



## Eastover Primary School

### Whole school science knowledge progression with cross curricular links (breadth)

	FS	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
Animals including humans		<ul style="list-style-type: none"> <li>❖ Identify and name common animals.</li> <li>❖ Identify and name animals that are carnivores, herbivores and omnivores.</li> <li>❖ Name, draw and label the basic parts of the human body and link to each sense. <b>Body parts revisited in RSE YR2</b></li> </ul>	<ul style="list-style-type: none"> <li>❖ Notice that animals, including humans, have offspring which grow into adults.</li> <li>❖ Describe the basic needs of animals for survival.</li> <li>❖ Describe the importance of exercise, diet and diet for humans. <b>Revisited yearly in health week (all year groups)</b></li> </ul>	<ul style="list-style-type: none"> <li>❖ Identify that animals need the right types and amount of nutrition and that they get nutrient from what they eat. <b>Revisited yearly in health week (all year groups)</b></li> <li>❖ Identify that humans and other animals have skeletons and muscles for support, protection and movement.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Describe the simple functions of the basic parts of the digestive system.</li> <li>❖ Identify the different types of teeth in humans.</li> <li>❖ Construct and interpret a variety of food chains, identifying producers, predators and prey <b>Food chains introduced in YR2</b></li> </ul>	<ul style="list-style-type: none"> <li>❖ Describe the changes as humans develop to old age.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Identify and name the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood.</li> <li>❖ Recognise the importance of diet, exercise, drugs and lifestyles on the way the bodies function.</li> <li>❖ Describe the way nutrients and water are transported within animals.</li> </ul>
Plants		<ul style="list-style-type: none"> <li>❖ Identify and name common wild and garden plants.</li> <li>❖ Name deciduous and evergreen trees</li> <li>❖ Describe the basic structure of plants and trees.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Observe and describe how seeds and bulbs mature into plants.</li> <li>❖ Find out how plants need water, light, suitable temp to grow and stay healthy.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Identify and describe the functions of different parts of the flowering plant.</li> <li>❖ Explore the requirements of plants for life and growth and how they vary from plant to plant. <b>Revisited YR5 geography (Journeys – trade)</b></li> <li>❖ Investigate the way in which water is transported within plants.</li> </ul>			

				❖ Understand what the flower does in the lifecycle of flowering plants.			
Everyday materials		<ul style="list-style-type: none"> <li>❖ Name everyday materials.</li> <li>❖ Describe the physical properties of everyday materials.</li> <li>❖ Compare and group together a variety of everyday materials.</li> <li>❖ Distinguish between an object and the material that it is made from.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Compare the suitability of everyday materials.</li> <li>❖ Find out how some materials can be changed by squashing/bending/twisting/stretching.</li> </ul>		<p>States of matter</p> <ul style="list-style-type: none"> <li>❖ Compare and group materials together based on solid, liquids and gases.</li> <li>❖ Observe that some materials change state when they are heated/cooled. Measure and record temperature when this happens.</li> <li>❖ Identify the part played by evaporation and condensation in the water cycle. Revisited in YR4 geography (Rivers and the water cycle)</li>   <li>Revisited in YR4 Volcanoes and earthquakes</li> </ul>	<ul style="list-style-type: none"> <li>❖ Compare and group everyday materials based on their properties.</li> <li>❖ Know that some materials will dissolve in a liquid to form a solution and describe how to recover a substance from a solution.</li> <li>❖ Use knowledge of solid, liquid and gases to decide how mixtures might be separated.</li> <li>❖ Give reasons for the use of everyday materials.</li> <li>❖ Demonstrate that dissolving, mixing and changes of state are reversible changes.</li> <li>❖ Explain that some changes result in the formation of new materials. Building upon YR2 everyday materials and YR4 solids, liquid and gases.</li> </ul>	
Seasonal changes		<ul style="list-style-type: none"> <li>❖ Observe changes across the four seasons</li> </ul>					

		<ul style="list-style-type: none"> <li>❖ Observe and describe weather associated with the seasons.</li> <li>❖ Observe and describe how day length varies.</li> </ul> <p>Revisited in YR2 geography (Seasons)</p> <p>Revisited Yr 3 geography (climate)</p> <p>Revisited YR5 geography (Journeys – trade)</p>					
Living things and their habitats			<ul style="list-style-type: none"> <li>❖ Compare the difference between things that are living, dead, never alive.</li> <li>❖ Name a variety of habitats and know how they provide for the basic needs of different plants and animals.</li> </ul> <p>Revisited in YR3 geography (climate) Revisited YR6 geography (the amazon)</p> <p>Introduced YR1 geography (animals and their habitats)</p> <ul style="list-style-type: none"> <li>❖ Understand simple food chains.</li> </ul> <p>School trip to The Wild Place Project (habitats)</p>		<ul style="list-style-type: none"> <li>❖ Recognise that living things can be grouped in a variety of ways.</li> <li>❖ Explore and use classification keys to group, name and identify a variety of living things in their local and wider environment.</li> <li>❖ Recognise that environments can change and this can sometimes pose danger to living things.</li> </ul> <p>Revisited YR6 geography (protecting the environment)</p> <p>Residential to Pinkery -</p>	<ul style="list-style-type: none"> <li>❖ Describe the differences in the lifecycles of a mammal, amphibian, insect and a bird.</li> <li>❖ Describe the life process of reproduction in some plants and animals.</li> </ul> <p>Terms introduced in YR1.</p>	<ul style="list-style-type: none"> <li>❖ Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</li> <li>❖ Give reasons for classifying plants and animals based on specific characteristics.</li> </ul>
Rocks				<ul style="list-style-type: none"> <li>❖ Compare and group together different</li> </ul>			

				<p>kinds of rocks on the basis of physical properties and appearance. <b>YR1 materials – describing properties.</b></p> <ul style="list-style-type: none"> <li>❖ Describe in simple terms how fossils are formed.</li> <li>❖ Recognise that soils are made from rocks and organic matter</li> </ul> <p><b>Revisited yr 3 geography (Coasts)</b></p> <p>Visitor from Taunton Museum (fossils)</p>			
Forces and motion				<ul style="list-style-type: none"> <li>❖ Compare how things move on different surfaces. Revisited in <b>YR4 geography (rivers and the water cycle)</b></li> <li>❖ Notice that some forces need contact between two objects.</li> <li>❖ Observe how magnets attract and repel each other and some materials.</li> <li>❖ Group materials based on whether they are magnetic.</li> <li>❖ Describe magnets having two poles.</li> <li>❖ Predict whether magnets will attract or repel.</li> </ul>		<ul style="list-style-type: none"> <li>❖ Explain that unsupported objects fall towards the Earth.</li> <li>❖ Identify the effect of air resistance, water resistance and friction.</li> <li>❖ Recognise that some mechanisms allow a smaller force to have a greater effect e.g. levers, pulleys and gears.</li> </ul>	
Light				<ul style="list-style-type: none"> <li>❖ Recognise that light is needed in order to see things and that dark is the absence of light.</li> <li>❖ Notice that light is reflected from surfaces/</li> </ul>			<ul style="list-style-type: none"> <li>❖ Recognise that light appears to travel in straight lines,</li> <li>❖ Use the idea that light travels in</li> </ul>

				<ul style="list-style-type: none"> <li>❖ Recognise that light from the sun can be dangerous and know how to protect our eyes.</li> <li>❖ Know how shadows are formed.</li> <li>❖ Find patterns in the way that the size of a shadow changes. Shadows and light introduced in YR1 seasonal changes.</li> </ul> <p>Visitor from Specsavers (eyes/light/sun)</p>			<p>straight lines to explain that objects are seen because they give out or reflect light into the eye.</p> <ul style="list-style-type: none"> <li>❖ Explain that we see things because light travels from light sources to objects and then to our eyes.</li> <li>❖ Use the idea that light travels in straight lines to explain why shadows have the same shape as the object.</li> </ul>
Electricity					<ul style="list-style-type: none"> <li>❖ Identify common appliances that run on electricity.</li> <li>❖ Construct a simple circuit, naming and identifying basic parts.</li> <li>❖ Identify whether or not a lamp will light in a simple circuit.</li> <li>❖ Recognise that a switch open and closes and associate this with whether or not a lamp lights.</li> <li>❖ Recognise some common conductors and insulators.</li> </ul>		<ul style="list-style-type: none"> <li>❖ Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</li> <li>❖ Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers.</li> <li>❖ Use recognised symbols when representing a</li> </ul>

							simple circuit in a diagram.
Sound					<ul style="list-style-type: none"> <li>❖ Identify how sounds are made.</li> <li>❖ Recognise that vibrations from sounds travel through a medium to the ear.</li> <li>❖ Find patterns between pitch of a sound and features of the object that produced it.</li> <li>❖ Find patterns between the volume of a sound and the strength of the vibrations that produced it.</li> <li>❖ Recognise that sounds get fainter as the distance increases.</li> </ul> <p style="color: red; margin-left: 20px;">Sound introduced in YR1 animals inc humans (senses)</p>		
Earth and Space						<ul style="list-style-type: none"> <li>❖ Describe the movement of the Earth and other planets, relative to the Sun.</li> <li>❖ Describe the movement of the moon, relative to the sun.</li> <li>❖ Describe the Sun, Earth and Moon as approximately spherical bodies.</li> <li>❖ Use the idea of the Earth rotation to explain day and night and the apparent movement of the sun across the</li> </ul>	

						sky. Day/Night introduced in YR1 seasons. Introduce in YR3 geography (Our world)	
Evolution and inheritance							<ul style="list-style-type: none"> <li>❖ Recognise that living things have changed over time and that fossils provide information about living things that inhabited Earth millions of years ago YR3 rocks (fossils)</li> <li>❖ Recognise that living things produce offspring of the same kind but normally offspring vary and are not identical to their parents, YR2/yr5 animals including humans.</li> <li>❖ Identify how plants and animals are adapted to suit their environment and that adaptation may lead to evolution.</li> </ul>