

## KNOWLEDGE ORGANISER

**BIG IDEA:** GENES

**TOPIC:** EVOLUTION

Key Word	Definition
population	Group of organisms of the same species living in the same place.
natural selection	Process by which species change over time in response to environmental changes and competition for resources
extinct	When no more individuals of a species remain
biodiversity	The variety of living things. It is measured as the difference between individuals of the same species, or the number of different species in an ecosystem
competition	When two or more living things struggle against each other to get the same resource
evolution	Theory that the animal and plant species living today descended from species that existed in the past.
gene	a section of DNA that is responsible for a characteristic like eye colour or blood group
variation	The differences within a species.

Biodiversity is the variety of living things. It is vital to maintaining populations. Within a species variation helps against environmental changes, avoiding extinction.

Within an ecosystem, having many different species ensures resources are available for other populations.



1. Long time ago, there were giraffes with short and long neck. The ones with short neck couldn't eat, they were really hungry.

2. Only long-necked giraffes survived.

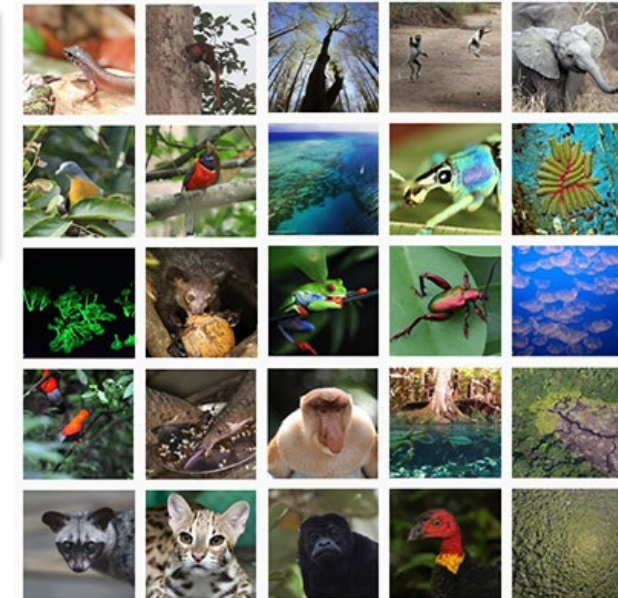
### Natural Selection

A theory that explains how species evolve and how extinction occurs.

1. Variation exist within a population
2. Those better adapted to their environment are able to survive and reproduce
3. These organisms pass on these beneficial genes to their offspring

The picture shows some species that live in the rainforest.

The rainforest has high biodiversity as there are large number of organisms living there.



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