

Year 7: Living World- Classification.

	Check	Date
<p>Revise assumed knowledge: ST3-10LW describes how structural features and other adaptations of living things help them to survive in their environment</p> <p>ST3-11LW describes some physical conditions of the environment and how these affect the growth and survival of living things</p>	<input type="checkbox"/>	
LW1 There are differences within and between groups of organisms; classification helps organise this diversity. (ACSSU111)		
CLASSIFYING LIVING THINGS		
4LW1a. identify reasons for classifying living things		
4LW1b. classify a variety of living things based on similarities and differences in structural features		
<p>Literacy activity (ESL focus): Define and describe. Classification, Botanist, Zoologist</p>	<input type="checkbox"/>	
<p>Group work: Animal charades In pairs. Describe an animal to your partner without naming it. They are to draw it based on the description and name it (Oxford pg52).</p>	<input type="checkbox"/>	
<p>Research task or teacher delivered: Produce a timeline of early classification systems (Oxford pg53)</p>	<input type="checkbox"/>	
<p>Group a variety of living things based on similarities and differences in structural features</p> <ul style="list-style-type: none"> • Students given a range of organisms by name and asked to group them based on similarities and differences in structural features • Use structural features of students to develop a key of the class (ensure ONLY appropriate features are chosen) 	<input type="checkbox"/>	
<p>Why do we classify things? Mind Map</p> <ul style="list-style-type: none"> • Human need for order • Communication across the world • Common language (Binomial naming- address later) • Show relationships between organisms 	<input type="checkbox"/>	
<p>Briefly outline the work of Anton van Leeuwenhoek, Robert Hooke and Robert Brown to the classification of living things</p>	<input type="checkbox"/>	
<p>CODE: 7LW20 First-Hand Investigation: Hay infusion Collect grass and leaf cutting and leave soaking in beaker of water for at least a week. Take a sample of water and observe for microorganisms under microscope.</p>	<input type="checkbox"/>	
<p>Have all living organisms been discovered. Explain.</p>	<input type="checkbox"/>	
<p>Describe the common characteristics of all living things (MRS GREN)</p>	<input type="checkbox"/>	
<p>Group work: Is fire living? (Oxford pg58) Groups are given 5 minutes to discuss whether fire is living against MRS GREN. Discuss as a class</p>	<input type="checkbox"/>	

Distinguish between non-living and dead.	<input type="checkbox"/>	
Review: Classification of living things (Oxford pg59)	<input type="checkbox"/>	
4LW1f. explain how the features of some Australian plants and animals are adaptations for survival and reproduction in their environment 🍄⚙️		
Define adaptation	<input type="checkbox"/>	
Research task and class discussion: Australian examples Students to research 3 Australian plants and animals and provide a 1-2 minute information session to the class on the adaptations of each organism.	<input type="checkbox"/>	
Extension: Research task or teacher delivered. Describe how living fossils such as the Wollemi pine and lung fish continue to survive despite the changing environment around them (isolated niche)	<input type="checkbox"/>	
Briefly describe how adaptations arise as a result of variation within a species.	<input type="checkbox"/>	
Review: Adaptations for survival and reproduction (Oxford pg63)	<input type="checkbox"/>	
Assessment: Oxford online test- Classifying living things Students to achieve 100% in Support and Consolidate OR Consolidate and Extend	<input type="checkbox"/>	
USING KEYS AS TOOLS FOR CLASSIFICATION		
4LW1b. classify a variety of living things based on similarities and differences in structural features		
4LWadd4 classify, using a hierarchical system, a range of selected plants and animals to species level 🍄		
Literacy activity (ESL focus): Define and describe. Dichotomous key	<input type="checkbox"/>	
Describe the Linnaean classification system	<input type="checkbox"/>	
Explain why the scientific names used in binomial classification are derived from Latin	<input type="checkbox"/>	
Research task: A4 page identifying the classification of your favourite plant/animal and explain what features puts it in those groups eg http://www.factmonster.com/ipka/A0776195.html	<input type="checkbox"/>	
Review: The Linnaean classification system (Oxford pg68)	<input type="checkbox"/>	
Choose a number of species and classify according to <ul style="list-style-type: none"> Kingdom, Phylum, Class, Order, Family, Genus, Species 	<input type="checkbox"/>	
4LW1c. use simple keys to identify a range of plants and animals 🍄		
4LWadd3 design and construct simple keys to identify a range of living things ⚙️		
Describe how a circular key can be used to classify organisms	<input type="checkbox"/>	
Describe how a dichotomous key can be used to classify organisms	<input type="checkbox"/>	
Use simple dichotomous key to identify organisms or individuals (Oxford pg70)	<input type="checkbox"/>	
Students construct simple dichotomous key using a range of living things (Oxford pg71)	<input type="checkbox"/>	
Review: Using keys for identification (Oxford pg72)	<input type="checkbox"/>	

Assessment: Oxford online test- Using keys as tools for classification Students to achieve 100% in Support and Consolidate OR Consolidate and Extend	<input type="checkbox"/>	
CLASSIFICATION TODAY		
4LW1b. classify a variety of living things based on similarities and differences in structural features 4LW1e. outline the structural features used to group living things, including plants, animals, fungi and bacteria		
Literacy activity (ESL focus): Define and describe. Animalia, Plantae, Fungi, Monera (bacteria), Protista, microorganism, cell wall, unicellular, multicellular, chloroplasts, autotroph, heterotroph	<input type="checkbox"/>	
Classification of Animals, Plants, Fungi, Monera and Protista based on physical morphology <ul style="list-style-type: none"> • Animal and Plant: Cell wall v's no cell wall • All and Monera: Unicellular v's multicellular • Plants and Fungi: chloroplasts v's no chloroplasts (photosynthesis, autotroph v's heterotroph) 	<input type="checkbox"/>	
Literacy: COSMOS: students research for another related article. Students then write a series of questions that MUST include 5 multiple choice, 2 identify, 2 describe, 1 explain and either 1 assess or evaluate.	<input type="checkbox"/>	
4LW1d. identify some examples of groups of microorganisms		
Research task: Microorganism Provide a 1-2 minute information session to the class on groups of beneficial and harmful microorganisms <ul style="list-style-type: none"> • Bacteria; salmonella, golden staph, gut flora and fauna • Viruses; Influenza, HIV, swine flu • Fungi; yeast 	<input type="checkbox"/>	
Research task: History of microscopes. Where would we be today without them	<input type="checkbox"/>	
4LW1b. classify a variety of living things based on similarities and differences in structural features 4LW1e. outline the structural features used to group living things, including plants, animals, fungi and bacteria 4LW1f. explain how the features of some Australian plants and animals are adaptations for survival and reproduction in their environment 🍷⚙️		
Literacy activity (ESL focus): Define and describe. Vertebrate, Invertebrate, endoskeleton, exoskeleton, chordata	<input type="checkbox"/>	
Classify animals as vertebrates and invertebrates giving examples of each	<input type="checkbox"/>	
Extension: Giant squid dissection video	<input type="checkbox"/>	
CODE: 7LW21 First-Hand Investigation-Teacher Demonstration: examining skeletons (Oxford pg79). Fish, prawn and whole squid.	<input type="checkbox"/>	
Review: Classifying animals (Oxford pg80)	<input type="checkbox"/>	
Distinguish between monotremes, marsupials and placental mammals	<input type="checkbox"/>	

Provide Australian examples of each group of mammals and explain how the features of each are adaptations for survival and reproduction in their environment	<input type="checkbox"/>	
Literacy: Enigma of the Echidna (Oxford pg82)	<input type="checkbox"/>	
Provide distinguishing characteristics/features and examples of the following classes: <ul style="list-style-type: none"> • Aves (birds) • Reptilia (reptiles) • Amphibia (amphibians) • Pisces (fish) 	<input type="checkbox"/>	
Research task or teacher delivered: Classifying invertebrates. Provide the distinguishing features of: <ul style="list-style-type: none"> • Arthropods • Molluscs • Poriferans • Nematodes • Annelids • Platyhelminthes • Cnidarians • Echinoderms Give examples from each group	<input type="checkbox"/>	
Identifying the distinguishing feature of all plants is their ability to photosynthesise	<input type="checkbox"/>	
Literacy activity (ESL focus): Define and describe. Vascular, xylem, phloem, non-vascular	<input type="checkbox"/>	
Research task or teacher delivered: Classifying plants. Provide the distinguishing features of: <ul style="list-style-type: none"> • Mosses • Herbs • Ferns • Shrubs • Trees • Vines Give examples from each group	<input type="checkbox"/>	
CODE: 7LW22 First-Hand Investigation: Observe and draw prepared slides of xylem and phloem	<input type="checkbox"/>	
4LWadd5 identify, using an example of an organism or group of organisms, where the classification has changed as a result of new evidence from technological developments, scientific discoveries and/or advances in scientific understanding		
Explain where the classification has changed as a result of new evidence from technological developments, scientific discoveries and/or advances in scientific understanding <ul style="list-style-type: none"> • 2 to 3 to 4 to 5 kingdoms • 3 kingdoms to 3 domains • Reclassification of humans separate from other apes 	<input type="checkbox"/>	

Describe the change in the highest level of classification from kingdom to the domains

- Archaea
- Bacteria
- Eukaryotes

and identify the role of technology in the change

Assessment: Oxford online test- Classification today
Students to achieve 100% in Support and Consolidate **OR** Consolidate and Extend

Comments and Suggested improvements

Name:

Signature:

Date: