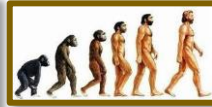




Y6 Science

Evolution & Inheritance



**Key Knowledge:** Evolution by natural selection is the understanding that, over generations, species of living things have changed to adapt to their habitats. The organisms that are best adapted to their habitats will be more likely to reproduce and pass on their genes to their offspring. Evidence for evolution includes the fossil record and DNA.

**Key Vocabulary**

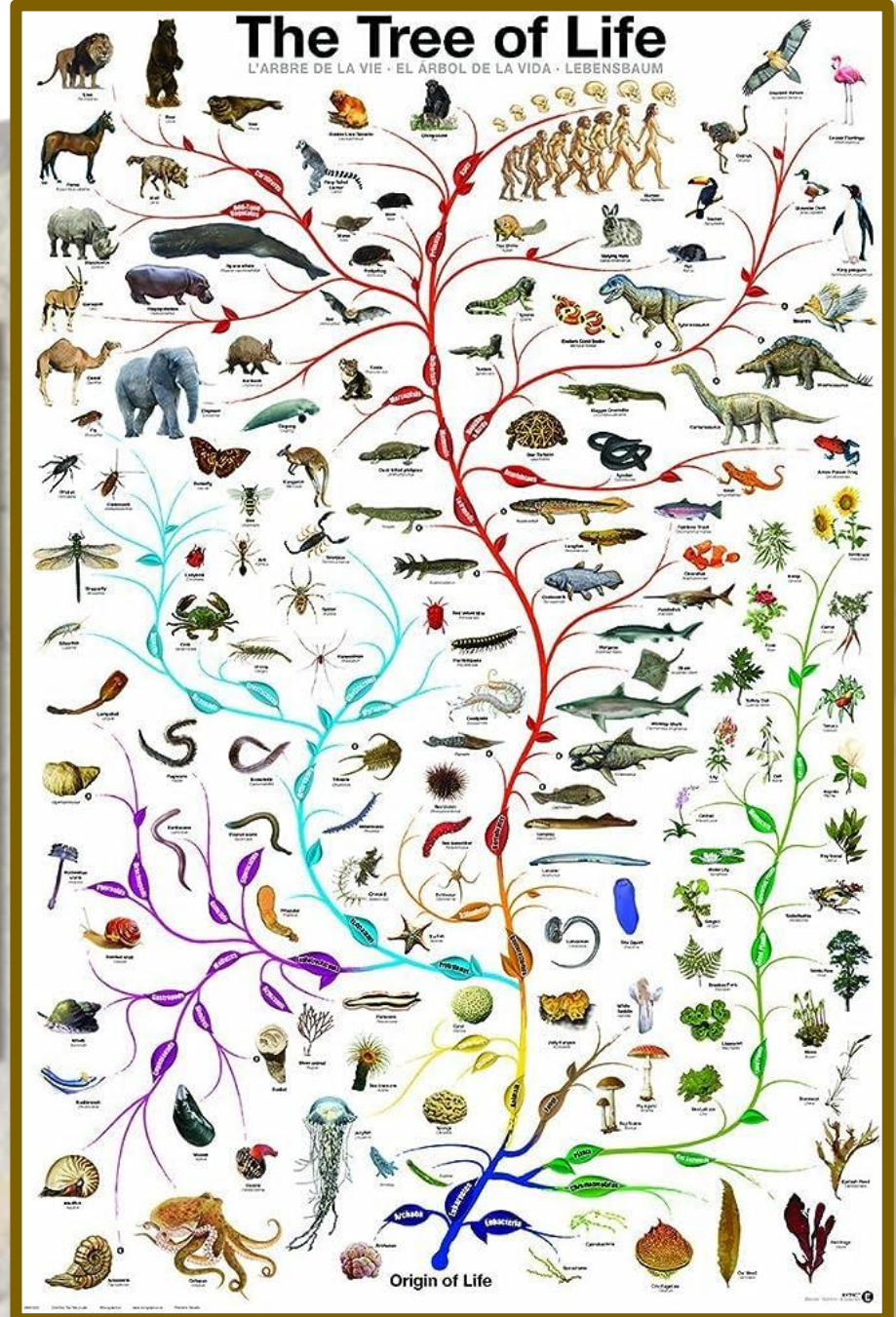
**evolution:** the process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth  
**inheritance:** characteristics passed on from parent to offspring

**offspring:** an animal or plant's young  
**habitat:** the natural home or environment of an animal, plant, or other organism

**adaptation:** the process where a species or an organism gradually becomes better acclimated to its environment

**natural selection:** Natural selection is the process through which populations of living organisms adapt and change. Individuals in a population are naturally variable, meaning that they are all different in some ways. This variation means that some individuals have traits better suited to the environment than others.

**Charles Darwin and the Galapagos Finches**







Carl Linnaeus was a scientist from Sweden; his classification system, which is known as taxonomy, helps us determine what an organism is.

### KEY VOCABULARY

- Taxonomy:** the scientific study of naming, defining, and classifying organisms based on shared characteristics
- Vertebrates:** animals with a backbone
- Invertebrates:** animals without a backbone
- Mammals:** a type of animal that has hair or fur. They breathe air through their lungs, are warm blooded and feed milk to their young.
- Birds:** a type of animal that has 2 legs, feathers, wings, and a beak. They lay eggs on land and are warm blooded.
- Fish:** animals that have scales and live in water. They use gills to breathe, have fins and lay eggs in the water. They are cold blooded.
- Reptiles:** animals that have hard, scaly skin, are cold blooded and lay eggs on land.
- Amphibian:** These live in water or on land. They are cold blooded. They use gills to breathe when they are young, and lungs to breathe when they are adults. They have moist, smooth skin, and have 4 legs. They lay their eggs in water.
- Insects:** These animals have an exoskeleton, 6 legs and a pair of antennae. Their bodies are made of 3 parts: the head, thorax, and abdomen. They are cold blooded.
- Arachnid:** Most of these animals have 4 pairs of legs. They have a hard exoskeleton, jointed legs for walking and are cold blooded.
- Microorganism:** an organism that can only be seen through a microscope
- Fungus (fungi):** Any of a wide variety of organisms that reproduce by spores, including the mushrooms, moulds, yeasts, and mildews.
- Bacteria:** are small single-celled organisms
- Virus:** an infectious microbe

**Key Knowledge:** Living things (animals, plants, and microorganisms) can be classified/organised into different groups according to their characteristics.

Animals are organised into 2 main groups: vertebrates and invertebrates, which are then divided again into smaller groups.

Microorganisms can be organised into those that are harmful or helpful to humans.



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