



Year 4 Science Skills and Knowledge Organiser. Classification

Key Knowledge and Skills	Working scientifically	Key Vocabulary	Key Questions
<p>To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>To recognise that living things can be grouped in a variety of ways</p> <p>To explore ways of grouping living things including animals and plants (flowering and non-flowering)</p> <p>To recognise that animals can be grouped into vertebrates and invertebrates</p> <p>To describe some of the characteristics of the vertebrate (fish, mammals, amphibians, reptiles and birds) groups (e.g. warm-blooded, have fur, lay eggs)</p> <p>To group animals into vertebrate (fish, mammals, amphibians, reptiles and birds) and invertebrates groups (snails, slugs, spiders, worms and insects)</p> <p>To explain why some animals are hard to classify (e.g. platypus, echidna, bat, flightless birds)</p> <p>To identify that some animals feed on other animals and some on plants</p> <p>To represent feeding relationships with simple food chains</p> <p>To recognise that a food chain must always start with a green plant (a producer)</p> <p>To represent feeding relationships within a habitat with food chains beginning with a green plant which 'produces' food for the other organisms</p> <p>To recognise that green plants are the ultimate source of food for all animals</p>	<p>asking relevant questions and using different types of scientific enquiries to answer them</p> <p>setting up simple practical enquiries, comparative and fair tests</p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p>	<p>Classification –Living things can be classified into broad groups according to observable characteristics that are similar or different.</p> <p>Classification key- a series of yes/no questions that help identify or classify things.</p> <p>Vertebrate – animals that have a backbone. They can be divided into 5 groups- fish, amphibians, reptiles, birds and mammals.</p> <p>Invertebrate- animals that do not have a backbone. These can be divided into several groups including insets, worms, spiders, snails.</p> <p>Inherited- the way a trait or characteristics is passed to offspring from parents.</p>	<p>What is a classification key and how do we use one?</p> <p>In which ways can we group living things?</p> <p>Why do animals eat different foods?</p> <p>What is a food chain?</p> <p>What factors might change a food chain?</p> <p>Why do different plants and animals live in different habitats?</p> <p>How and why do habitats change?</p> <p>How have humans negatively impacted on environments?</p>



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<p>To use and understand the terms: producer, predator and prey</p> <p>To construct and interpret a variety of food chains, identifying producers, predators and prey (Teacher Note: statement moved from NC 'Animals including humans' to improve progression within topics)</p> <p>To use food chains to predict what might happen to the numbers of an organism if there are suddenly more predators or less prey</p> <p>To know the function of some of the more complex features which aid survival in specific habitats (e.g. gills, blubber, camouflage)</p> <p>To describe why different animals and plants live in different habitats</p> <p>To recognise that environments can change and that this can sometimes pose dangers to living things</p> <p>To describe how humans can cause changes to environments</p> <p>To explain why it is necessary to use a reasonably large sample when investigating the preferences of small invertebrates</p> <p>To explain that different organisms are found in different habitats because of differences in environmental factors</p> <p>To describe how humans have negatively impacted environments (e.g. pollution, deforestation, introduction of invasive species)</p>	<p>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p>Using straightforward scientific evidence to answer questions or to support their findings.</p>	<p>predator- an animal that hunts, kills, and eats other animals:</p> <p>prey- an animal that is hunted and killed for food by another animal:</p> <p>Producer- plants are called producers because they make their own food.</p> <p>Habitat- the place where an animal or plant lives.</p> <p>Environment- the conditions in which a living thing exists.</p>	
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