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| **Science**  | **Cycle A** |
|  |  | **Milestone 2** |
| **To work scientifically** |  | • Ask relevant questions.• Set up simple practical enquiries and comparative and fair tests.• Make accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.• Gather, record, classify and present data in a variety of ways to help in answering questions.• Record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.• Use results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.• Identify differences, similarities or changes related to simple, scientific ideas and processes.• Use straightforward, scientific evidence to answer questions or to support their findings. |
| **Biology** | **To understand plants**  | • Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers.• Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.• Investigate the way in which water is transported within plants.• Explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. |
|  | **To understand animals and humans**  | • Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat.• Describe the ways in which nutrients and water are transported within animals, including humans.• 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. |
|  | **To investigate living things**  |  |
|  | **To understand evolution and inheritance**  |  |
| **Chemistry** | **To investigate materials**  | • Compare and group together different kinds of rocks on the basis of their simple, physical properties.• Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).• Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock. |
| **Physics** | **To understand movement, forces and magnets**  | • Observe how magnets attract or repel each other and attract some materials and not others. • Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials. |
|  | **To understand light and seeing**  |  |
|  | **To investigate sound and hearing**  |  |
|  | **To understand electrical circuits**  |  |
|  | **To understand the Earth’s movement in space**  | • Describe the movement of the Earth relative to the Sun in the solar system.• Describe the movement of the Moon relative to the Earth. |

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| **Science**  | **Cycle B** |
|  |  | **Milestone 2** |
| **To work scientifically** |  | • Ask relevant questions.• Set up simple practical enquiries and comparative and fair tests.• Make accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.• Gather, record, classify and present data in a variety of ways to help in answering questions.• Record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.• Use results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.• Identify differences, similarities or changes related to simple, scientific ideas and processes.• Use straightforward, scientific evidence to answer questions or to support their findings. |
| **Biology** | **To understand plants**  |  |
|  | **To understand animals and humans**  | • Identify that humans and some animals have skeletons and muscles for support, protection and movement. |
|  | **To investigate living things**  | • Identify and name a variety of living things (plants and animals) in the local and wider environment, using classification keys to assign them to groups. • Give reasons for classifying plants and animals based on specific characteristics.• Recognise that environments are constantly changing and that this can sometimes pose dangers to specific habitats. |
|  | **To understand evolution and inheritance**  | • Identify how plants and animals, including humans, resemble their parents in many features.• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.• Identify how animals and plants are suited to and adapt to their environment in different ways. |
| **Chemistry** | **To investigate materials**  | • Compare and group materials together, according to whether they are solids, liquids or gases.• Observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (°C), building on their teaching in mathematics.• Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. |
| **Physics** | **To understand movement, forces and magnets**  |  |
|  | **To understand light and seeing**  |  |
|  | **To investigate sound and hearing**  | • Identify how sounds are made, associating some of them with something vibrating.• Recognise that sounds get fainter as the distance from the sound’s source increases. |
|  | **To understand electrical circuits**  |  |
|  | **To understand the Earth’s movement in space**  |  |