

















Science Curriculum Mapping – Glenfield Infant School








Year 2	Autumn 1 – Who am I & Why am I remembered?	Autumn 2 – Fire!	Spring 1 – Reduce, reuse and recycle	Spring 2 – All aboard	Summer 1 – Dungeons & Dragons	Summer 2 – If you go down to the woods
Outline of unit:	❖ Animals including humans	❖ Plants – bulbs ❖ Fire (Working Scientifically and Materials)	❖ Materials ❖ Living things and their habitats	❖ Plants - seeds	❖ Materials	❖ Living things and their habitats
By the end of the unit the children will know/be able to:	<p><i>By the end of the unit the children will know/be able to:</i></p> <ul style="list-style-type: none"> • Can describe how animals, including humans, have offspring which grow into adults, using the appropriate names for the stages • Can state the basic needs of animals, including humans, for survival • Can state the importance for humans of exercise, mindful eating, and hygiene 	<p><i>By the end of the unit the children will know/be able to:</i></p> <ul style="list-style-type: none"> • Can describe how plants that they have grown from bulbs have developed over time • Can name an object, say what material it is made from, identify its properties and make a link between the properties and a particular use • For a given object can identify what properties a suitable material needs to have <p>⇒ Specific to Great Fire of London buildings</p>	<p><i>By the end of the unit the children will know/be able to:</i></p> <ul style="list-style-type: none"> • Can name an object, say what material it is made from, identify its properties and make a link between the properties and a particular use • Can label a picture or diagram of an object made from different materials • For a given object can identify what properties a suitable material needs to have • Can recognise that a material may come in different forms which have different properties • Can name an animal and plants that live in a habitat and micro- 	<p><i>By the end of the unit the children will know/be able to:</i></p> <ul style="list-style-type: none"> • Can describe how plants that they have grown from seeds and bulbs have developed over time • Can identify plants that grew well in different conditions 	<p><i>By the end of the unit the children will know/be able to:</i></p> <ul style="list-style-type: none"> • Can name an object, say what material it is made from, identify its properties and make a link between the properties and a particular use • Can label a picture or diagram of an object made from different materials • For a given object can identify what properties a suitable material needs to have • Whilst changing the shape of an object can describe the action used • Can use the words flexible and/or stretchy to describe materials that can be changed in 	<p><i>By the end of the unit the children will know/be able to:</i></p> <ul style="list-style-type: none"> • Can find a range of items outside that are living, dead and never lived • Can name a range of animals and plants that live in a habitat and micro-habitats that they have studied • Can talk about how the features of these animals and plants make them suitable to the habitat • Can talk about what the animals eat in a habitat and how the plants provide shelter for them • Can construct a food chain that starts with a plant and has the arrows pointing in the correct direction

			<p>habitats that they have studied</p> <ul style="list-style-type: none"> • Can talk about how the features of these animals and plants make them suitable to the habitat • Can talk about what the animals eat in a habitat and how the plants provide shelter for them <p>⇒ Specific to worms – will then look more widely in Summer 2</p>		<p>shape and stiff and/or rigid for those that cannot</p> <ul style="list-style-type: none"> • Can recognise that a material may come in different forms which have different properties 	
<p>Substantive Knowledge: NC objectives</p>	<ul style="list-style-type: none"> • Notice that animals, including humans, have offspring which grow into adults. • 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. 	<ul style="list-style-type: none"> • Observe and describe how seeds and bulbs grow into mature plants. • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. 	<ul style="list-style-type: none"> • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • Explore and compare the differences between things that are living, dead, and things that have never been alive. • 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. • Identify and name a variety of plants and 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Explore and compare the differences between things that are living, dead, and things that have never been alive. • 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. • Identify and name a variety of plants and animals in their habitats, including microhabitats. • Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name

			<p>animals in their habitats, including microhabitats.</p> <ul style="list-style-type: none"> Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. 			different sources of food.
Vocabulary	<p>survive, survival, water food, air, exercise, heartbeat, breathing, hygiene, germs, disease pulse, muscles, sweating, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy), hunger, hungry, senses, mindful eating, offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/hen, kitten/cat, caterpillar/butterfly)</p>	<p>light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling</p> <p>Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard</p> <p>Properties of materials – flammable and non-flammable</p> <p>Burn, oxygen, fuel, heat</p>	<p>Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard</p> <p>Properties of materials – as for Year 1 plus opaque, transparent and translucent, reflective, nonreflective, flexible, rigid</p> <p>suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, worm</p>	<p>light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling, seed</p>	<p>Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard</p> <p>Properties of materials – as for Year 1 plus opaque, transparent and translucent, reflective, nonreflective, flexible, rigid</p> <p>Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching</p>	<p>living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark,shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and microhabitats studied</p>

**Disciplinary Knowledge:
Working Scientifically**

 <p>Ask & answer questions Ask people questions that include scientific language and recognise that they can be answered in different ways. Begin to use secondary sources to answer questions.</p>	 <p>Observe Use simple equipment to observe closely including changes over time</p>	 <p>Ask & answer questions Ask people questions that include scientific language and recognise that they can be answered in different ways. Begin to use secondary sources to answer questions.</p>	 <p>Plan & set up enquiries</p> <ul style="list-style-type: none"> Perform simple tests 	 <p>Ask & answer questions Ask people questions that include scientific language and recognise that they can be answered in different ways. Begin to use secondary sources to answer questions.</p>	 <p>Observe Use simple equipment to observe closely including changes over time</p>
 <p>Plan & set up enquiries</p> <ul style="list-style-type: none"> Perform simple tests 	 <p>Present results Communicate ideas, what he/she does, and what he/she finds out in a variety of ways</p>	 <p>Observe Use simple equipment to observe closely including changes over time</p>	 <p>Observe Use simple equipment to observe closely including changes over time</p>	 <p>Plan & set up enquiries</p> <ul style="list-style-type: none"> Perform simple tests 	 <p>Present results Communicate ideas, what he/she does, and what he/she finds out in a variety of ways</p>
 <p>Measure Begin to measure in standard units using equipment with simple scales. Use digital equipment to measure weight and temperature.</p>	 <p>Measure Begin to measure in standard units using equipment with simple scales. Use digital equipment to measure weight and temperature.</p>		 <p>Measure Begin to measure in standard units using equipment with simple scales. Use digital equipment to measure weight and temperature.</p>	 <p>Measure Begin to measure in standard units using equipment with simple scales. Use digital equipment to measure weight and temperature.</p>	

	 <p>Gather & record results</p> <ul style="list-style-type: none"> Gather and record data to help in answering questions including from secondary sources of information Identify, group and classify data 			 <p>Gather & record results</p> <ul style="list-style-type: none"> Gather and record data to help in answering questions including from secondary sources of information Identify, group and classify data 	 <p>Gather & record results</p> <ul style="list-style-type: none"> Gather and record data to help in answering questions including from secondary sources of information Identify, group and classify data 	
	 <p>Interpret results</p> <p>Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns. Compare simple comparative tests.</p>			 <p>Interpret results</p> <p>Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns. Compare simple comparative tests.</p>		
	 <p>Observe</p> <p>Use simple equipment to observe closely including changes over time</p>			 <p>Present results</p> <p>Communicate ideas, what he/she does, and what he/she finds out in a variety of ways</p>		
<p>Link to Forest school</p>						