SHERRIER CE PRIMARY
SCIENCE COVERAGE BY YEAR GROUP

Science coverage year group overview

	Autumn		Spring		Summer	
	1	2	1	2	1	2
EYFS						
Year 1	**Animals (including humans)** Know how to classify a range of animals by amphibian, reptile, mammal, fish and birds – Know and classify animals by what they eat (carnivore, herbivore and omnivore) Know how to sort by living and non-living things Know the name of parts of the human body that can be seen		**Everyday Materials** Know the name of the materials an object is made from Know about the properties of everyday materials		**Plants** Know and name a variety of common wild and garden plants Know and name the petals, stem, leaves and root of a plant Know and name the roots, trunk, branches and leaves of a tree Know and explain how seeds and bulbs grow into plants Know what plants need in order to grow and stay healthy (water, light & suitable temperature) Seasonal Changes Name the seasons and know about the type of weather in each season	
Year 2	**Living things and their habitats** Classify things by living, dead or never lived Name some different sources of food for animals Know about and explain simple food chain **Animals inc. humans** Know the basic stages in a life cycle for animals including humans Know why exercise, a balanced diet and good hygiene are important for humans **Plants** Know an explain how seeds and bulbs grow into plants Know what plants need in order to grow and stay healthy (water, light, suitable temperature)		**Everyday materials** Identify different materials Name everyday materials • Know why a material might or might not be used for a specific job Properties of materials • Know how materials can be changed by squashing, bending, twisting and stretching • Compare the use of different materials • Compare movement on different surfaces		**Living things and their habitats** Know how a specific habitat provides for the basic needs of living things there (plants and animals) Match living things to their habitat Name some different sources of food for animals Know about and explain simple food chain **Everyday Materials** Identify different materials Name everyday materials • Know why a material might or might not be used for a specific job Properties of materials • Know how materials can be changed by squashing, bending, twisting and stretching • Compare the use of different materials • Compare movement on different surfaces	
Year 3	**Animals (included 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		**Forces & Magnets** Compare how things move on different surfaces Notice that some forces need contact between	**Light** Recognise that they need light in order to see things and that dark is the absence of light	**Plants** Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	

	Identify that humans and some other animals have skeletons and muscles for support, protection and movement.		two 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 two poles Predict whether two magnets will attract or repel each other, depending on which poles are facing.	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.	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.	
Year 4	**Sound** Use the idea that sounds are associated with vibrations and that they require a medium to travel through. To explain how sounds are made and heard. Describe the relationship between the pitch of a sound and the features of its source, between the volume of a sound, the strength of the vibrations and the distance from its source. **Animals Inc humans** Name, locate and describe the functions of the main parts of the digestive system.		**Materials: States of matter** Describe characteristics of different states of matter and group materials on this basis. Describe how materials change state at different temperatures - Explain everyday phenomena E.G. the water cycle Identify and describe what is happening when dissolving occurs in everyday situations. Describe how to separate mixtures and solutions into their components.		Explain how environmental changes may have an impact on living things.	
Year 5	**Properties and Changes in Materials** Compare properties of everyday materials	**Earth and Space** Movement of the Earth and the planets Movement of the moon	**All Living Things and Their Habitats** Life cycles – Plants and animals	**Animals, Including Humans**	**Electricity** Uses of electricity Simple circuits and switches	**Electricity** Conductors and insulators

	Soluble/ dissolving Reversible and irreversible substances	Night and day **Forces** Gravity Friction Forces and motion of mechanical devices	Reproductive processes Famous naturalists	Changes as humans develop from birth to old age		
Year 6	**Evolution and Inheritance** Describe how fossils provide evidence for evolution Use the basic ideas of inheritance, variation and adaption to describe how living things have changed over time and evolved 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.	**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.	**Electricity** Associate the brightness of a lamp/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.	**Light** Use the idea that light from sources, or reflected light, travels in straight lines and enters our eyes, to explain how we see objects, and the formation, shape and size of shadows to explain how we see objects. To explain the formulation, shape and size of shadows.	**Plants** Use the observable features of plants, animals and microorganisms to group, classify and identify them into broad groups, using keys or in other ways.	**Forces** Identify simple mechanisms, including leavers, gears and pulleys that increase the effect of a force. **Animals inc humans** Describe the effects of diet, exercise, drugs and lifestyle on how their bodies function. Name a describe the functions of the main parts of the circulatory systems. Discuss and look into the three main nutrients; proteins, fats and carbohydrates.