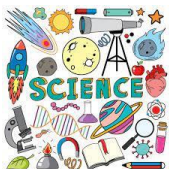


Branton Community Primary School and Breamish Valley Community Nursery Cycle B Coverage





Branton Community Primary School and Breamish Community Valley Nursery

Cycle B – Science Coverage

Cycle B							
EYFS/KS1 Topics			Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations		Stem - Investigations Plants	
KS2 Topics			Animals including Humans Stem - Investigations	Earth and Space	Sound	Forces and Magnets	Plants
Working Scientifically	0 to 3	Communication and Language	Understand simple questions about 'who', 'what' and 'where' (but generally not 'why').	✓	✓	✓	
		Physical Development	Show an increasing desire to be independent, such as wanting to feed themselves and dress or undress.	✓	✓	✓	
		Understanding the World	Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.	✓	✓	✓	
	3 to 4	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"	✓	✓	✓	
		Physical Development	Make healthy choices about food, drink, activity and tooth brushing.	✓	✓	✓	



Rec	Understanding the World	<p>Use all their senses in hands-on exploration of natural materials.</p> <p>Explore collections of materials with similar and/or different properties.</p> <p>Talk about what they see, using a wide vocabulary.</p> <p>Begin to make sense of their own life-story and family's history.</p> <p>Explore how things work.</p> <p>Plant seeds and care for growing plants.</p> <p>Understand the key features of the life cycle of a plant and an animal.</p> <p>Begin to understand the need to respect and care for the natural environment and all living things.</p> <p>Explore and talk about different forces they can feel.</p> <p>Talk about the differences between materials and changes they notice.</p>	✓	✓	✓
	Communication and Language	<p>Learn new vocabulary.</p> <p>Ask questions to find out more and to check what has been said to them.</p> <p>Articulate their ideas and thoughts in well-formed sentences.</p> <p>Describe events in some detail.</p> <p>Use talk to work out problems and organise thinking and activities.</p> <p>Explain how things work and why they might happen.</p> <p>Use new vocabulary in different contexts.</p>	✓	✓	✓
	Physical Development	<p>Know and talk about the different factors that support their overall health and wellbeing:</p> <ul style="list-style-type: none"> -regular physical activity - healthy eating -tooth brushing -sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian 	✓	✓	✓



	Understanding the World		Explore the natural world around them. Describe what they see, hear and feel while they are outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.	✓	✓	✓
ELG	Communication and Language	Listening, Attention and Understanding	Make comments about what they have heard and ask questions to clarify their understanding.	✓	✓	✓
	Personal, Social and Emotional Development	Managing Self	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.	✓	✓	✓
	Understanding the World	The Natural World	Explore the natural world around them, making observations and drawing pictures of animals and plants.			
				✓	✓	✓
KS1	Asking simple questions and recognising that they can be answered in different ways			✓	✓	✓
	Observing closely, using simple equipment			✓	✓	✓
	Performing simple tests			✓	✓	✓
	Identifying and classifying			✓	✓	✓

	Using their observations and ideas to suggest answers to questions	✓		✓	✓	
	Gathering and recording data to help in answering questions.	✓		✓		✓
LKS2	Asking relevant questions and using different types of scientific enquiries to answer the	✓	✓	✓	✓	✓
	Setting up simple practical enquiries, comparative and fair tests	✓	✓	✓	✓	✓
	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	✓	✓	✓	✓	✓
	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	✓	✓	✓	✓	✓
	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	✓	✓	✓	✓	✓
	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	✓	✓	✓	✓	✓
	Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	✓	✓	✓	✓	✓
	Identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.	✓	✓	✓	✓	✓
UKS2	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	✓	✓	✓	✓	✓
	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	✓	✓	✓	✓	✓



	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter	✓	✓	✓	✓	✓	✓
	Graphs, bar and line graph	✓	✓	✓	✓	✓	✓
	Using test results to make predictions to set up further comparative and fair test reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	✓	✓	✓	✓	✓	✓



EYFS/KS1 Topics				Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations	Stem - Investigations Plants		
KS2 Topics				Animals including Humans Stem - Investigations	Forces and Magnets	Sound	Earth and Space	Plants
Animals Including Humans	0 to 3	Communication and Language	Understand simple questions about 'who', 'what' and 'where' (but generally not 'why').	✓				
		Physical Development	Show an increasing desire to be independent, such as wanting to feed themselves and dress or undress.	✓				
		Understanding the World	Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.	✓				
	3 to 4	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"	✓				
		Physical Development	Make healthy choices about food, drink, activity and tooth brushing.	✓				
		Understanding the World	Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Begin to make sense of their own life-story and family's history. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things.	✓				

		<p>Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.</p>			
Rec	Communication and Language	<p>Learn new vocabulary. Ask questions to find out more and to check what has been said to them. Articulate their ideas and thoughts in well-formed sentences. Describe events in some detail. Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen. Use new vocabulary in different contexts.</p>	✓		
	Physical Development	<p>Know and talk about the different factors that support their overall health and wellbeing: -regular physical activity - healthy eating -tooth brushing -sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian</p>	✓		
	Understanding the World	<p>Explore the natural world around them. Describe what they see, hear and feel while they are outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.</p>	✓		

ELG	Communication and Language	Listening, Attention and Understanding	Make comments about what they have heard and ask questions to clarify their understanding.	✓		
	Personal, Social and Emotional Development	Managing Self	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.	✓		
	Understanding the World	The Natural World	Explore the natural world around them, making observations and drawing pictures of animals and plants.			
KS1	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with which sense.			✓		
	Identify and name a variety of common animals 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 range of common animals (fish, amphibians, reptiles, birds and mammals, including pets)			✓		
	Notice that animals, including humans, have offspring which grow into adults			✓		
Animals including LKS2	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, protection and movement.			✓		

	Describe the simple functions of the basic parts of the digestive system in humans	✓				
	Identify the different types of teeth in humans and their simple functions	✓				
	Construct and interpret a variety of food chains, identifying producers, predators and prey.	✓				
	Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	✓				
	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	✓				
UKS2	Describe the changes as humans develop to old age.	✓				
	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.	✓				

EYFS/KS1 Topics				Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations	Stem - Investigations Plants		
KS2 Topics				Animals including Humans Stem - Investigations	Forces and Magnets	Sound	Earth and Space	Plants
Everyday materials/ Uses of everyday materials	0 to 3	Communication and Language	Understand simple questions about 'who', 'what' and 'where' (but generally not 'why').		✓			
		Physical Development	Show an increasing desire to be independent, such as wanting to feed themselves and dress or undress.		✓			
		Understanding the World	Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.		✓			
	3 to 4	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"		✓			
		Physical Development	Make healthy choices about food, drink, activity and tooth brushing.		✓			

Rec	Understanding the World	<p>Use all their senses in hands-on exploration of natural materials.</p> <p>Explore collections of materials with similar and/or different properties.</p> <p>Talk about what they see, using a wide vocabulary.</p> <p>Begin to make sense of their own life-story and family's history.</p> <p>Explore how things work.</p> <p>Plant seeds and care for growing plants.</p> <p>Understand the key features of the life cycle of a plant and an animal.</p> <p>Begin to understand the need to respect and care for the natural environment and all living things.</p> <p>Explore and talk about different forces they can feel.</p> <p>Talk about the differences between materials and changes they notice.</p>		✓	
	Communication and Language	<p>Learn new vocabulary.</p> <p>Ask questions to find out more and to check what has been said to them.</p> <p>Articulate their ideas and thoughts in well-formed sentences.</p> <p>Describe events in some detail.</p> <p>Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen.</p> <p>Use new vocabulary in different contexts.</p>		✓	
	Physical Development	<p>Know and talk about the different factors that support their overall health and wellbeing:</p> <ul style="list-style-type: none"> -regular physical activity - healthy eating -tooth brushing -sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian 		✓	
	Understanding the World	<p>Explore the natural world around them.</p> <p>Describe what they see, hear and feel while they are outside.</p> <p>Recognise some environments that are</p>		✓	



			different to the one in which they live. Understand the effect of changing seasons on the natural world around them.			
ELG	Communication and Language	Listening, Attention and Understanding	Make comments about what they have heard and ask questions to clarify their understanding.		✓	
	Personal, Social and Emotional Development	Managing Self	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.		✓	
	Understanding the World	The Natural World	Explore the natural world around them, making observations and drawing pictures of animals and plants.		✓	
KS1	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 every day materials				✓	
	Compare and group together a variety of everyday materials on the basis of their simple physical properties.				✓	
	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.				✓	



EYFS/KS1 Topics		Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations	Stem - Investigations Plants		
KS2 Topics		Animals including Humans Stem - Investigations	Forces and Magnets	Sound	Earth and Space	Plants
Forces and Magnets	LKS2	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 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.		✓		
	UKS2	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		✓		
		recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.		✓		



EYFS/KS1 Topics		Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations	Stem - Investigations Plants		
KS2 Topics		Animals including Humans Stem - Investigations	Forces and Magnets	Sound	Earth and Space	Plants
Sound	LKS2	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 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.		✓		
	UKS2	Recognise that sounds can be high or low (pitched)		✓		
		Describe how sounds are made when objects vibrate		✓		
		Recognise that not all objects can be seen to vibrate		✓		
		Recognise that vibrations can travel at different speeds through different mediums.				



EYFS/KS1 Topics		Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations	Stem - Investigations Plants			
KS2 Topics		Animals including Humans Stem - Investigations	Forces and Magnets	Sound	Earth and Space	Plants	
Earth and Space	LKS2	Observe how the Sun appears to move across the sky from East to West			✓		
		Observe how the Sun appears to move and this causes shadows to change			✓		
		Describe how we can see the Moon because the Sun's light reflects off it			✓		
		Describe how the Earth and Moon go around the Sun in one year			✓		
		Recognise that humans have been to the Moon.			✓		
	UKS2	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				✓	
		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.				✓	

EYFS/KS1 Topics				Animals & Humans (inc Survival) Stem - Investigations	Everyday materials/ Uses of everyday materials Stem - Investigations	Stem - Investigations Plants		
KS2 Topics				Animals including Humans Stem - Investigations	Forces and Magnets	Sound	Earth and Space	Plants
Plants	0 to 3	Communication and Language	Understand simple questions about 'who', 'what' and 'where' (but generally not 'why').				✓	
		Physical Development	Show an increasing desire to be independent, such as wanting to feed themselves and dress or undress.				✓	
		Understanding the World	Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.				✓	
	3 to 4	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"				✓	
		Physical Development	Make healthy choices about food, drink, activity and tooth brushing.				✓	

Rec		<p>Understanding the World</p> <p>Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Begin to make sense of their own life-story and family's history. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.</p>	✓	✓	✓
		<p>Communication and Language</p> <p>Learn new vocabulary. Ask questions to find out more and to check what has been said to them. Articulate their ideas and thoughts in well-formed sentences. Describe events in some detail. Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen. Use new vocabulary in different contexts.</p>			✓
		<p>Physical Development</p> <p>Know and talk about the different factors that support their overall health and wellbeing: -regular physical activity - healthy eating -tooth brushing -sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian</p>			✓



		Understanding the World	Explore the natural world around them. Describe what they see, hear and feel while they are outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.				✓
	ELG	Communication and Language	Listening, Attention and Understanding	Make comments about what they have heard and ask questions to clarify their understanding.			✓
		Personal, Social and Emotional Development	Managing Self	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.			✓
		Understanding the World	The Natural World	Explore the natural world around them, making observations and drawing pictures of animals and plants.			
	KS1			Identify and name a variety of common, wild and garden plants, including deciduous and evergreen.			✓
				Identify the basic structure of a range of common flowering plants, including trees.			✓
				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.			✓		

Plants	LKS2	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 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.						✓