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|   | *Reception* | *Year 1*  | *Year 2*  |
| Working Scientifically  | Talk about their own ideas. Begin to test their own ideas. Question why things happen. Begin to use science vocabulary. Use equipment and tools safely. Talk about plants, animals, natural and found objects. Create simple representations of people and objects. Use senses and look closely. Notice similarities and differences. | Ask simple questions in response to the teacher. Understand and use the question words what, why, where, when and how with support. Make observations using appropriate senses. Test ideas suggested to them and begin to make own suggestions. Say what has happened in a test/enquiry. Make simple comparisons and groupings. Say whether what has happened was what they expected. Draw and label simple pictures. Use simple charts to communicate findings. Communicate observations orally and simple writing e.g. stem sentences.   | Ask their own questions. Independently understand and use the question words what, why, where, when and how. Use simple equipment to aid observations. Compare and contrast observations. Begin to recognise when a test or comparison is unfair. Design a test to answer their own questions. Say what their observations from an enquiry show. Begin to draw simple conclusions from their enquiry. Begin to suggest improvements in their work. Collect and record data (supported by teacher). Suggest how enquiry data could be collected to answer questions. Begin to plan and choose their own equipment.  |
| Being a Biologist  | **Plants, Animals and Seasonal Changes:** Know about similarities and differences in relation to places, objects, materials and living things. Talk about the features of their own immediate environment and how environments might vary from one another. Make observations of animals and plants and explain why some things occur and talk about changes. Make observations of plants that they have planted themselves. Know the life cycle of a butterfly.  | **Plants:** 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.  **Animals Including Humans:** 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.    | **Plants:** 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.  **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. **Living Things and Their Habitats:** 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.  |

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|  |  | **Seasonal Changes:** Observe changes across the 4 seasons. Observe and describe weather associated with the seasons and how day length varies. | Identify and name a variety of plants and animals in their habitats, including microhabitats. 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.  |
| Being a Chemist  | **Materials:** Know about similarities and differences in relation to places, objects, materials and living things.  Talk about the features of their own immediate environment and how environments might vary from one another.  Observe changing states of matter e.g. water freezing.   | **Everyday Materials:** 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.  | **Uses of Everyday Materials:** 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. |