



St Augustine of Canterbury R.C Primary School

Science Coverage 2022-2023

Christus Hic, Hodie, Semper



Aut I	Unit:	EYFS Superheroes	Y1 Seasonal Changes	Y2 Living things and their habitats (inc seasonal link)	Y3 Rocks	Y4 All living things and their habitats	Y5 Forces	Y6 Animals inc humans (healthy lifestyles)
	Key Knowledge:	<ul style="list-style-type: none">➤ Learn about how to look after the environment.➤ Exploring senses -➤ Explore and investigate seasonal changes.➤ Ask questions about my environment and the natural world.➤ How to care for living things. Including environmental recycling and healthy eating.➤ Discuss observations.	<ul style="list-style-type: none">➤ Observe changes across the 4 seasons➤ Observe and describe weather associated with the seasons and how day length varies	<ul style="list-style-type: none">➤ 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➤ Identify and name a variety of plants and animals in their habitats including micro-habitats➤ Describe how animals obtain their food	<ul style="list-style-type: none">➤ 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	<ul style="list-style-type: none">➤ Recognise that living things can be grouped in a variety of ways➤ 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	<ul style="list-style-type: none">➤ Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object➤ Identify the effects of air resistance, water resistance and friction, that act between moving surfaces➤ Recognising that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	<ul style="list-style-type: none">➤ 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

				from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.				
	Resources:				<ul style="list-style-type: none"> ➤ Rock set ➤ Pipettes ➤ measuring containers ➤ sandpaper ➤ magnifying glasses 			
		EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Aut 2	Unit:	Festivals and celebrations	Animals including humans	Use of everyday material	Light	States of matter	Properties and changes of materials	Animals inc humans (healthy lifestyles)
	Key Knowledge:	<ul style="list-style-type: none"> ➤ Compare and contrast chosen countries using food, culture and the environment. ➤ Discuss why things happen. ➤ Observe and discuss the seasons, harvest and Autumn. 	<ul style="list-style-type: none"> ➤ Identify and name a variety of common <u>animals</u> 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 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ 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. 	<ul style="list-style-type: none"> ➤ 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 or research the temperature at which this happens in degrees Celsius ➤ Identify the part played by evaporation and 	<ul style="list-style-type: none"> ➤ Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets ➤ Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution ➤ Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating ➤ Give reasons, based on evidence from 	<ul style="list-style-type: none"> ➤ 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

						condensation in the water cycle and associate the rate of evaporation with temperature	<ul style="list-style-type: none"> ➤ comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic ➤ Demonstrate that dissolving, mixing and changes of state are reversible changes ➤ Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acids on bicarbonate of soda 	
	Resources:					Torches batteries mirrors		
Spr 1	Unit:	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
	Dinosaurs and Dragons	Everyday materials		Uses of every day materials	Animals including humans (muscular/skeletal system)	Electricity	Properties and changes of materials (cont) Investigative skills	Electricity
	Key Knowledge:	<ul style="list-style-type: none"> ➤ Make comments on things seen outside including plants and animals. ➤ Discuss experiences at different times in the year. ➤ Observe and understand the effects of the changing seasons. ➤ Recognise types of dinosaur names and 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ 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, 	<ul style="list-style-type: none"> ➤ Identify common appliances that run on electricity ➤ Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers ➤ Identify whether or 	<ul style="list-style-type: none"> ➤ Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets ➤ Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution ➤ Use knowledge of solids, liquids and 	<ul style="list-style-type: none"> ➤ 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

		features; herbivore, carnivore and omnivore, habitats and fossils.		squashing, bending, twisting and stretching	protection and movement	<p>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</p> <p>➤ Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>➤ Recognise some common conductors and insulators, and associate metal with being good conductors</p>	<p>gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>➤ Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>➤ Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>➤ Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acids on bicarbonate of soda</p>	simple circuit in a diagram
--	--	--	--	---	-------------------------	--	---	-----------------------------

Resources:		EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Spr 2	Unit:	Once upon a time	Plants	Plants (seeds/early growth)	Plants	Animals including humans (teeth, digestion, food chains)	Earth in Space	Light and Astronomy
	Key Knowledge:	<ul style="list-style-type: none"> ➤ Investigate different materials to build houses etc. ➤ Changing materials and concepts. 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ Observe and describe how seeds and bulbs grow into mature plants ➤ Find out and describe how plants need water, light 	<ul style="list-style-type: none"> ➤ Identify and describe the functions of different parts of flowering plants: roots, stem-trunk, leaves and flowers 	<ul style="list-style-type: none"> ➤ Describe the simple functions of the basic parts of the digestive system in humans ➤ Identify the different 	<ul style="list-style-type: none"> ➤ Describe the movement of the Earth, and other planets, relative to the Sun in the solar system ➤ Describe the movement of the Moon relative to the Earth 	<ul style="list-style-type: none"> ➤ 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

				and a suitable temperature to grow and stay healthy	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ types of teeth in human and their simple functions ➤ Construct and interpret a variety of food chains, identifying producers, predators and prey 	<ul style="list-style-type: none"> ➤ Describe the Sun, Earth and Moon as approximately spherical bodies ➤ Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky 	<ul style="list-style-type: none"> ➤ 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
--	--	--	--	---	--	---	---	---

Resources:								
		EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Sum I	Unit:	It's Alive	Seasonal changes	Habitats/Animals including humans (seasonal link)	Forces	Sound	Living things and their habitats (plants and animal life cycles)	Evolution and inheritance
	Key Knowledge:	<ul style="list-style-type: none"> ➤ Recognise what is a living thing? ➤ Explore and observe the natural world? ➤ Draw pictures of plants and animals. ➤ Recognise similarities and differences between a variety of plants and animals. 	<ul style="list-style-type: none"> ➤ Observe changes across the 4 seasons ➤ Observe and describe weather associated with the seasons and how day length varies 	<ul style="list-style-type: none"> ➤ Notice that animals, including humans, have offspring which grow into adults ➤ Find out about describe the basic needs of animals, including humans, for survival (water, food and air) ➤ Describe the importance 	<ul style="list-style-type: none"> ➤ Compare how things move on different surfaces ➤ Notice that some forces need contact between two objects, but magnetic forces can act at a distance ➤ Observe how magnets attract or repel each other and attract some 	<ul style="list-style-type: none"> ➤ Identify how sounds are made, associating some of them with something vibrating ➤ Recognise that vibrations from sounds travel through a medium to the ear ➤ Find patterns between the 	<ul style="list-style-type: none"> ➤ Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird ➤ Describe the life process of reproduction in some plants and animals 	<ul style="list-style-type: none"> ➤ 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

		<ul style="list-style-type: none"> ➤ Life cycles and habitats. 		for humans of exercise, eating the right amounts of different types of food, and hygiene	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ pitch of a sound and features of the object that produced it ➤ Find patterns between the volume of a sound and the strength of the vibrations that produced it ➤ Recognise that sounds get fainter as the distance from the sound source increases 		adapted to suit their environment in different ways and that adaptation may lead to evolution
--	--	---	--	--	--	--	--	---

Resources:		Magnets						
		EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Sum 2	Unit:	Seaside	Plants investigative skills	Plants Investigative skills	Plants Investigative skills	Seasonal habitats Investigative skills	Animals including humans (life cycles)	Animals/ environment (classification)
	<p>Key Knowledge:</p> <ul style="list-style-type: none"> ➤ Discuss their own location and compare with another (seaside) location. ➤ Make observations of plants and animals and discuss change. ➤ Seasonal changes. ➤ Floating and sinking 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ Recognise that living things can be grouped in a variety of ways ➤ Explore and use classification keys to help group, identify and name a variety of living things in their local 	<ul style="list-style-type: none"> ➤ Describe changes as humans develop to old age 	<ul style="list-style-type: none"> ➤ Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and difference, including micro-organisms, plants and animals ➤ Give reasons for classifying plants and animals based on specific characteristics 	

	➤ Wonder how can I look after environment ocean pollution.			➤ 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	➤ and wider environment Recognise that environments can change and that this can sometimes pose dangers to living things	