

Maple Tree Primary School

Year 6: Classification

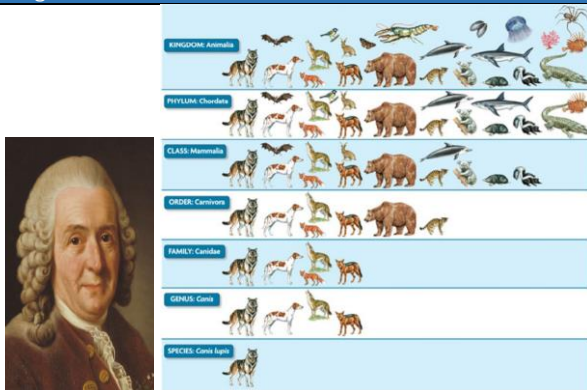
What should I already know?

- That living things can be grouped in a variety of ways – mammals, amphibians, reptiles, fish, birds, invertebrates
- That classification keys help group, identify and name a variety of living things in their local and wider environment
- That environments can change and that this can sometimes pose dangers to living things

Knowledge and skills

- To know who Linnaeus was and learn about his classification system
- To explore classification systems, understanding that they group according to similarities & differences
- To identify similarities and differences between living things in order to determine their classification
- To use classification keys to sort living things according to observable characteristics
- To develop classification keys
- To test out classification key, identifying potential flaws
- To describe the key characteristics of unusual living things from around the world
- To use descriptions of features, and online research, to attempt to classify unusual living things
- To design, describe and name a new creature that characteristically sits within the Animalia classification
- To sort 'new' creatures within the Animalia taxonomy
- To sketch a detailed creature based on known characteristics and imagination

Diagrams



Vocabulary	
Bacteria	Single celled micro-organisms.
Carl Linnaeus	A Swedish naturalist. He created two scientific systems: the system for classifying plants and animals and the system for naming all living things. Linnaeus is also called the Father of Systematic Botany.
Characteristics	The distinguishing features or quality of something.
Class	The various phyla are divided into classes – Phylum Chordata is divided into the classes: amphibians, birds, mammals, reptiles and fish.
Classification	The grouping together of similar species of plant, animal and other organisms.
Domain	A domain refers to the largest of all groups in the classification of life.
Family	The family is a relatively new scientific concept. It is a way scientists group similar genera together. This is not the 'mum, dad, brother and sister' type of family!
Genus	Two or more species that share unique body structures or other characteristics are considered to be closely related and are placed together in a genus. Sometimes a genus might include only a single species if there is nothing else in the world that has similarities with it. The genus is the first part of the scientific name of a species. The genus is always spelled with a capital letter and in italics.
Hierarchy	How important and powerful each organism is.
Kingdom	Most scientists now list 5 kingdoms – Animal, Plant, Protists (amoebas and such), Fungi and Monera (bacteria).
Micro-Organism	A microorganism or microbe is an organism that is incredibly small. Usually, they cannot be seen by the naked eye. Microorganisms are often single-celled or unicellular organisms.
Order	Scientific groupings don't follow hard and fast rules. Once we get to the 'order' of a living thing, there sometimes begins to be some disagreement about where it belongs. You may find that different sources group creatures in different orders or families. And you may find that a creature has its order or family changed as more information is learned.
Organism	Any living thing.
Phylum	There are more than 30 phyla in the Animal Kingdom and 9 or 10 in the Plant Kingdom. Phylum Chordata is the one we're most familiar with – it includes humans, birds, fish, and all other vertebrates (animals with a backbone). Phylum Arthropoda includes insects, spiders, lobsters, etc. Arthropods have segmented bodies with the segments grouped into two or three distinct sections. They have hard external skeletons, or exoskeletons, that are shed and regenerated as the animals grow.
Species	A species can be defined as a group of individuals that breed together to produce fertile offspring. Individuals of a species cannot breed with other such groups. It is sometimes possible for different species to breed, but the offspring will be sterile. A mule is the sterile offspring of a donkey and a horse, and the mule can never mate and reproduce itself. The species is the second part of the scientific name of a species. The species is always spelled with a lower-case letter and in italics.
Taxonomist	A scientist who classifies living things into categories

Question 1: I can use ____ to identify and organise life on Earth	True/False	True/False
a database		
a classification system		

Question 2: Carl Linnaeus created _____	True/False	True/False
the 5 kingdoms		
a classification system		
organisms		

Question 3: I can name a similarity and difference between micro-organisms , plants and animals.	
Start of unit	End of unit

Question 4: The term given to change over time is _____	True/False	True/False
survival of the fittest		
evolution		
selective breeding		

Question 5: I can name the 5 kingdoms	
Start of unit	End of unit

Question 6: I can create a creature suited to its environment based on given characteristics. This creature lives in a hot country, on land. It has feathers.	
Start of unit	End of unit

Question 7: I can match a group of living creatures from their characteristics.		
	Start of unit	End of unit
These creatures have fur or hair. They breathe air through their lungs. They feed milk to their young. They are warm blooded.		
These creatures have scaly skin and live in water. They use gills to breathe. They have fins. They lay their eggs in water, and they are cold blooded.		
These animals have hard, scaly skin and are cold blooded. They use lungs to breathe air and they lay their eggs on land.		

Question 8: I can give two characteristics that make an owl suited to hunting its prey.	Start of unit	End of unit

Question 9: A scientist who classifies living things is a _____	True/False	True/False
taxidermist		
biologist		
taxonomist		

Question 10: I can use the key to sort the following animals into the correct box. Kangaroo, spider, human, ant, fox, snail, seagull, frog	
Start of unit	End of unit