



### Living things and their habitats (Autumn 1)

Humans (Autumn 2)

Material properties – uses of materials (Spring 1)

### Material properties – uses of materials (Spring 2)

Plants (Summer 1)

Animals survival and growth (Summer 2) – <u>If kept short- opportunity to revisit Autumn 1 if key skills haven't been covered.</u>

Ongoing

## (statutory- underlined in red).

#### Working scientifically

- Asking simple questions and recognising that they can be answered in different ways (Raise their own questions based on or linked to things they have observed).
- Observe closely, using simple equipment (e.g. hand lenses, egg timers).
- Performing simple (comparative test, different types of scientific enquiry to find answers, practical ways, , begin to notice patterns and relationships, explain how they know...use "it is because...." / suggest how and/or why things happen).
- Identifying and classifying (compare and contrast, sort and classify by features).
- Using their observations and ideas to suggest answers to questions (scientific language, over time, real world, (use of scientific lang, Observe and describe simple processes/cycles with several steps).
- Gathering and recording data to help in answering questions (Use their senses, simple measurements and equipment to gather data with increasing independence).
- (compare and contrast, sort and classify by features).

- Compare and contrast, sort and classify by features).		
Environment - Living things and their habitats	Animals - Animal survival and growth	Health — How we grow and stay healthy
Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:
Explore and compare the differences between things that are living, dead, and things that have	Notice that animals, have offspring which grow into	Notice that humans, have offspring which grow into adults.
<u>never been alive.</u>	<u>adults.</u>	Find out about and describe the basic needs of humans, for
Identify that most living things live in habitats to which they are suited and describe how	Find out about and describe the basic needs of	<u>survival (water, food and air).</u>
different habitats provide for the basic needs of different kinds of animals and plants, and how	<u>animals, for survival (water, food and air).</u>	Describe the importance for humans of exercise, eating the right
they depend on each other.		amounts of different types of food, and hygiene.
Identify and name a variety of plants and animals in their habitats, including micro-habitats.		<ul> <li>Medicines can be useful when we are ill.</li> </ul>
Describe how animals obtain their food from plants and other animals, using the idea of a	Notes and Guidance (non-statutory):	Medicines can be harmful if not used properly.
simple food chain, and identify and name different sources of food.	Pupils should be introduced to the basic needs of	
<ul> <li>Different kinds of plants and animals live in different kinds of places.</li> </ul>	animals for survival.	Notes and Guidance (non-statutory):
There are different kinds of habitat near school which need to be cared for	They should also be introduced to the process of	Pupils should be introduced to the basic needs of animals for
- Habitats provide the preferred conditions for the animals/plants that live there (compare local	reproduction and growth in animals. The focus at this	survival, as well as the importance of exercise and nutrition for
habitats and less familiar examples).	stage should be on questions that help pupils to	humans.
Notes and Guidance (non-statutory):	recognise growth; they should not be expected to	They should also be introduced to the process of reproduction and
Pupils should be introduced to the idea that all living things have certain characteristics that are	understand how reproduction occurs. The following	growth in animals [humans]. The focus at this stage should be on
essential for keeping them alive and healthy. They should raise and answer questions that help	examples might be used: egg, chick, chicken; egg,	questions that help pupils to recognise growth; they should not be
them to become familiar with the life processes that are common to all living things. Pupils should	caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb,	expected to understand how reproduction occurs. Growing into
be introduced to the terms 'habitat' (a natural environment or home of a variety of plants and	sheep.	adults can include reference to baby, toddler, child, teenager, adult.
animals) and 'micro-habitat' (a very small habitat, for example for woodlice under stones, logs or	Pupils might work scientifically by:	adult.
leaf litter). They should raise and answer questions about the local environment that help them to	<ul> <li>Observing, through video or first-hand observation</li> </ul>	
identify and study a variety of plants and animals within their habitat and observe how living	and measurement, how different animals grow;	Pupils might work scientifically by:
things depend on each other, for example plants serving as a source of food and shelter for	<ul> <li>Asking questions about what things animals need for</li> </ul>	<ul> <li>Observing, through video or first-hand observation and</li> </ul>
animals. Pupils should compare animals in familiar habitats with animals found in less familiar	survival suggesting ways to find answers to their	measurement, how humans grow.
habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest.	survival suggesting ways to jula answers to their	neusaienen, now nunturs grow.



# St Barnabas CE Primary Academy Key Learning in Science-Year 2



Pupils might work scientifically by:	questions.	Recording their findings using charts.
Sorting and classifying things as to whether they are living, dead or were never alive.		Asking questions about what things animals [humans]. need for
Recording their findings using charts		survival and what humans need to stay healthy.
Describing how they decided where to place things,		Suggesting ways to find answers to their questions.
Exploring questions such as: 'Is a flame alive? Is a deciduous tree dead in winter?'		
<ul> <li>Talking about ways of answering their questions.</li> </ul>		
Constructing a simple food chain that includes humans (e.g. grass, cow, human);		
Describing the conditions in different habitats and micro-habitats (under log, on stony path,		
under bushes);		
• Finding out how the conditions affect the number and type(s) of plants and animals that live		
there.		

(Plants - Plant growth)	Material Properties – <mark>Uses of Materials)</mark>
Pupils should be taught to:	Pupils should be taught to:
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,
• Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	<u>brick, rock, paper and cardboard for particular uses</u>
= <u>Plants are living and eventually die</u>	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
Notes and Guidance (non-statutory):	Some materials can be found naturally; others have to be made
Pupils should use the local environment throughout the year to observe how different plants grow. Pupils	
should be introduced to the requirements of plants for germination, growth and survival, as well as the process of reproduction and growth in plants.	
	Notes and Guidance (non-statutory):
Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them.	Pupils should identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons
Pupils might work scientifically by:	can be made from plastic, wood, metal, but not normally from glass). They should think about the properties of
• Observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or	materials that make them suitable or unsuitable for particular purposes and they should be encouraged to think about unusual and creative uses for everyday materials. Pupils might find out about people who have developed
• Observing similar plants at different stages of growth;	useful new materials; for example, John Dunlop, Charles Macintosh or John McAdam.
• Setting up a comparative test to show that plants need light and water to stay healthy.	
	Pupils might work scientifically by:
	• Comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs);
	<ul> <li>Observing closely,</li> </ul>
	Identifying and classifying the uses of different materials, and
	Recording their observations.
	<ul> <li>Thinking about unusual and creative uses for everyday materials.</li> </ul>