Ecology Unit Vocabulary

Ecology Vocabulary | For each term in Red make a 3x5 Card

Directions

For every new term below in red, write the vocabulary word on one side of your 3x5 Card and on the back of the index card define the term. When necessary include examples as well.

Population Ecology

CK-12 Life Science for Middle School > Ecology Overview

Ecology Biotic Abiotic

Introduction to Ecology

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

Biotic, include examples, competition, predation, symbiosis Abiotic, include examples. For example temperature, water, sunlight, wind, soil, periodic disturbances.

Atoms
Molecules
Organelles
Cells
Tissues
Organ Systems

<u>CK-12 Life Science for Middle School</u> > Ecological Organization

Organism
Population
Community
Ecosystems
Biosphere

Bioassessment of Species Diversity Using Field Techniques

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

- 1. Species Richness
- 2. Macroinvertebrates
- 3. S Values
- 4. Alpha Diversity
- 5. Gamma Diversity
- 6. Beta Diversity

Alpha diversity (or species richness), the most commonly referenced measure of species diversity, refers to the total number of species found in a particular biological community, such as a lake or a forest.

Gamma diversity describes the total number of species that occur across an entire region, such as a mountain range or continent, that includes many ecosystems.

Beta diversity connects alpha and gamma diversity. It describes the rate at which species composition changes across a region. Beta diversity is calculated as gamma diversity divided by alpha diversity.

DE DE DE	Alpha	Gamma	Beta
G F G B C F G B C F G B C F G B C F G B C F G B C F G B C F G C F	6	7	1.2
Ecoregion 2 C C E B C C C E C C C C C C C C C	3	6	2
Ecoregion 3	4	10	2.5

<u>CK-12 Life Science for Middle School</u> > Population

Population
Population Size
Population Density
Dispersion, examples, Random, Uniform, Clumped

Birth Rate Death Rate

Introduction to Populations

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

Indirect Indicators
Mark-Recapture
Demography
Cohort
Life Tables
Survivorship Curve Types I, II, III

• CK-12 Life Science for Middle School > 12.4 Population Growth Patterns

Population Growth Rate
Birth Rate and Death Rate
Migration, Immigration, Emigration,
Exponential Growth (J-shaped)
Logistic Growth (S-shaped)
Carrying Capacity (K)

Population Growth

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

N/t = r N (K-N) / K

CK-12 Life Science for Middle School > 12.5 Population Growth Limits

Limiting Factors, examples

Population Regulation

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

K-select r-select Density Dependent Factors, examples Density Independent Factors, examples

Allee Effect

Human Population

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

Demographic Transition
Age Structure, three types

Community Ecology

Introduction to Community Ecology

After watching the video and taking notes in your Ecology binder. Create the following 3x5 cards. Write the term on one side of the card and on the other side define the term.

Competition
Symbiosis (three different kinds) Examples
Niche | Realized and Fundamental
Resource Partitioning
Cryptic Coloration
Deceptive Markings
Mechanical Defenses
Aposematic Coloration
Mimicry | Batesian and Mullerian

• CK-12 Life Science for Middle School > 12.7 <u>Competition</u> and 12.8 <u>Predation</u>

Interspecific Interactions
Intraspecific Interactions
Competitive Exclusion Principle
Character Displacement
Predator/Prey
Keystone Species

 CK-12 Life Science for Middle School > 12.9 <u>Symbiosis</u> and 12.10 <u>Ecosystems</u>

Parasitism, Mutualism, Commensalism

CK-12 Life Science for Middle School > 12.11 <u>Habitat and Niche</u>

Ecosystem Ecology

- CK-12 Life Science for Middle School > 12.12 <u>Biomes</u> and > 12.13 <u>Terrestrial</u> <u>Biomes</u>
- Terrestrial Biomes

Chaparral

Grasslands

Savannas

Coniferous Forests

Tundra

Permafrost

Desert

Deciduous

Tropical Forests

- CK-12 Life Science for Middle School > 12.14 <u>Aquatic Biomes</u>
- Aquatic Biomes

Plankton

Nekton

Benthos

Photic Zone

Upwelling

Wetlands

Lakes

Rivers

Estuaries

Intertidal Zones

Pelagic Zone

Coral Reefs

Abyssal Zones

CK-12 Life Science for Middle School > 12.15 <u>Biosphere</u>

- CK-12 Life Science for Middle School > 12.16 Producer
- Primary Production

Primary Production
Gross and Net Primary Production
Limiting Nutrient
Eutrophication
Secondary Production

- CK-12 Life Science for Middle School > 12.17 Consumers and Decomposers
- Introduction to Ecosystems

Energy Flow
Chemical Cycling
Trophic Levels
Autotroph | Producer
Heterotroph
Primary, Secondary, Tertiary Consumers
Decomposers
Scavengers

- CK-12 Life Science for Middle School > 12.18_Food Chain
- Trophic Structures

Trophic Structure Food Chain and Web Dominant Species Keystone Species

- CK-12 Life Science for Middle School > 12.19_<u>Energy Flow</u>
- Ecological Pyramids

Ecological Pyramids
Energy Biomass, and Numbers

• CK-12 Life Science for Middle School > 12.20 Succession

Ecological Succession

Ecological Succession Primary and Secondary Facilitate Pioneer Species Intermediate Species Climax Community