



**Test Ninjas**

VOCABULARY STUDY SERIES

ACT VOCABULARY

# ACT Science Vocabulary: Biology & Ecology

20 focused words in Biology & Ecology

**20**

UNIQUE WORDS

**1**

CATEGORIES

**ACT**

EXAM FOCUS



# About this study guide

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This vocabulary guide was prepared and published by Test Ninjas as an independent study resource. It is designed to help students build the precise word knowledge needed for demanding academic reading and reasoning.

## How to use this guide

Study in short, repeated sessions. Read each definition, say the word aloud, and use the example to understand how the word functions in context. Return to unfamiliar words until you can explain them without looking at the definition.

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**001 anatomical** *adjective***BIOLOGY & ECOLOGY**

Relating to the physical structure of a body or organism

Leonardo da Vinci's **anatomical** drawings reveal a scientific curiosity far ahead of his time.

**MEMORY CUE:** An anatomical chart maps the structures and parts of a body.

**002 biodiversity** *noun***BIOLOGY & ECOLOGY**

The variety of plant and animal life in a particular habitat or in the world generally

The coral reef's extraordinary **biodiversity** makes it one of the most scientifically valuable ecosystems on the planet.

**MEMORY CUE:** Biodiversity fills one habitat with a broad variety of living species.

**003 biosphere** *noun***BIOLOGY & ECOLOGY**

The regions of the earth's surface and atmosphere occupied by living organisms; the global ecological system

Human activity is altering the **biosphere** at a rate unprecedented in the geological record.

**MEMORY CUE:** The biosphere wraps Earth in every region where life exists.

**004 carnivores** *noun (plural)***BIOLOGY & ECOLOGY**

Animals that feed on other animals; meat-eaters

Large **carnivores** play a critical role in regulating prey populations and maintaining ecosystem balance.

**MEMORY CUE:** Carnivores carve into meat because other animals are their food.

**005 fauna** *noun***BIOLOGY & ECOLOGY**

The animals of a particular region, habitat, or geological period

The island's **fauna** includes several species found nowhere else on Earth, making it a priority for conservation.

**MEMORY CUE:** Fauna means the animal life found in a region or period.

**006 herbivores** *noun (plural)***BIOLOGY & ECOLOGY**

Animals that feed on plants

Large **herbivores** like elephants shape their environment by toppling trees and creating clearings that benefit other species.

**MEMORY CUE:** Herbivores browse herbs and other plants instead of eating animals.

007 **omnivorous** *adjective*

BIOLOGY & ECOLOGY

Feeding on food of both plant and animal origin; (figurative) having wide-ranging interests or tastes

The author was an **omnivorous** reader whose influences ranged from ancient Greek philosophy to modern comic books.

**MEMORY CUE:** An omnivorous eater's menu includes both plants and animals.

008 **offspring** *noun*

BIOLOGY & ECOLOGY

The young produced by an organism

The biologist tracked the **offspring** of the tagged wolves to study how behavioral traits are passed between generations.

**MEMORY CUE:** Offspring spring from their parents as the next generation.

009 **phylogeny** *noun*

BIOLOGY & ECOLOGY

The evolutionary development and history of a species or group of organisms

Advances in DNA sequencing have revolutionized the study of **phylogeny**, revealing evolutionary relationships invisible in the fossil record.

**MEMORY CUE:** A phylogeny is a branching family tree of evolutionary history.

010 **phytoplankton** *noun*

BIOLOGY & ECOLOGY

Microscopic marine organisms that photosynthesize, forming the base of aquatic food chains

**Phytoplankton** produce roughly half of the world's oxygen through photosynthesis, making them essential to life on Earth.

**MEMORY CUE:** Phytoplankton are tiny floating plantlike organisms feeding aquatic food webs.

011 **predation** *noun*

BIOLOGY & ECOLOGY

The act of one organism hunting and consuming another

The introduction of wolves into the ecosystem restored a natural cycle of **predation** that controlled the deer population.

**MEMORY CUE:** Predation is the hunt in which one organism consumes another.

012 **excretion** *noun*

BIOLOGY & ECOLOGY

The process of discharging waste matter from the body

The kidneys play a vital role in the **excretion** of metabolic waste products from the bloodstream.

**MEMORY CUE:** Excretion is the body's exit system for discharging waste.

**013 respire** *verb***BIOLOGY & ECOLOGY**

To breathe; to release carbon dioxide through metabolic processes

All aerobic organisms **respire**, consuming oxygen and releasing carbon dioxide as they convert food into energy.

**MEMORY CUE:** To respire is to breathe and exchange gases through metabolism.

**014 virulence** *noun***BIOLOGY & ECOLOGY**

The severity or harmfulness of a disease or pathogen

The **virulence** of the new strain alarmed epidemiologists, who feared it could overwhelm hospital capacity.

**MEMORY CUE:** Virulence measures how severely a pathogen can harm its host.

**015 zooplankton** *noun***BIOLOGY & ECOLOGY**

Tiny aquatic animals that drift in water bodies; a domain-specific ecological term

**Zooplankton** form a critical link in the marine food chain, feeding on phytoplankton and serving as prey for small fish.

**MEMORY CUE:** Zooplankton are tiny drifting animals suspended in aquatic food webs.

**016 organism** *noun***BIOLOGY & ECOLOGY**

An individual living thing capable of carrying out the processes necessary for life.

Each **organism** in the culture consumed nutrients, released waste, and reproduced under favorable conditions.

**MEMORY CUE:** An organism is one complete living unit, from a bacterium to a blue whale.

**017 population** *noun***BIOLOGY & ECOLOGY**

All members of the same species living in a defined area at a particular time.

The island's lizard **population** declined sharply after drought reduced the insects available as food.

**MEMORY CUE:** A population gathers every member of one species inside the same place-and-time boundary.

**018 ecosystem** *noun***BIOLOGY & ECOLOGY**

A community of organisms interacting with one another and with their physical environment.

Removing the top predator altered the **ecosystem** by changing prey numbers and plant abundance.

**MEMORY CUE:** An ecosystem is a living community plus the water, soil, air, and energy around it.

019 **habitat** *noun*

## BIOLOGY &amp; ECOLOGY

The natural environment where an organism lives and obtains the resources it needs.

The wetland provides **habitat** with shallow water, nesting cover, and abundant food for migrating birds.

**MEMORY CUE:** A habitat is an organism's natural home address, complete with food and shelter.

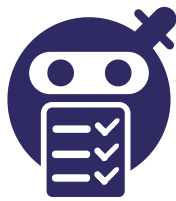
020 **photosynthesis** *noun*

## BIOLOGY &amp; ECOLOGY

The process by which certain organisms use light energy to build sugars from carbon dioxide and water.

During **photosynthesis**, the algae released more oxygen when brighter light reached the culture vessel.

**MEMORY CUE:** PHOTO means light and SYNTHESIS means building; photosynthesis uses light to build sugar.



ACT VOCABULARY

# Keep building your edge.

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Vocabulary grows through repeated exposure and deliberate use.  
Revisit this list, write with the words, and practice recognizing their  
meaning in context.

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