



Science Unit Planner Year: 6 Title: Evolution and Inheritance

<b>Unit Overview</b>	Children use all their knowledge of living things to consolidate learning. They classify animals and plants based on their features. They learn to use a simple key to identify unknown living things.	
<b>Prior Learning/ Links</b>	<p>EY – children have grown plants and learned about living things.</p> <p>KS1 – children learn the names of common trees and plants, they learn about parts of flowers and life cycles. Children learn about how to look after plants and animals.</p> <p>KS2 – children learn to group and classify different living things, they learn about life cycles and reproduction of plants and animals.</p>	
<b>Unit Title:</b>	<b>Substantive Knowledge</b>	<b>Disciplinary Knowledge</b>
<p><b>Key Questions:</b></p> <p><b>What animal groups are there?</b></p> <p><b>How would you identify a bird you had never seen before?</b></p>	<ul style="list-style-type: none"> <li>• Children know living things can be classified using criteria such as animals/plant.</li> <li>• Animals can be classified into Vertebrates (have a backbone) and invertebrates (do not have a back bone). They can name some from the list learnt:</li> </ul> <p><b>Vertebrates have a backbone:</b></p> <p><b>Fish</b> – cold blooded, has gills, breathes under water, lays eggs in water.  <b>Names of fish we keep as pets:</b> guppy, tetra, goldfish  <b>Names of wild fish/ fish we eat:</b> cod, haddock, pike, tuna</p> <p><b>Amphibians</b> – cold blooded, has gills but then develops lungs, damp skin, lays eggs in water.  <b>Names of some amphibians:</b> frog, toad, salamander, newt</p> <p><b>Reptiles</b> – breathes with lungs, lays eggs on land, dry scaly skin, cold – blooded.  <b>Names of some reptiles:</b> Turtles, crocodiles, snake, lizard</p> <p><b>Birds</b> - have feathers, dry skin, lay eggs on land, breathes with lungs, warm blooded.  <b>Names of some birds:</b> parrot, owl, swallow, sparrow, thrush, finch.</p> <p><b>Mammals</b> – have live young, usually covered in hair or fur, feed young mothers milk, warm – blooded, breathe using lungs.  <b>Names of some mammals:</b> elephant, human, dog, whale, giraffe, lion, ant – eater</p> <p><b>Invertebrates do not have a backbone:</b></p> <p><b>Insects</b> – 3 body sections and 6 legs</p> <p><b>Arachnids</b> - 2 body sections and 8 legs</p> <p><b>Molluscs</b> – have a ‘foot’ which is limy, and sometimes a shell.</p> <ul style="list-style-type: none"> <li>• Children know we can categorise plants into what type they are and whether they are flowering or non – flowering which is the way they reproduce.</li> <li>• Children can explain how to use a simple key to identify a living thing.</li> <li>• Children know what a micro – organism is and give examples of where these are used: yoghurt, yeast, medicines.</li> </ul>	<p><b>Questioning and Planning</b>  Plan an enquiry and explore the evidence for the questions asked.</p> <p><b>Observation and Measurement</b></p> <p><b>Recording and Presenting</b>  Investigate different sources of evidence and record information.  Present information to others using diagrams/ images.</p> <p><b>Analysing and Evaluating</b></p>



	<ul style="list-style-type: none"> <li>Children can give examples of why and how humans can look after animals and plants.</li> </ul>	
<b>Vocabulary</b>	<b>Trips/ Visits/Useful Websites/ Resources</b>	<b>Key Misconceptions:</b>
<b>Substantive:</b> Living things Plant Animal Vertebrate Invertebrate Reproduce Micro - organism  <b>Disciplinary:</b> Classify Key Group Explain	<a href="#">Year 6: All Living Things   STEM</a>  <a href="#">Living things - Year 5-6 / P6-7 Science Collection - Home Learning with BBC Bitesize - BBC Bitesize</a>  <a href="#">Living things and their habitats: Year 6 (Classification)   Lesson Plans for Teachers   Young People's Trust For the Environment (ypte.org.uk)</a>  <a href="#">Micro-organisms - Disease, defence and treatment – WJEC - GCSE Biology (Single Science) Revision - WJEC - BBC Bitesize</a>  <a href="#">Year 6 Living Things - Classifying Microorganisms   Teaching Resources (tes.com)</a>	That living things can control when and how they change over time: e.g children think the polar bear has decided to have a white coat... or that there is a choice. That if an animal decides to adapt, it can, and then it will pass this on to it's offspring.