



# Animals Including Humans

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals Including Humans	Animals Including Humans	Animals Including Humans	Animals Including Humans	Animals Including Humans	Animals Including Humans	Animals Including Humans
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Begin to make sense of their own life-story and family's history.	What are the five senses and how do we use these to find out about the world	How do humans keep healthy? (exercise, food, hygiene)	Animals including humans need the right amount of nutrition	What are the simple functions of the basic parts of the digestive system in humans?	What are the changes as humans develop to old age?	What are the main parts of the human circulatory system?
Show interest in different occupations. Name and describe people who are familiar to them.	Identify and name common animals. (fish, amphibians, reptiles, birds and mammals)	What are the basic needs for survival? (water, food, air)	Animals including humans get their nutrition from what they eat	What are the different types of teeth in a human and what are their simple functions.		What are the functions of the heart, blood vessels and blood
Continue developing positive attitudes about the differences between people.	Identify and name common animals (carnivores, herbivores and omnivores)		Why do we have a skeleton and what does it protect?	Construct and interpret a variety of food chains		What is the impact of diet, exercise, drugs and lifestyle on the way the body functions?
Know that there are different countries in the world and talk about the differences they have experienced or seen in photos.	Describe and compare the structure of common animals		How do animals move their muscles?	Identify producers, predators and prey		What ways are nutrients and water transported within animals, including humans?
Talk about members of their immediate family and community.			How do muscles work?			



# Plants

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Plants</b>	<b>Plants</b>	<b>Plants</b>	<b>Plants</b>	<b>Plants</b>	<b>Plants</b>	<b>Plants</b>
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Plant seeds and care for growing plants.	Can you name the parts of a flowering plant and trees?	How do seeds and bulbs grow into mature plants?	Explore the part the flower plays in the life cycle of flowering plants including pollination, seed formation and seed dispersal		Describe the life process of reproduction is some plants and animals.	
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Understand the key features of the life cycle of a plant and an animal.	What do plants need to grow well?	Find out and describe how plants need water, light and suitable temperature to grow and stay healthy.	How is water transported through the plant			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
	What plants can you find by our school?		What are the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow)			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
	Can you identify and name common wild and garden plants (deciduous and evergreen trees)		How can this vary from plant to plant?			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			What is the job of roots, leaves and stems/trunk and flowers?			



# Earth & Space

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Earth &amp; Space</b>	<b>Earth &amp; Space</b>	<b>Earth &amp; Space</b>	<b>Earth &amp; Space</b>	<b>Earth &amp; Space</b>	<b>Earth &amp; Space</b>	<b>Earth &amp; Space</b>
A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2
Explore and talk about different forces they can feel.					Describe the movement of the earth and other planets, relative to the Sun in the solar system.	
A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2
Describe what they see, hear and feel whilst outside.					Describe the movement of the Moon relative to the Earth.	
A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2
					Describe the Sun, Earth and Moon as approximately spherical bodies.	
A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2
					Why does the sun seem to move across the sky, rising in the East and setting in the West.	
A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2	A1   A2   S1   S2   S1   S2
					Why do we have day time and night time?	



# Electricity

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Electricity	Electricity	Electricity	Electricity	Electricity	Electricity	Electricity
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
				What common appliances run on electricity?		How does the number and voltage of cells effect the brightness of a lamp or the volume of a buzzer?
				Construct a simple series circuit.		Compare and give reasons for variations in how components function including brightness of bulb, loudness of buzzer, on/off position of switches.
				Identify the different parts to a circuit including cell, wires, bulbs, switches and buzzers		Recognise symbols when representing a simple circuit in a diagram.
				Identify whether 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.		
				How does a switch work and will this light the lamp in the simple series circuit?		
				What are the common conductors and insulators?		
				Are metals good conductors?		



# Evolution & Inheritance

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evolution & Inheritance	Evolution & Inheritance	Evolution & Inheritance	Evolution & Inheritance	Evolution & Inheritance	Evolution & Inheritance	Evolution & Inheritance
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Begin to make sense of their own life-story and family's history.						How do living things change over time?
						What information does a fossil provide? (information about living things that inhabited the Earth millions of years ago).
						Living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
						How do animals and plants adapt to suit their environment?
						How does adaptation lead to evolution?



# Forces

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Forces</b>	<b>Forces</b>	<b>Forces</b>	<b>Forces</b>	<b>Forces</b>	<b>Forces</b>	<b>Forces</b>
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Explore and talk about different forces they can feel.	How do objects move?	What are pushes and pulls?	Compare how things move on different surfaces.		Why do unsupported objects fall towards the Earth (forces of gravity)?	
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
	How do you stop or slow down an object?	How can we control speed, direction of an object?	Some forces need contact between two objects but magnetic forces can act at a distance.		What are the effects of air resistance, water resistance and friction on moving surfaces?	
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
		How do they effect an object – can pushes and pulls change the shape of objects?	Magnets can attract, repel each other.		That some mechanicalness, including levers, pulleys and gears, allow a smaller force to have a greater effect.	
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			That magnets can attract some materials and not others.			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			That magnets have two poles.			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			Predict whether two magnets will attract or repel each other based on which poles are facing.			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet.			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			Identify some magnetic materials.			



# Light & Sound

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Light & Sound	Light & Sound	Light & Sound	Light & Sound	Light & Sound	Light & Sound	Light & Sound
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Describe what they see, hear and feel whilst outside.			Recognise the need for light to see things and that dark is the absence of light?	How are sounds made? (vibration)		What direction does light travel?
			Light is reflected from surfaces.	Vibrations travel through a medium to the ear.		Objects are seen because they give out or reflect light into the eye.
			Light from the sun can be dangerous and that there are ways to protect your eyes.	Find patterns between the volume of a sound and the strength of the vibration.		How do we see things? (light travels from light sources to our eyes or from light sources to objects then to our eyes.
			Shadows are formed when the light from light sources is blocked by a solid object.	Find patterns between the pitch of a sound and features of the object that produces it		Understand that light travels in straight lines which explain why shadows have the same shape as the object that cast them.
				What happens to sound as the distance from the sound source increases?		



# Living Things & Their Habitats

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Living Things & Habitats	Living Things & Habitats	Living Things & Habitats	Living Things & Habitats	Living Things & Habitats	Living Things & Habitats	Living Things & Habitats
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Understand the key features of the life cycle of a plant and an animal.		Identify/name plants and animals including micro-habitats.		Recognise that living things can be grouped in a variety of ways.	What is the difference between the life cycles of a mammal, an amphibian, and insect and a bird?	Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences including micro-organisms, planets and animals.
Begin to understand the need to respect and care for the natural environment and all living things.		How can we sort living, dead and never been alive things?		How do I use a key to identify local plants and animals?	Describe the life process of reproduction is some plants and animals.	What are the reasons for classifying plants and animals (specific characteristics).
Explore the natural world around them.		Describe how animals get food – food chain.		That environments can change and that this can sometimes pose dangers to living things.		What are the reasons for classifying plants and animals (specific characteristics).
Describe what they see, hear and feel whilst outside.		What are the similarities and differences between local habitats and how does it affect the animals and plants that live there.		What ways can we protect living things and the environment?		
Recognise some environments that are different from the one in which they live.						



# Materials

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Materials	Materials	Materials	Materials	Materials	Materials	Materials
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
<p>Talk about the differences between materials and changes they notice.</p>	<p>Distinguish between an object and the material from which it is made.</p>	<p>Identify and compare the suitability of a variety of everyday materials including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p>			<p>Compare and group together everyday materials on the basis of the properties including hardness, solubility, transparency, conductivity (electricity and thermal) and response to magnets.</p>	
	<p>Identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock.</p>	<p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>			<p>Some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Demonstrate that dissolving, mixing and changes of state are reversible changes.</p>	
	<p>Describe the simple physical properties of a variety of everyday materials.)</p>				<p>Separate solids, liquids and gases through filtering, sieving and evaporating.</p>	
	<p>Compare and group together a variety of everyday materials based on their simple properties.</p>				<p>Give reasons, based on evidence from comparative and fair tests, for the particular use of everyday materials including wood, plastic and metals.</p>	
					<p>Some changes result in the formation of new materials.</p>	
					<p>Changes associated with burning and the action of acid on bicarbonate of soda are irreversible.</p>	



# States of Matter

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
States of Matter	States of Matter	States of Matter	States of Matter	States of Matter	States of Matter	States of Matter
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
				Compare and group materials together according to whether they are solids, liquids or gases.		
				How do some materials change state when they are heated or cooled?		
				I can measure or research the temperature at which this change happens in degree Celsius.		
				Identify the part played by evaporation and condensation in the water cycle.		
				Associate the rate of evaporation with temperature.		



# Rocks

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Rocks	Rocks	Rocks	Rocks	Rocks	Rocks	Rocks
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			Compare and group together different kinds of rocks based on appearance and simple physical properties.			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			Describe in simple terms how fossils are formed when things have lived and then are trapped within rock.			
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
			Recognise that soils are made from rocks and organic matter.			



# Seasonal Changes

Nursery & Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Seasonal Changes	Seasonal Changes	Seasonal Changes	Seasonal Changes	Seasonal Changes	Seasonal Changes	Seasonal Changes
A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
Understand the effect of changing seasons on the natural world around them.	Observe changes across the four seasons.					
	Observe and describe weather associated with the seasons.					
	Observe and describe how the day length varies based on the season.					





	To present some findings in simple tables and block graphs using ICT where relevant.		To present results in drawings, bar charts and tables using ICT where relevant.	To think about why observations and measurements should be repeated.	To measure pulse rate.	To use tables, bar charts and line graphs to present results using ICT where relevant.
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
				To present results in bar charts and tables using ICT where relevant.	To think about why observations and measurements should be repeated.	
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
					To present results in bar charts and line graphs using ICT where relevant.	
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
<b>Considering evidence and evaluating</b>	To make simple comparisons and groupings that relate to differences and similarities between living things and objects.	To make simple comparisons, identifying similarities and differences between living things, objects and events.	To draw conclusions from results and begin to use scientific knowledge to suggest explanations for them.	To identify simple trends and patterns in results presented in tables, charts and graphs and to suggest explanations for some of these.	To decide whether results support any prediction.	To make comparisons; to evaluate repeated results.
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
	In some cases to say what their observations show, and whether it was what they expected.	To say what results show.	To make generalisations and begin to identify simple patterns in results presented in tables.	To explain what the evidence shows and whether it supports any prediction made.	To begin to evaluate repeated results.	To identify patterns in results and results that do not appear to fit the pattern.
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
	To draw simple conclusions and explain what they did.	To say whether their predictions were supported.		To link the evidence to scientific knowledge and understanding in some contexts.	To recognise and make predictions from patterns in data and suggest explanations for these using scientific knowledge and understanding.	To use results to draw conclusions and to make further predictions.
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
		In some cases to use knowledge to explain what was found out and to draw conclusions.			To interpret data and think about whether it is sufficient to draw conclusions.	To suggest and evaluate explanations for these predictions using scientific knowledge and understanding.
	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2	A1 A2 S1 S2 S1 S2
		To explain what they did.			To draw conclusions indicating whether these match any prediction made.	To say whether the evidence supports any prediction made.



St. Paul's School, Chipperfield – Assessment (Related to Progression of Skills) 2023/24 SCIENCE

Year Group:

<p><b>Working below ARE:</b> Children are working below what has been prescribed in the national curriculum as well as not meeting targets from the progression of skills for their age.</p>	<p><b>Working broadly within ARE:</b> Children are working broadly within what has been prescribed in the national curriculum as well as broadly meeting targets from the progression of skills for their age.</p>	<p><b>Working securely in ARE:</b> Children are working securely within what has been prescribed in the national curriculum as well as securely meeting targets from the progression of skills for their age.</p>	<p><b>Working above ARE:</b> Children are generally working beyond what has been prescribed in the national curriculum as well as exceeding targets from the progression of skills for their age.</p>