



## Strand – Biology

What I should already know	What I will learn	Important words to help me. (vocabulary)	Ideas for Scientific Enquiry																						
<ul style="list-style-type: none"><li>Animals can be classified into different groups based on their characteristics</li><li>Animals can be grouped into vertebrates and invertebrates</li><li>Plants can be grouped into flowering plants and non-flowering plants</li></ul>	<p><b>How can I classify plants and animals?</b></p> <p>There are millions of types of living things in the world, so it would be very difficult if we tried to describe and name each one individually. To help us understand living things, scientists organise them into groups, according to features they share - this is called classification. Scientists are always looking for characteristics or "observable features" which allow them to group different species together and see how they are related to each other.</p> <p><b>How are plants, animals and micro-organisms classified into broad groups?</b></p> <p>Linnaeus only identified the Plant and Animal kingdoms, but today living things are divided into 5 broad groups called kingdoms (some scientists argue there are 6 or 7 kingdoms, but most agree on 5). These are based on how living things are the same and how they are different. Aristotle and Linnaeus were not aware of unicellular organisms, as they could not see them with the naked eye and they did not have equipment such as powerful microscopes to magnify tiny things.</p>	<table><tr><td>classification</td><td>the arrangement of organisms into orderly groups based on their similarities and differences</td></tr><tr><td>micro-organisms</td><td>Very tiny living things. So small they are not visible to the naked eye, so a microscope is needed to see them. They can be found all around us. They live in and on bodies, in the air, in water and on objects.</td></tr><tr><td>vertebrates</td><td>animals with a backbone</td></tr><tr><td>invertebrates</td><td>animals without a backbone</td></tr><tr><td>amphibians</td><td>a cold-blooded vertebrate animal that compromises frogs, toads, newts, salamanders and caecilians</td></tr><tr><td>reptiles</td><td>cold-blooded animals. Usually lay eggs. Most have scales.</td></tr><tr><td>birds</td><td>a warm-blooded egg-laying vertebrate animal distinguished by the possession of feathers, wings, a beak and typically able to fly</td></tr><tr><td>mammals</td><td>warm-blooded animals. Usually have fur on their bodies and give birth to live young. Drink milk from their mother</td></tr><tr><td>fish</td><td>cold-blooded animals. Breathe underwater using gills and lay eggs. Have fins to help propel them through water</td></tr><tr><td>insects</td><td>a small animal that usually has six legs and generally one or two pairs of wings</td></tr><tr><td>species</td><td>a group of closely related organisms that are very similar to each other and are usually capable of producing offspring.</td></tr></table>	classification	the arrangement of organisms into orderly groups based on their similarities and differences	micro-organisms	Very tiny living things. So small they are not visible to the naked eye, so a microscope is needed to see them. They can be found all around us. They live in and on bodies, in the air, in water and on objects.	vertebrates	animals with a backbone	invertebrates	animals without a backbone	amphibians	a cold-blooded vertebrate animal that compromises frogs, toads, newts, salamanders and caecilians	reptiles	cold-blooded animals. Usually lay eggs. Most have scales.	birds	a warm-blooded egg-laying vertebrate animal distinguished by the possession of feathers, wings, a beak and typically able to fly	mammals	warm-blooded animals. Usually have fur on their bodies and give birth to live young. Drink milk from their mother	fish	cold-blooded animals. Breathe underwater using gills and lay eggs. Have fins to help propel them through water	insects	a small animal that usually has six legs and generally one or two pairs of wings	species	a group of closely related organisms that are very similar to each other and are usually capable of producing offspring.	<p><b>Observation over time</b></p> <p>Investigate into how mould grows on bread</p> <p><b>Classification/Grouping</b></p> <p>Classify various animals by their characteristics using a classification key</p>
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<p><b>Interesting Facts</b></p> <ul style="list-style-type: none"><li>97% of creatures of invertebrates</li><li>There are 8.7 million different species on earth</li><li>There are over 41,000 endangered species on earth</li></ul>																									