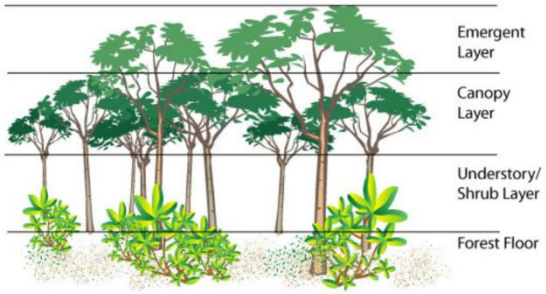
Berkswell CE Primary School
Year 6 – Geography – Secrets of the Amazon (South America)

Vocabulary	
Agriculture	The science of farming and the methods that are used to raise and look after crops and animals.
Amazon River	A body of water that runs through the continent of South America.
Andes	Mountain Range in South America.
Canopy	A layer of overlapping trees and plants above the ground.
Deforestation	The destruction of trees over a large area.
Emergent layer	The top layer of the rainforest. There is a lot of sunlight and the tallest trees grow to this level.
Habitat	The natural environment where an animal or plant normally lives.
Indigenous	Belonging to the country in which they are found, rather than being brought there from another country.
Forest floor	The ground beneath the trees consisting of roots and soil.
Land use	How the people use the land to help themselves survive.
Plantations	Large areas of land used for one crop grown for money.
Settlements	Where people live in cities, towns and villages
Trade Links	Exchange of goods, crops, products for money between people and countries
Tribe	A group of people who live together, sharing the same language, culture, and history.
Tropical wet climate zone	Also known as a rainforest. It has predictably warm weather and regular rainfall.
Tropical forest biome	A hot moist area where, because of the year-long rain, vegetation is dense.
Understory layer	The layer of the rainforest underneath the canopy. It is hot and damp. Bushes and young trees grow here.

Layers of the Rainforest



Reasons for Deforestation

Palm oil - produced in trees in the Amazon and used in salad dressings, washing powder and fuels.

Cattle ranches- around 10 million cattle in the Amazon region. Raised for consumption by humans.

Medicinal plants- curare is produced in the Amazon (used by surgeons)

What will I know by the end of the unit	
Prior Learning	• South America is one of the seven continents. • It is surrounded by three oceans – Atlantic, Pacific and Southern Ocean • There are many different time zones and biomes. • The Equator runs through Brazil, Columbia and Ecuador.
NC Geography Objectives	• How to use an atlas, maps and globes to locate countries in different locations across the earth. • Describe and understand key aspects of human geography, including: types of settlement and land use. • Describe and understand key aspects of physical geography, including: rivers, mountains and deserts. • Describe and understand key aspects of physical geography, including: climate zones and biomes and vegetation belts. • Understand geographical similarities and differences through the study of human and physical geography of a region within South America. • Identify and discuss the key physical and human characteristics of North and South America, (for example: The Great Lakes, The Great Plains, The Sierra Madre mountain system and Gaucho culture.) • Locate South America and the countries within this continent. • Locate the major cities in South America.

Map of South America and Famous Landmarks







Andes Mountain Range — The Amazon River



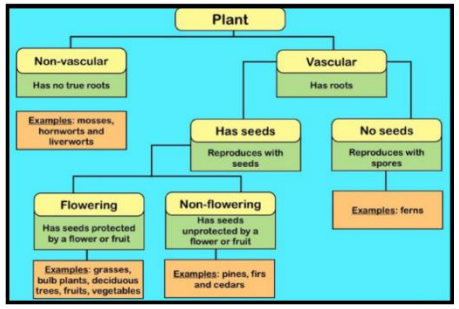


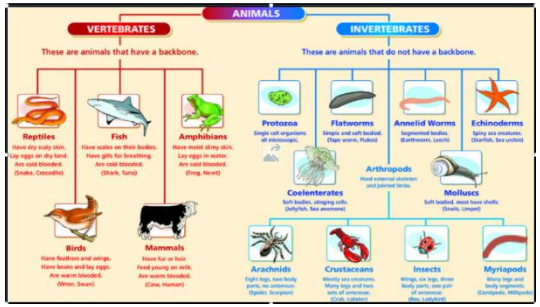
The Inca Trail — Christ the Redeemer, Rio de Janeiro

Berkswell CE Primary School
Year 6 – Science – Living things and their habitats (Classification)

Vocabulary	
algae	A single or multi-cellular organism that has no roots, stems or leaves and is often found in water.
amphibian	A cold-blooded vertebrate - frogs, toads, newts, salamanders and caecilians
arachnid	A group of small animals, similar to insects but with four pairs of legs, that include spiders, scorpions, ticks and mites
bacteria	Tiny little organisms that are everywhere around us.
classification	The arrangement of organisms into orderly groups based on their similarities and presumed evolutionary relationships.
crustacean	Mostly live in water with a hard shell and several pairs of legs
distinguish	Recognise a difference
fungi	A classification or group of living organisms. This means they are not animals, plants, or bacteria.
habitat	The natural home or environment of an animal, plant or other organism
invertebrate	An invertebrate animal does not have a backbone and 97% of creatures belong to this group.
mammal	A warm-blooded vertebrate usually distinguishable by hair or fur
micro-organism	An organism which is microscopic, making it too small to be seen by the human eye.
molluscs	An animal that has a soft body, no spine, and is often covered with a shell
organism	An individual animal, plant or single-celled life form.
species	A group of closely related organisms that are very similar to each other and are usually capable of producing offspring.
taxonomy	The science of naming, identifying and classifying organisms.
vertebrate	A vertebrate animal is one that has a backbone.
virus	A small infectious agent that replicates only inside the living cells of an organism.

Classification of Plants and Animals





Prior Learning

- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment (Y4)
- recognise that living things can be grouped in a variety of ways (Y4)
- the differences in the life cycles of a mammal, an amphibian, an insect and a bird (Y5)
- the life process of reproduction in some plants and animals. (Y5)

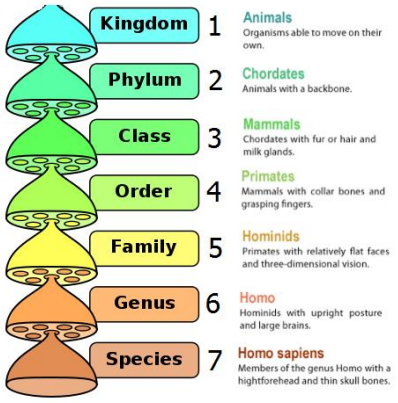
By the end of the unit you will be able to:

- sort and group animals based on their characteristics
- recognise that animals can be divided into vertebrates and invertebrates
- recognise that plants can be divided into flowering and non-flowering plants
- know that plants and animals are two main groups but there are other living things that do not fit into these groups, e.g. micro-organisms
- know that plants can make their own food whereas animals cannot
- describe Carl Linnaeus and his development of his classification system
- name types of microorganisms e.g bacteria, yeast, toadstools.
- complete descriptions on the characteristics of groups of organisms, using images as prompts



Carl Linnaeus – Born in Sweden 23rd May 1707. A leading light in the field of taxonomy. Famous for developing the first system for classifying animals effectively.

The Seven Levels of Classification



Micro-organisms

Microorganisms are very tiny living things. They are so small that they are not visible to the naked eye, so a microscope is needed to see them. Microorganisms can be found all around us. They can live on and in our bodies, in the air, in water and on the objects around us. They can be found in almost every habitat on Earth.



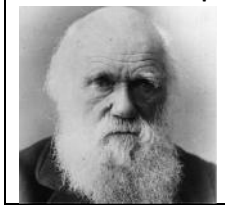
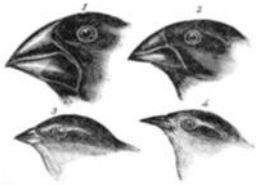
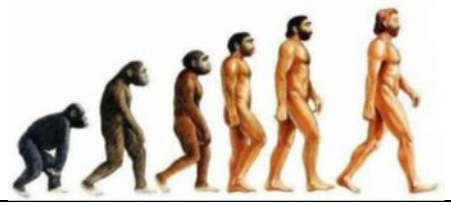


Berkswell CE Primary School
Year 6 – Science – Evolution and Inheritance

Vocabulary	
adaptation	a change in structure or function that improves the chance of **survival** for an animal or plant within a given **environment**
ancestor	an early type of animal or plant from which a later, usually dissimilar, type has **evolved**
biodiversity	a wide variety of plant and animal **species** living in their natural **environment**
breeding	the process of producing plants or animals by **reproduction**
characteristics	the qualities or features that belong to them
environment	all the circumstances, people, things, and events around them that influence their life
evolution	a process of change that takes place over many generations, during which species of animals, plants, or insects slowly change some of their physical **characteristics**
extinct	no longer has any living members, either in the world or a particular place
fossil	the hard remains of a **prehistoric** animal or plant that are found inside a rock
generation	the act or process of bringing into being; through **reproduction**, especially of **offspring**
inherit	you are born with a characteristic because your parents or **ancestors** also had it.
maladaptation	the failure to **adapt** properly to a new situation or **environment**
mutation	**characteristics** that are not **inherited** from the parents or **ancestors** and appear as new **characteristics**.
natural selection	a process by which **species** of animals and plants that are best **adapted** to their **environment survive** and **reproduce**, while those that are less well **adapted** die out
offspring	a person's children or an animal's young
reproduction	when an animal or plant produces one or more individuals similar to itself
species	a class of plants or animals whose members have the same main **characteristics** and are able to **breed** with each other
survive	continue to exist
theory	a formal idea or set of ideas that is intended to explain something
variation	a change or slight difference

Charles Darwin

Charles Darwin, an evolutionary scientist, studied different animal and plant **species**, which allowed him to see how **adaptations** could come about. His work on the finches was some of his most famous.

Prior Learning
• Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. (Y2) • Notice that animals, including humans, have offspring which grow into adults. (Y2) • Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3) • Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3) • Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4) • Describe the life process of reproduction in some plants and animals. (Y5)

What will I know by the end of the unit	
What is evolution?	• Evolution is a process of change that takes place over many generations, during which species of animals, plants, or insects slowly change some of their physical characteristics. This is because offspring are not identical to their parents. • It occurs when there is competition to survive. This is called natural selection. • Difference within a species (for example between parents and offspring) can be caused by inheritance and mutations. • Inheritance is when characteristics are passed on through generations. • Mutations in characteristics are not inherited from the parents and appear as new characteristics.
How do we know about evolution?	• Evidence of evolution comes from fossils - when these are compared to living creatures from today, palaeontologists can compare similarities and differences. • Other evidence comes from living things - comparisons of some species may reveal common ancestors.
What is adaptation?	• Adaptation is when animals and plants have evolved so that they have adapted to survive in their environments. For example, polar bears have a thick layer of blubber under their fur to survive the cold, harsh environment of the Arctic while giraffes have long necks to reach the leaves on trees. • Sometimes adaptations can be disadvantageous. One example of this can be the dodo, which became extinct as it lost its ability to fly through evolution. Flying was unnecessary for the dodo as it had lived for so many years without predators, until its native island became inhabited.