Carr Hill Community Primary School



Key Stage One Science Mapping



Science Curriculum Mapping KS1

				Cycle 1				
Year 1 & 2		Prior Learning These should be considered in flash backs/ revised where topics have not covered for a long time	Amazing Me Biology Animals, Including Humans	Flames & Fireworks Chemistry Everyday Materials Uses of Everyday Materials	Globe Trotter Biology Plants	House & Homes Chemistry Everyday Materials Uses of Everyday Materials	All Creatures Great and Small Biology Animals including Humans	Oh I do like to be beside the Seaside Lighthouses Biology Living Things and their Habitats
Autumn 1		In Early Years children should:		National C	urriculum Objectives			Flash Backs
Gibside Weather observations and discussions daily.	e and weather observed across the year	 be able to identify different parts of their body. Have some understanding of healthy food and the need for variety in their diets. Be able to show care and concern for living things. Know the effects exercise has on their bodies. Have some understanding of growth and change. Can talk about things they have observed including animals. 	 Identify, name, draw and labe each sense. – Body part focus Notice that animals, including Key Learning Humans have key parts in com Animals, including humans, have young, such as babies or kitter laid that hatch to young or oth parents e.g. tadpoles. Working Scientifically Skills to be Ask questions about the world Recognise that questions can classifying, comparative and form 	 Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. – Body part focus Y1 Notice that animals, including humans, have offspring which grow into adults. Y2 Human Focus Key Learning Humans have key parts in common, but these vary from person to person. Animals, including humans, have offspring which grow into adults. In humans and some animals, these offspring will be young, such as babies or kittens, that grow into adults. In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults. The young of some animals do not look like their parents e.g. tadpoles. Working Scientifically Skills to be taught Ask questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Observe closely using simple equipment 				 Lifecycles – Butterfly 5 senses
Autumn 2 1st lesson of Aut 2 to look at seasonal change – AUTUMN. Weather observations	Seasonal Change	In Early Years children should: • Developing an understanding of change. • Observe and explain why certain things may occur (e.g. leaves falling off trees, weather changes). • Look closely at similarities, differences, patterns and change. • Comments and questions about the place they live or the natural	Flames & Fireworks Chemistry E Distinguish between an object Identify and name a variety of Describe the simple physical p Compare and group together Identify and compare the suitapaper and cardboard for parti Key Learning All objects are made of one or	t and the material from everyday materials, inderoperties of a variety of a variety of everyday mability of a variety of everyday mability of a variety of everyday uses. Y2	which it is made. Y1 cluding wood, plastic, f everyday materials. aterials on the basis o eryday materials, incl	glass, metal, water, and Y1 of their simple physical uding wood, metal, plas	properties. Y1 stic, glass, brick, rock,	 Seasons e.g show pictures linked to the seasons Pre teach vocab linked to senses – rough, smooth, hard, soft etc.
and discussions daily.		world.	wooden spoons.Materials can be described by different forms with very diffe		iny, stretchy, rough e	tc. Some materials e.g.	plastic can be in	

		All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside	
		and waterproof so that it holds the water. When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities. A material can be suitable for different purposes and an object can be made of different materials.	
		Working Scientifically Skills to be taught	
		 Ask simple questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Observe closely using simple equipment. To know how to use simple equipment safely. Identify and classify. 	
		Decide how to sort and group objects, materials and living things.	
		WHAT INVESTIGATION??? – 3 pigs houses • Carry out simple tests	
		Begin to make predictions and give a reason	
		Say what happened in an investigation.	
		 Gather and record data Record and communicate findings in a range of ways – use simple tables 	
		Talk about what they have found out and how they found it out	
		Begin to say what happened in my investigation and whether I was surprised by the result or not	
Control	In Fact, Wasse shill-less should	To begin to say what I would change in my investigation Club Transport Plants	
Spring 1	In Early Years children should: • Comments and questions about	Globe Trotter Biology Plants Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Y1 	What are plants?How do we care for
Kirkley Zoo	the place they live or the natural	 Identify and describe the basic structure of a variety of common flowering plants, including trees. Y1 	them?
	world.	Identify and name a variety of plants and animals in their habitats, including micro-habitats. Naming plants and their	What do they have?
1 st lesson of Spr 1 to look at	 Shows care and concern for living things and the environment. 	habitats focus Y2	Name plants
seasonal	Can talk about things they have	Key Learning • Growing locally, there will be a yest array of plants which all have specific names. These can be identified by looking at	
change –	observed such as plants and animals.	 Growing locally, there will be a vast array of plants which all have specific names. These can be identified by looking at the key characteristics of the plant. 	
WINTER.	 Notices features of objects in their environment. 	Plants have common parts, but they vary between the different types of plants.	
Weather	Comments and asks questions	Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during	
observations	about their familiar world.	spring.	
and discussions daily.	 Make observations of plants Know some names of plants, trees and flowers 	 Animals and plants live in a habitat to which they are suited, which means that animals have suitable features that help them move and find food and plants have suitable features that help them to grow well. The habitat provides the basic needs of the animals and plants – shelter, food and water. 	
	May be able to name and describe different plants, trees and flowers	Working Scientifically Skills to be taught	
		Ask simple questions about the world around us	
		 Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) 	
		Record and communicate findings in a range of ways- use simple tables.	
		Talk about what they have found out and how they found it out	

		 Observe closely using simple equipment. To know how to use simple equipment safely. Identify and classify. Decide how to sort and group objects, materials and living things. 	
Weather observations and discussions daily.	 In Early Years children should: be able to ask questions about the place they live. Talk about why things happen and how things work. Discuss the things they have observed such as natural and found objects. 	 House & Homes Chemistry Everyday Materials and Uses of Everyday Materials Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Y2 Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Y2 Key Learning All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and 	 Revisit types of materials and properties Finish looking at materials used in musical instruments
	Manipulates materials to achieve a planned effect.	 waterproof so that it holds the water. When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities. A material can be suitable for different purposes and an object can be made of different materials. Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc. This can be a property of the material or depend on how the material has been processed e.g. thickness. Working Scientifically Skills to be taught Ask simple questions about the works around us 	to make sound – drum skins, strings, tambourine.
		 Ass simple questions about the works around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Observe closely using simple equipment. To know how to use simple equipment safely. Identify and classify. Decide how to sort and group objects, materials and living things. 	
		 ???? Suit of armour??? Carry out simple tests Begin to make predictions and give a reason Say what happened in an investigation. Gather and record data Record and communicate findings in a range of ways – use simple tables Talk about what they have found out and how they found it out Begin to say what I would change in my investigation To begin to say what I would change in my investigation 	
Summer 1 Boldon Lodge	In Early Years children should:be able to identify different parts of their body.	 All Creatures Great and Small Biology Animals including Humans Notice that animals, including humans, have offspring which grow into adults. Y2 Animal focus e.g. frog lifecycle Identify and name a variety of plants and animals in their habitats, including micro-habitats. Micro-habitat focus (pond, garden, trees, log - mini beasts) Y2 	Revisit lifecycle – human and animal.

1st lesson of SUM 1 to look at seasonal change – SPRING Weather observations and discussions	 Have some understanding of healthy food and the need for variety in their diets. Be able to show care and concern for living things. Know the effects exercise has on their bodies. Have some understanding of growth and change. Can talk about things they have 	 Key Learning Animals, including humans, have offspring which grow into adults. In humans and some animals, these offspring will be young, such as babies or kittens, that grow into adults. In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults. The young of some animals do not look like their parents e.g. tadpoles. Within a habitat there are different micro-habitats e.g. in a woodland – in the leaf litter, on the bark of trees, on the leaves. These micro-habitats have different conditions e.g. light or dark, damp or dry. These conditions affect which plants and animals live there. Working Scientifically Skills to be taught 	Caring for plants – how do we look after plants and help them to grow (links from EY)
daily.	observed including animals.	 Ask simple questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Record and communicate findings in a range of ways- use simple tables. Talk about what they have found out and how they found it out Observe closely using simple equipment. To know how to use simple equipment safely. Identify and classify. Decide how to sort and group objects, materials and living things. 	
Summer 2 St Mary's Lighthouse Rock pooling	 In Early Years children should: Comments and questions about the place they live or the natural world. Shows care and concern for living things and the environment. 	 Oh I do like to be beside the Seaside/Lighthouses Biology Living Things and their Habitats / Animals including humans. Explore and compare the differences between things that are living, dead, and things that have never been alive Y2 Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Y2 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. Y2 	 Flashback to EYFS natural world around them Naming basic animals and where they live
1st lesson of Sum 2 to look at seasonal change – SUMMER. Weather observations and discussions daily.	 Can talk about things they have observed such as plants and animals. Notices features of objects in their environment. Comments and asks questions about their familiar world. 	 Key Learning All objects are either living, dead or have never been alive. Living things are plants (including seeds) and animals. Dead things include dead animals and plants and parts of plants and animals that are no longer attached e.g. leaves and twigs, shells, fur, hair and feathers. Animals and plants live in a habitat to which they are suited, which means that animals have suitable features that help them move and find food and plants have suitable features that help them to grow well. The habitat provides the basic needs of the animals and plants – shelter, food and water. All animals, including humans, have the basic needs of feeding, drinking and breathing that must be satisfied in order to survive. 	(e.g. sea, fields, underground etc). Using pictures
		 Working Scientifically Skills to be taught Ask simple questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Record and communicate findings in a range of ways- use simple tables. Talk about what they have found out and how they found it out Observe closely using simple equipment. To know how to use simple equipment safely. Identify and classify. Decide how to sort and group objects, materials and living things. 	

Seasonal Change Cycle 1 & Cycle 2 Observed and taught across the year				
Prior Learning	National Curriculum Objectives	Flashbacks		
In Early Years children should: • Developing an understanding of change. • Observe and explain why certain things may occur (e.g. leaves falling off trees, weather changes).	 Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. 	Seasons e.g how pictures linked to the seasons		
 Look closely at similarities, differences, patterns and change. Comments and questions about the place they live or the natural world. 	 Key Learning In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again. The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people. Working Scientifically Skills to be taught 			
	 Ask simple questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Gather and record data Record and communicate findings in a range of ways- use simple tables. Talk about what they have found out and how they found it out Observe closely using simple equipment To observe changes over time with guidance and begin to notice patterns and relationships. To know how to use simple equipment safely. Use simple measurements and equipment.Begin to progress from non-standard units to mm, cm, cl etc. 			



Science Curriculum Mapping KS1

Cvcle 2

	Cycle 2							
Year 1 & 2		Prior Learning These should be considered in flash backs/ revised where topics have not covered for a long time	Terrific Toys Chemistry Everyday Materials Uses of Everyday Materials	Winter Wonderland Biology Animals including Humans	A Village in Africa Biology Living Things and their Habitats	Castles and Turrets Chemistry Uses of Everyday Materials	Growing Things Biology Plants	Active Me Biology Animals, including Humans
Autumn 1		In Early Years children should:			National Curriculum Obje	ectives	•	Flash Backs
Farm Weather observations and discussions daily.	Seasonal Change and weather observed across the year	 be able to ask questions about the place they live. Talk about why things happen and how things work. Discuss the things they have observed such as natural and found objects. Manipulates materials to achieve a planned effect. 	 Describe the simple phy Compare and group tog Identify and compare the paper and cardboard fo Key Learning All objects are made of wooden spoons. Materials can be described forms with very different All objects are made of task. For example, a ward waterproof so that it how with the properties of the suitable for different put Working Scientifically Skit Ask simple questions about the properties of the suitable for different put 	object and the material fiety of everyday materials sical properties of a variety either a variety of everyday either a variety of everyday in suitability of a variety or particular uses. Y2 one or more materials. So the properties expected by their properties expected by the	es of Everyday Materials rom which it is made. Y1 s, including wood, plastic, g ty of everyday materials. Y ay materials on the basis of everyday materials, included the complex of everyday materials, included the complex of everyday materials, included the complex of the com	glass, metal, water, and ro 1 Their simple physical pro- ding wood, metal, plastic rom different materials e. c. Some materials e.g. pla- ecause they have suitable t allowing you to see the ect from, the properties no s and classifying activities rials.	g. plastic, metal or stic can be in different erroperties for the drink inside and eeded are compared . A material can be	Language around senses and touch and sight. Finish by looking at magnets push and pull (basic)
			Carry out simple testsBegin to make predictioSay what happened in aGather and record data					

		 Record and communicate findings in a range of ways – use simple tables Talk about what they have found out and how they found it out Begin to say what happened in my investigation and whether I was surprised by the result or not To begin to say what I would change in my investigation 	
Autumn 2	In Early Years children should: • be able to identify different parts of	<u>Winter Wonderland</u> Biology Animals including humans ■ Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Y1	 Name basic animals, where they live and
Gibside	their body. • Have some understanding of	 Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Y1 Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, 	what they eat.
1 st lesson of	healthy food and the need for	including pets). Y1	
Aut 2 to look	variety in their diets.	Key Learning	
at seasonal	 Be able to show care and concern 	 Animals vary in many ways having different structures e.g. wings, tails, ears etc. They also have different skin coverings e.g. 	
change –	for living things.	scales, feathers, hair. These key features can be used to identify them.	
AUTUMN.	 Know the effects exercise has on 		
	their bodies.	Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals	
Weather	 Have some understanding of 	Working Scientifically Skills to be taught	
observations	growth and change.	Ask questions about the world around us	
and	 Can talk about things they have 	Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying,	
discussions	observed including animals.	comparative and fair tests, research)	
daily.		Observe closely using simple equipment	
		To observe changes over time with guidance and begin to notice patterns and relationships.	
		Identify and classify.	
		Decide how to sort and group objects, materials and living things.	
Spring 1	In Early Years children should:	A Village in Africa Biology Living Things and their Habitats	Flashback to Autumn
1 0	 Comments and questions about the 	Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify	2 Cycle 2
Animal	place they live or the natural	and name different sources of food. Y2	-,
man/lady	world.	Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the	
visit to	 Shows care and concern for living 	basic needs of different kinds of animals and plants, and how they depend on each other. Y2	
school	things and the environment.	Key Learning	
1st lesson of	Can talk about things they have	The plants and animals in a habitat depend on each other for food and shelter etc. The way that animals obtain their food	
Spr 1 to look	observed such as plants and	from plants and other animals can be shown in a food chain.	
at seasonal	animals.	Animals and plants live in a habitat to which they are suited, which means that animals have suitable features that help	
change –	 Notices features of objects in their 	them move and find food and plants have suitable features that help them to grow well. The habitat provides the basic	
WINTER.	environment.	needs of the animals and plants – shelter, food and water.	
	 Comments and asks questions 		
Weather	about their familiar world.	Working Scientifically Skills to be taught	
observations		Ask questions about the world around us	1
and		 Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, 	
discussions		comparative and fair tests, research)	
daily.		Find information using computers and books	
•		To observe changes over time with guidance and begin to notice patterns and relationships.	
		Identify and classify. Deside how to cort and crown phicate materials and living things.	
		Decide how to sort and group objects, materials and living things.	
Spring 2	In Early Years children should:	<u>Castles and Turrets</u> Chemistry Uses of Everyday Materials	 Flashback to Autumn
Newcastle	 be able to ask questions about the 	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock,	1 Cycle 2
Castle	place they live.	paper and cardboard for particular uses. Y2	

Weather	 Talk about why things happen and how things work. Discuss the things they have 	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Y2	
observations and discussions daily.	 observed such as natural and found objects. Manipulates materials to achieve a planned effect. 	 Key Learning All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and waterproof so that it holds the water. When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities. A material can be suitable for different purposes and an object can be made of different materials. Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc. This can be a property of the material or depend on how the material has been processed e.g. thickness. 	
		Working Scientifically Skills to be taught	
		 Ask simple questions about the works around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) 	
		 Observe closely using simple equipment. To know how to use simple equipment safely. Identify and classify. Decide how to sort and group objects, materials and living things. 	
		???? Suit of armour??? • Carry out simple tests	
		 Begin to make predictions and give a reason Say what happened in an investigation. Gather and record data 	
		 Record and communicate findings in a range of ways – use simple tables Talk about what they have found out and how they found it out Begin to say what happened in my investigation and whether I was surprised by the result or not 	
		To begin to say what I would change in my investigation	
Summer 1 Thornly/	In EYFS Children should:Make observations of plantsKnow some names of plants, trees	 Growing Things Biology Plants Observe and describe how seeds and bulbs grow into mature plants. Y2 Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. Y2 	What are plants?How do we care for them?
Chopwell Woods 1st lesson of	 and flowers May be able to name and describe different plants, trees and flowers Show some care for their world around them 	 Key Learning Plants may grow from either seeds or bulbs. These then germinate and grow into seedlings which then continue to grow into mature plants. These mature plants may have flowers which then develop into seeds, berries, fruits etc. Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates. Some 	What do they have?Name plants
Sum 1 to look at seasonal	3.55	plants are better suited to growing in full sun and some grow better in partial or full shade. Plants also need different amounts of water and space to grow well and stay healthy. Working Scientifically Skills to be taught	
change – SPRING.		 Ask simple questions about the works around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, 	
Weather observations		comparative and fair tests, research) • Observe closely using simple equipment.	

and discussions daily.		 To observe changes over time with guidance and begin to notice patterns and relationships To know how to use simple equipment safely. Identify and classify. ???? What a plant needs to grow Carry out simple tests Begin to make predictions and give a reason Say what happened in an investigation. Gather and record data Record and communicate findings in a range of ways – use simple tables Talk about what they have found out and how they found it out Begin to say what I would change in my investigation 	
Summer 2 1st lesson of Sum 2 to look at seasonal change – SUMMER.	 In Early Years children should: be able to identify different parts of their body. Have some understanding of healthy food and the need for variety in their diets. Be able to show care and concern for living things. Know the effects exercise has on their bodies. 	 Active Me Biology Animals, including Humans Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Y1 - Senses focus Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.Y2 Key Learning Humans (and other animals) find out about the world using their senses. Humans have five senses – sight, touch, taste, hearing and smelling. These senses are linked to particular parts of the body. All animals, including humans, have the basic needs of feeding, drinking and breathing that must be satisfied in order 	 Senses – what they are. How to stay healthy – (basic) food/exercise
observations and discussions daily.	 Have some understanding of growth and change. Can talk about things they have observed including animals. 	to survive. To grow into healthy adults, they also need the right amounts and types of food and exercise. Good hygiene is also important in preventing infections and illnesses. Working Scientifically Skills to be taught Ask questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Observe closely using simple equipment To know how to use simple equipment safely Identify and classify Decide how to sort and group objects, materials and living things.	

Seasonal Change Cycle 1 & Cycle 2 Observed and taught across the year			
Prior Learning	National Curriculum Objectives	Flashbacks	
In Early Years children should: • Developing an understanding of change. • Observe and explain why certain things may occur (e.g. leaves falling off trees, weather changes).	 Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. 	Seasons e.g how pictures linked to the seasons	
 Look closely at similarities, differences, patterns and change. Comments and questions about the place they live or the natural world. 	 Key Learning In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again. The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people. Working Scientifically Skills to be taught 		
	 Ask simple questions about the world around us Recognise that questions can be answered in different ways (changes over time, noticing patterns, grouping and classifying, comparative and fair tests, research) Gather and record data Record and communicate findings in a range of ways- use simple tables. Talk about what they have found out and how they found it out Observe closely using simple equipment To observe changes over time with guidance and begin to notice patterns and relationships. To know how to use simple equipment safely. Use simple measurements and equipment.Begin to progress from non-standard units to mm, cm, cl etc. 		