
| Expectations  SEASONS |  | describe seasonal changes (year 1) |  |
| SEASONAL CHANGES | * They talk about seasonal changes. | Pupils should be taught to:  observe changes across the four seasons  observe and describe weather associated with the seasons and how day length varies. | Name the four seasons and a wide range of key features of each. |
| Expectations  LIVING THINGS & THEIR HABITATS |  |  | identify whether things are alive, dead or have never lived (year 2)  name different plants and animals and describe how they are suited to different habitats (year 2)  describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships (year 2) |
| LIVING THINGS AND THEIR HABITATS | * children know about similarities and differences in relation to living things. * They talk about the features of their own immediate environment and how environments might vary from one another. * children know about similarities and differences in relation to places, |  | Pupils should be taught to:  explore and compare the differences between things that are living, dead, and things that have never been alive  all living things have certain characteristics that are essential for keeping them alive and healthy.  to become familiar with the life processes that are common to all living things.  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  Pupils should compare animals in familiar habitats with animals found in less familiar habitats,  identify and name a variety of plants and animals in their habitats, including micro-habitats  describe the conditions in different habitats and micro-habitats and find out how the conditions affect the number and type(s) of plants and animals that live there. ???  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.  construct a simple food chain that includes humans  Know how animals and plants depend on each other |
| WORKING SCIENTIFICALLY |  | During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:  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. | During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:  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. |