**National Curriculum**

**Science Lower Key Stage 2**

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| **Science**  **National Curriculum Objectives (LKS2)** | | **Where are they taught?** |
| **Pupils should be taught to…** | | |
| **Plants** | identify and describe the functions of different parts of flowering plants: roots, stem / trunk, leaves and flowers | Under the Canopy |
| 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 |
| explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal |
| **Animals, Including Humans** | identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat | LKS2 3D PSHE C1 U3 L1, L2  (within Come Fly With Me! Africa) |
| identify that humans and some other animals have skeletons and muscle for support, protection and movement | Come Fly With Me! Africa |
| describe the simple functions of the basic parts of the digestive system |
| identify the different types of teeth on humans and their simple functions |
| construct and interpret a variety of food chains, identifying producers, predators and prey |
| **Rocks** | compare and group together different kinds of rocks on the basis of their appearance and simple physical properties | Rocky the Findosaur |
| describe in simple terms how fossils are formed when things that have lived are trapped within rock |
| recognise that soils are made from rocks and organic matter |

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| **Light** | know that light is reflected from surfaces | A World of Difference  Cry Freedom |
| find patterns in the way that the size of shadows change |
| know that shadows are formed when the light from a light source is blocked by a solid object | Light Up the World (KS1) |
| recognise that light from the Sun can be dangerous and that there are ways to protect their eyes |
| recognise that we need light in order to see things and that dark is the absence of light |
| **Forces and Magnets** | compare how things move on different surfaces | Land Ahoy and The Beachcombers (KS1)  May the Force Be With You |
| notice that some forces need contact between two objects and some forces act at a distance | May the Force Be With You |
| observe how magnets attract or repel each other and attract some materials and not others |
| describe magnets as having two poles |
| predict whether two magnets will attract or repel each other, depending on which poles are facing |
| 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 |
| **Living Things and Their Habitats** | recognise that living things can be grouped in a variety of ways | Come Fly With Me! Africa |
| explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment |
| recognise that environments can change and that this can sometimes pose dangers to living things | Going Wild (KS1) |
| **States of Matter** | compare and group materials together, according to whether they are solids, liquids or gases | Rocky the Findosaur |
| observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (oC) |
| identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature |

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| **Sound** | identify how sounds are made, associating some of them with something vibrating | Picture Our Planet |
| know that vibrations from sounds travel through a medium to the ear |
| find patterns between the volume of a sound and the strength of the vibrations that produce it |
| find patterns between the pitch of a sound and the feature of the object that produced it |
| recognise that sounds get fainter as the distance from the sound source increases | Land Ahoy! and The Beachcombers (KS1) |
| **Electricity** | identify common appliances that run on electricity | Zero to Hero (KS1)  Lightning Speed |
| construct a simple series electrical circuit and demonstrate this, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers |
| identify whether or not a lamp will light in a simple series circuit based on whether or not the lamp is part of a complete loop with a battery | Lightning Speed |
| recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit |
| recognise some common conductors and insulators, and associate metals with being good conductors |