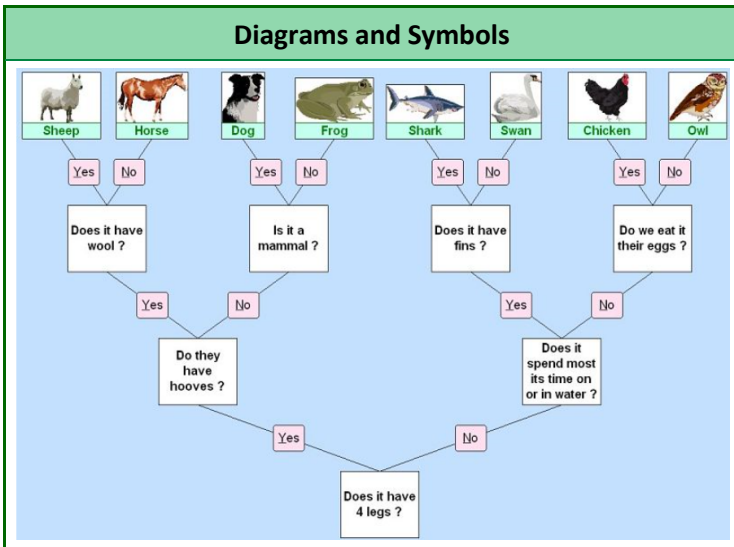


Uplands Manor Primary School - Science Unit Organiser

Science Topic:	Living Things and Their habitats		Year 4	
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What? (Key Vocabulary)	
Spelling	Definition/Sentence
Gills	Slits on the side of a fish to help it breathe
Fins	Part of a fish that helps it move and balance
Scales	Thin plates protecting the skin of fish or reptiles
Lungs	Spongy bags in the chest used when breathing
Body Temperature	How hot or cold the inside of an animals body is
Section	A part of something
Deciduous	A tree that loses its leaves in Autumn and grows new ones in Spring
Coniferous (Evergreen)	A plant or tree that keeps its leaves all year
Algae	A small plant that is found in water (It has no stems, roots or leaves)

What? (Key Knowledge)	
Grouping living things	
Animals can be put into one of two groups	Vertebrates or invertebrates
Vertebrates	
Vertebrates	Are animals with a backbone
There are 5 ways Vertebrates can be grouped	Fish, amphibians, reptiles, birds and mammals
How to spot a Fish	<ul style="list-style-type: none"> Breathes with gills/lays eggs in water/has fins and scales/its body temperature changes
How to spot an Amphibian	<ul style="list-style-type: none"> Born with gills then develops lungs/lays eggs in water/damp skin/body temperature changes
How to spot a Reptile	<ul style="list-style-type: none"> Breathes with lungs/lays eggs on land/dry scaly skin/body temperature changes
How to spot a Bird	<ul style="list-style-type: none"> Breathes with lungs/lays eggs with hard shells/has feathers/steady body temperature
How to spot a Mammal	<ul style="list-style-type: none"> Breathes with lungs/babies are born live/body hair or fur/steady body temperature/feeds babies milk



Invertebrates	
Invertebrates	Invertebrates are animals with no backbones
There are 3 ways Invertebrates can be grouped	<ul style="list-style-type: none"> Insects Arachnids Molluscs
How to spot an Insect	<ul style="list-style-type: none"> 3 body sections/6 legs
How to spot an Arachnid	<ul style="list-style-type: none"> 2 body sections/8 legs
How to spot a Mollusc	<ul style="list-style-type: none"> Slimy foot/often have a shell

Recommended Experiments	
<p>A minimum of two experiments should take place during this unit of work with one final written outcome linked to the scientific enquiry skills and approaches used.</p>	
	Identifying and naming a variety of living things in the local (school) and wider environment
	Exploring and using classification keys to help group, identify and name a variety of living things in their local and wider environment
	Designing own keys and branch diagrams to identify animals and plants
	Creating an online database of animals and plants on the school site (invite other users of the school grounds to update with sightings)

Plant Groups	
Plants can be put into one of two groups	Flowering plants or non-flowering plants
Flowering Plants	
Flowering plants are made of four groups	<ul style="list-style-type: none"> Grasses/cereals/garden shrubs/deciduous trees (lose their leaves)
Non-Flowering Plants	
Non-Flowering plants are made of three groups	<ul style="list-style-type: none"> Algae/coniferous (evergreen) trees/ferns
Changing Habitats	
What is a habitat?	Where a plant or animals lives
How can habitats change?	<p>The seasons can change habitats with the weather and plant life in the habitat changing.</p> <p>Humans can change habitats, for example by dropping litter or chopping down trees.</p>
Classifying Animals and Plants	
What is classifying?	Grouping things that are similar
How can we group?	We can create branched diagrams to help us (see diagram)

Builds on: learning in Year 2 - Summer - Unit: Living Things and Their Habitats	Learning links	Leads to: learning in Year 5 - Autumn 2 - Unit: Living Things and Their Habitats
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