



Whole School SCIENCE Overview – Cycle A				
Year Group/Cl ass	EYFS	Years 1 & 2	Years 3& 4	Years 5&6
Autumn 1	 Discussions around snack time and lunch time - healthy eating choices. Discussions around healthy living choices including: washing hands, brushing teeth, eating and exercise. Story time and circle time to explore books focusing on staying healthy and the human body: Funnybones, Germs, What makes me, me and The Little Book of Manners. Naming body parts through songs: if you're happy and you know it and head, shoulders, knees and toes Talking about our pets at home and drawing our pets in our family portraits. (Pet Week) Materials – what is the best material for the Three Pigs to build a house out of? Seasonal changes – Autumn: Exploring school's grounds and observing seasonal changes in the Autumn. Welly Wednesday Exploring natural autumnal resources in a Tuff Tray, asking questions and making/drawing observations. Explore hibernation and migration Explore harvest time in the UK and farming at harvest time. Observe seasonal weather changes and longer nights in the autumn compared to the summer. 	Animals including humans - Notice that animals have offspring which grow into adults -Basic needs for survival for animals and humans -Importance of hygiene, food and exercise Y2 Animals including humans -Name common animals Y1	Forces and Magnets - compare how things move on different surfaces - notice that some forces need contact between 2 objects, but magnetic forces can act at a distance - 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 - describe magnets as having 2 poles - predict whether 2 magnets will attract or repel each other, depending on which poles are facing.	Evolution - recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents - identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.





	 Daily weather books Let's Celebrate: Explore festival origins/celebrations across the world, using a world map/globe. 			
Autumn 2	Continued from Autumn 1	Animals including humans Living things - Explore and compare the differences between things that are living, dead, and things that have never been alive	Forces and Magnets Continued	Animals including humans - identify and name the 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.
Spring 1	 Explorers: Seasonal Changes – Winter & Spring: Exploring schools' grounds and observing seasonal changes in the winter/spring. Explore compare/contrast our environment with polar regions. Build a boat for Lost and Found (floating and sinking exploration). Discuss global warming and the impact on polar regions Observe seasonal weather changes in the winter/spring (ice exploration) Observe, question and draw spring plants/spring growth. Explore natural spring resources in Tuff Tray, asking questions and making/drawing observations. Spring walk around School grounds describing and discussing what is found. Explore the life cycle of frogs. Explore the life cycle of plants Still life observations and drawings of spring flowers. 	Everyday materials - Distinguish between an object and the material from which it is made - Identify and name a variety of everyday materials - Describe the simple physical properties of materials Y2 Everyday materials -Name, describe and sort everyday materials Y1	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 - identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Living Things and their habitats - describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals - give reasons for classifying plants and animals based on specific characteristics.





	Welly Wednesday: Planting seeds and plants Discover, compare and contrast food produce/grown in different climates around the world – Handa's Surprise			
Spring 2	Continued from Spring 1	Everyday materials - Compare and group together a variety of everyday materials - Identify and compare the suitability of a variety of everyday materials -Find out how the shapes of solid objects made from some materials can be changed	Rocks - compare and group together different kinds of rocks on the basis of their appearance and simple physical properties - 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.	Micro-organisms. - identify types of micro-organism. - describe helpful and harmful Micro-organisms. -investigate harmful micro-organisms.
Summer 1	 Seasonal Changes – Summer: Exploring schools' grounds and observing seasonal changes in the summer. Observe seasonal weather changes in the summer All Creatures Great and Small: I can show care and concern for living things in the environment I can start to develop an understanding of growth, decay and changes over time (wormery) I can talk about some of the things I have observed such as plants, animals, natural and found objects To understand where dinosaurs are now and begin to understand that they were alive a very long time ago. Learn about what a palaeontologist is and how they explore really old artefacts. What a wonderful world: To begin to understand that gravity is an invisible force that pulls everything towards the centre of earth – Space / rocket launch 	Plants - Identify and name a variety of common wild and garden plants - Identify and describe the basic structure of plants and trees	Light - recognise that they need light in order to see things and that dark is the absence of light - notice that light is reflected from surfaces - recognise that light from the sun can be dangerous and that there are ways to protect their eyes - recognise that shadows are formed when the light from a light source is blocked by a solid object - find patterns in the way that the size of shadows change.	Light - recognise that light appears to travel in straight lines - use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye - explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes - use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them





	Listen to how children communicate their understanding of their own environment and contrasting environments through conversation and in play. I can talk about ways in which I can look after the environment – Under the sea			
Summer 2	Continued from Summer 1	Plants - Observe and describe how seeds and bulbs grow into mature plants -Find out and describe how plants grow	Plants - identify and describe the functions of different parts of flowering plants: roots, stem/trunk, 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 part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Electricity - 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 the on/off position of switches - use recognised symbols when representing a simple circuit in a diagram.