

<p>Plants</p>		<p>Identify and name plants – garden and wild.</p> <p>Know differences between identity and name e.g. of deciduous and evergreen tree, oak and spruce.</p> <p>Know the structure of flowering plants – roots, stem, leaves, flowers/seeds.</p> <p>Know what a seed is and identify some seeds (including bulbs).</p> <p>Know and use accurate flowering vocabulary: deciduous, evergreen, root, stem, trunk, leaf, branch, flower, and petal.</p>	<p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Investigate and know requirements for a plant to stay healthy – water, light, nutrients and appropriate temperatures. Vocab: germination, seed, bulb, nutrients.</p>	<p>Revise parts of the flowering plant.</p> <p>Explore differences in requirements for plants to grow and live.</p> <p>Know how water is transported in plants and investigate this.</p> <p>Know how flowers work and parts of a flower.</p> <p>Know job of different parts of a plant.</p>			
<p>Animals</p>		<p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>	<p>Know about life cycles of a range of animals including humans.</p> <p>Describe ways for humans to stay healthy e.g balanced diet, exercise and hygiene.</p>	<p>Know that animals need to eat plants or animals and cannot make their own food from the sun like plants.</p> <p>Name food types required for balanced/healthy diet humans and compare dietary requirements for animals.</p> <p>Know role of bones – support and protection and muscles – movement and how they work together.</p>	<p>Identify parts of the human digestive system and give a simple description of how they work.</p> <p>Identify different types of teeth and know their function.</p> <p>Construct and use food chains to explain inter dependence of animals/plants. Use language of predator, prey, consumer and producer.</p>	<p>Describe life cycle of humans – Birth > Old age.</p> <p>Know about gestation period of different animals.</p> <p>Understand what puberty is and changes experienced.</p>	<p>Identify and name the parts of the human circulatory system.</p> <p>Describe the functions of the heat/blood vessels and blood.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyles on their bodies.</p> <p>Describe the way a variety of animals transport water and nutrients around their body (including humans).</p>

<p>Materials and change</p>	<p>Exploring and using media and materials 30-50 months:</p> <ul style="list-style-type: none"> (18) beginning to be interested in and describe the texture of things. 	<p>Know that objects are made from materials.</p> <p>Identify and name materials in common objects.</p> <p>Describe simple properties of everyday materials e.g. rough, smooth, dull, shiny, flexible/not flexible.</p> <p>Compare and group objects and materials according to properties.</p>			<p>Know simple properties of solids, liquids and gases.</p> <p>Use these properties to group materials.</p> <p>Observe changes in state.</p> <p>Understand relationship of state to temperature.</p> <p>Measure and record temperatures at which materials change state.</p> <p>Know what evaporation and condensation are.</p> <p>Use states of matter and understand of evaporation and condensation to explain the water cycle.</p> <p>Know effect of temperature on the water cycle.</p>	<p>Compare and group materials dependent upon their properties including:</p> <p>Magnetic/non magnetic</p> <p>Conductors/Insulators</p> <p>Know that some materials dissolve in liquid forming a solution (using vocabulary – solution, solvent, solute).</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>Separate mixtures using prior knowledge of solids, liquids and gases and use this to explain their choice and method of separation (filtering, sieving and evaporating).</p> <p>Understand that permanent changes mean a new substance has been created and cannot usually be reversed e.g. burning, mixing acid with bicarbonate of soda.</p> <p>Give reasons for usage of materials dependent upon properties.</p>	
<p>Rocks</p>				<p>Know what soil is made of.</p> <p>Know that soils are different depending on locality and rock base.</p> <p>Compare and group rocks of physical properties.</p> <p>Describe how fossils are formed and that once living things are trapped in rock.</p>			

<p>Light</p>				<p>Know that light is necessary to see.</p> <p>Know that dark is absence of light.</p> <p>Know that light is reflected from objects into our eyes when we see them.</p> <p>Know how shadows are formed.</p> <p>Know and use terms – transparent, opaque and translucent.</p> <p>Know how shadows change shape and size.</p> <p>Know that light from the sun can be dangerous and how to protect eyes.</p>			<p>Light travels in straight lines.</p> <p>Use this idea to explain how our eyes see things.</p> <p>Explain how this idea explains shadow formation.</p>
<p>Earth and Space</p>				<p>-</p>		<p>Describe the movement of the planets of the Solar System around the Sun.</p> <p>Describe the movement of the Moon around the Earth.</p> <p>Describe the Sun, Moon, Earth as approx. Spherical bodies.</p> <p>Explain Day and Night and explain apparent movement of the Sun across the Sky.</p>	
<p>Sound</p>		<p>Explore production of sound linked to music</p>			<p>Know that objects/materials vibrate.</p> <p>Know that vibrations travel through different mediums.</p> <p>Know that vibrations enter our ear for us to hear and that the further away they are the fainter they get.</p> <p>Investigate the effect that varying features of a sound source on the pitch of a sound – Notice patterns.</p>		

					Investigate effect of varying the type, direction and distance of a sound source on the volume and strength of a sound.		
Forces	Make observations and question forces linked to changing shape and direction of materials. Eg, pulling, pushing and twisting materials.			<p>Know, describe and compare effects of friction on objects moving across different surfaces.</p> <p>Know that a force is a push or a pull – mostly requiring contact between objects.</p> <p>Know that magnets can push/pull over a distance without contact.</p> <p>Know that magnets do not attract all materials and use terms magnetic/non-magnetic to describe and sort materials.</p> <p>Make observations about different types/strengths of magnets and pushes/pulls.</p> <p>Know about polarity of magnets and effects of polarity on attraction/repulsion of other magnets.</p>		<p>Explain that gravity causes unsupported objects to fall towards Earth.</p> <p>Identify the effects of forces acting upon a moving body – air resistance, water resistance, friction.</p> <p>Recognise that levers, pulleys and gears allow a smaller force to have a greater effect.</p> <p>Investigate how to alter the effects of levers, gears and pulleys.</p>	
Electricity					<p>Name common appliances that run on electricity.</p> <p>Construct a simple series circuit and identify and name each part.</p> <p>Draw and label a circuit diagram for a simple series circuit.</p> <p>Know that a complete circuit is needed to make a component work and predict which circuits will not therefore work.</p>		<p>Associate brightness of a bulb, loudness of a buzzer with the voltage of the power supply.</p> <p>Know what a battery cell is.</p> <p>Alter how components function including brightness/volume, use of switches and explain variations.</p> <p>Use and recognise meaning of circuit diagrams.</p>

					<p>Know that a switch makes or breaks a circuit and use one in a series circuit.</p> <p>Know and use terms conductor and insulator in electrical terms and name some of each.</p> <p>Associate metals with being good conductors</p>		
Humans and Inheritance							<p>Recognise effects of evolution on living things.</p> <p>Recognise the importance of the fossil record in tracking this.</p> <p>Recognise that living things give birth to their own species, but with individual differences.</p> <p>Understand that living things adapt to their environment and that this may lead to evolution.</p>