



Science Progression To investigate living things

Essential characteristics of scientists	<ul style="list-style-type: none">•The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings.•Confidence and competence in the full range of practical skills, taking the initiative in, for example, planning and carrying out scientific investigations.•Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings.•High levels of originality, imagination or innovation in the application of skills.•The ability to undertake practical work in a variety of contexts, including fieldwork.•A passion for science and its application in past, present and future technologies.		
	Key Knowledge	Key Vocabulary	
EYFS	Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.		
Y1/2	<p>Y2 learning challenge - Why would a dinosaur not make a good pet?</p> <p>Science Bug - Y2 - Living Things (things that all living things have in common)</p> <p>Habitats</p> <p>Focus text links - The Bog Baby</p> <ul style="list-style-type: none">• Explore and compare the differences between things that are living, that are dead and 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 micro-habitats.• 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. <i>(covered again in Y3/4 animals and humans)</i>	<ul style="list-style-type: none">• alive• dead• never alive• cells• move• reproduce• nutrition• growth• habitat• environment• energy• food chain	
Y3/4	<p>Y4 learning challenge - Which wild animals and plants thrive in our locality?</p> <p>Science Bug - Y4 Dangers to living things</p> <p>Grouping living things</p> <p>Focus text links - The Tin Forest</p> <ul style="list-style-type: none">• Recognise that living things can be grouped in a variety of ways.• Explore and use classification keys.• Recognise that environments can change and that this can sometimes pose dangers to specific habitats.	<ul style="list-style-type: none">• vertebrates• invertebrates• insect• arachnid• mollusc• flowering plants• non-flowering plants	<ul style="list-style-type: none">• coniferous• algae• gills• fins• scales• lungs• body temperature• section



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		<ul style="list-style-type: none">grasses, cereals, garden shrubs, deciduous trees
Y5/6	<p>Y5 learning challenge - Do all animals and plants start life as an egg?</p> <p>Science Bug - Y5 Life cycles (including changes in humans)</p> <p>Focus text links - The Firebird The Incredible Book Eating Boy Think Of An Eel</p> <ul style="list-style-type: none">Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (covered in Y1/2 animals and humans)Describe the life process of reproduction in some plants and animals.	<ul style="list-style-type: none">life cyclereproductiontwo parent reproductionone parent reproductiontransformationchimpanzee
Y5/6	<p>Y6 learning challenge - Could Spiderman really exist?</p> <p>Science Bug - Y6 Classifying living things</p> <ul style="list-style-type: none">Describe how living things are classified into broad groups according to common observable characteristics.Give reasons for classifying plants and animals based on specific characteristics.	<ul style="list-style-type: none">taxonomyclassificationdistinguish
KS3	<ul style="list-style-type: none">Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta.Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.Differences between species.	