

ANIMALS: OVERVIEW

Big Picture

Animals are a group of living organisms with much variety. Despite their differences, animals have certain traits in common. For example, all animals have a similar cell that does not include a cell wall. Their similarities show that animals descended from a common ancestor. Animals originated from chordates, which were organisms that have a notochord. Animals are classified into phyla, depending on characteristics such as having a vertebral column or not.

Key Terms

Animals: A kingdom of multicellular eukaryotes.

Invertebrates: Animals that lack a vertebral column.

Vertebrates: Animals that have a vertebral column.

Vertebral Column: Another name for backbone.

Exoskeleton: Non-bony skeleton that forms on the outside of the body.

Chordate: An animal with a notochord.

Notochord: A rigid rod that runs down the entire body.

Cranium: A bony skull that protects and encloses the brain.

Amniotes: Animals that produce eggs with internal membranes, which allow them to stay on land to reproduce as opposed to finding water.

Synapsids: One of the two groups that evolved from amniotes and eventually evolved into mammals.

Sauropsids: One of the two groups that evolved from amniotes. Sauropsids evolved into reptiles, dinosaurs, and birds.

Characteristics of Animals

Animals are heterotrophs because they do not make their own food or nutrients. They get their energy and nutrients from consuming other living things.

- Can detect environmental stimuli through their sensory nerve cells
- Can control movement at some stage during their life
- Have an internal digestion system for food
- Most animals spend most of their life as diploids
- Most animals reproduce sexually
 - A sperm and an egg fuse to form a zygote, which develops into an embryo
 - The embryo develops into an adult

Animal Cells

Animal cells have a nucleus and other membrane-bound organelles, but unlike plants and fungi, they do not have a cell wall.

This is what gives animal cells flexibility to take on different shapes to complete different jobs.

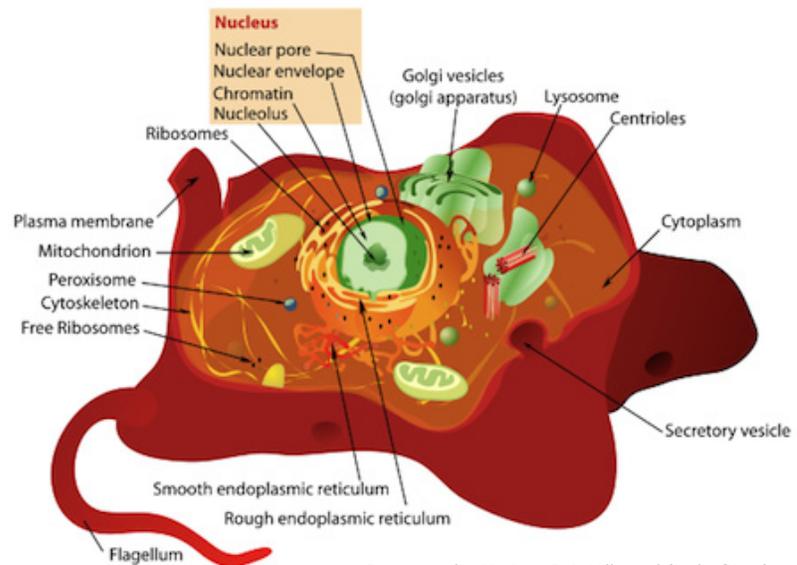


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