

















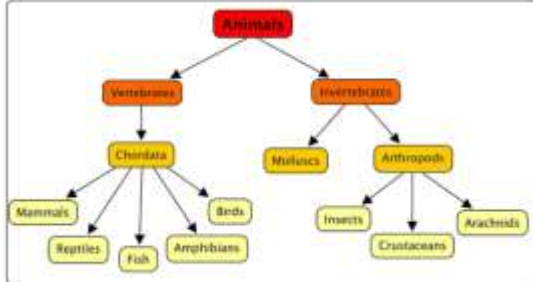



Learning Organiser for Year 6 Living things and their Habitats

National Curriculum Summary Key Subject Concept		Key Questions																
<ul style="list-style-type: none"> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals Give reasons for classifying plants and animals based on specific characteristics. 		<ul style="list-style-type: none"> How would you group organisms from the local environment? What are the 5 kingdoms which organisms can belong to? What reasons can you give for classifying certain plants and animals? 																
Key Vocabulary	Definition	Key Facts																
Classification	The action or process of classifying something	<ul style="list-style-type: none"> Living things can be organised into kingdoms: bacteria, archaea, protista, fungi, plantae, animalia. Fungi are not plants - they cannot produce food using photosynthesis. 99% of bacteria are actually helpful Every living thing on Earth contain carbon. Plants are classified into 5 main groups (divisions) and then subdivided at different levels (kingdom, division, order, family, genus, species). <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: left;"> <tr> <td colspan="2">A leopard, scientific name: <i>Panthera pardus</i></td> </tr> <tr> <td style="background-color: #e0e0e0;">Kingdom</td> <td>Animalia (animals)</td> </tr> <tr> <td style="background-color: #e0e0e0;">Phylum</td> <td>Chordata (vertebrates)</td> </tr> <tr> <td style="background-color: #e0e0e0;">Class</td> <td>Mammalia (mammals)</td> </tr> <tr> <td style="background-color: #e0e0e0;">Order</td> <td>Carnivora (carnivores)</td> </tr> <tr> <td style="background-color: #e0e0e0;">Family</td> <td>Felidae (cats)</td> </tr> <tr> <td style="background-color: #e0e0e0;">Genus</td> <td><i>Panthera</i> (big cats)</td> </tr> <tr> <td style="background-color: #e0e0e0;">Species</td> <td><i>pardus</i></td> </tr> </table> <p style="text-align: center; background-color: #c8e6c9; padding: 5px; margin: 5px auto; width: fit-content;">Classification Table - Leopard</p> <ul style="list-style-type: none"> The classification system was created by Carl Linneaus in the 19th century and is still used today. Classification is not the same as identification. 	A leopard, scientific name: <i>Panthera pardus</i>		Kingdom	Animalia (animals)	Phylum	Chordata (vertebrates)	Class	Mammalia (mammals)	Order	Carnivora (carnivores)	Family	Felidae (cats)	Genus	<i>Panthera</i> (big cats)	Species	<i>pardus</i>
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Dichotomus keys	A tool which allows the user to determine the identity of items in the natural world.																	
Bacteria	A micro-organism, usually one cell, which can be found everywhere and can cause disease.																	
Protist	A single celled organism of the kingdom Protista such as simple alga																	
Fungi	Any group of spore producing organisms feeding on organic matter																	
Genetic variation	The difference in DNA sequences between individuals within a population																	
Micro-organism	A microscopic organism, especially a bacterium, virus or fungus.																	
Arachnid	An animal that has eight legs and a body formed of two parts																	
Annelid	A segmented worm																	
Crustacean	Mostly lives in water with a hard shell and segmented body.																	

Working Scientifically Skills	Diagrams/Charts/Pictures																												
<p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</p>	<table border="1"> <thead> <tr> <th data-bbox="791 241 874 286">Domain</th> <th data-bbox="874 241 943 286">Bacteria</th> <th data-bbox="943 241 1011 286">Archaea</th> <th colspan="4" data-bbox="1011 241 1289 286">Eukarya</th> </tr> <tr> <th data-bbox="791 286 874 331">Kingdom</th> <th data-bbox="874 286 943 331">Bacteria</th> <th data-bbox="943 286 1011 331">Archaea</th> <th data-bbox="1011 286 1080 331">Protista</th> <th data-bbox="1080 286 1149 331">Fungi</th> <th data-bbox="1149 286 1217 331">Plantae</th> <th data-bbox="1217 286 1289 331">Animalia</th> </tr> </thead> <tbody> <tr> <td data-bbox="791 331 874 376">Example</td> <td data-bbox="874 331 943 376"></td> <td data-bbox="943 331 1011 376"></td> <td data-bbox="1011 331 1080 376"></td> <td data-bbox="1080 331 1149 376"></td> <td data-bbox="1149 331 1217 376"></td> <td data-bbox="1217 331 1289 376"></td> </tr> <tr> <td data-bbox="791 376 874 483">Characteristics</td> <td data-bbox="874 376 943 483">Bacteria are single unicellular organisms.</td> <td data-bbox="943 376 1011 483">Archaea are single unicellular organisms that often live in extreme environments.</td> <td data-bbox="1011 376 1080 483">Protists are unicellular and are even simpler than bacteria or archaea.</td> <td data-bbox="1080 376 1149 483">Fungi are unicellular or multicellular and absorb food.</td> <td data-bbox="1149 376 1217 483">Plants are multicellular and make their own food.</td> <td data-bbox="1217 376 1289 483">Animals are multicellular and take in their food.</td> </tr> </tbody> </table>	Domain	Bacteria	Archaea	Eukarya				Kingdom	Bacteria	Archaea	Protista	Fungi	Plantae	Animalia	Example							Characteristics	Bacteria are single unicellular organisms.	Archaea are single unicellular organisms that often live in extreme environments.	Protists are unicellular and are even simpler than bacteria or archaea.	Fungi are unicellular or multicellular and absorb food.	Plants are multicellular and make their own food.	Animals are multicellular and take in their food.
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<p>Identify scientific evidence that has been used to support or refute ideas or arguments</p>																													
<p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p>																													
Possible Experiences	Biographical Information																												
<ul style="list-style-type: none"> • Bristol Zoo Gardens • Botanic gardens • Create classification keys for different habitats, plants and animals for others to use • Sort animals based on characteristics • Discuss why living things are placed in one group and not another • Create a new animals which would fit into a specific part of the classification system • Discuss the original methods of classification in plants and animals would be a problem with all the organisms which we now know about 	<p>Carl Linnaeus (1707 - 1778)</p>  <p>Famous for his work in taxonomy - the science of identifying, naming and classifying organisms (plants, animals, bacteria etc.)</p>																												