Ecology

Ecology –

living –

examples:

non-living –

examples:

5 levels of environmental organization:

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organism –

Population –

Community –

Ecosystem –

Biosphere –

Climate –

* Because the Earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, radiation from the sun hits the Earth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which changes the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3 Main Climate Zones

* 1. Tropical Zone
* 1. Temperate Zone
* 1. Arctic Zone

Things that affect regional climate:



- breezes from an ocean or lake create **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



- rain shadow –



**-** as you increase in altitude, **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Biome –

Land Biomes:

Tundra

* + - * Climate:
      * Animals:
      * Plants:

Taiga

* + - * Climate:
      * Animals:
      * Plants:

Temperate Forest

* + - * Climate:
      * Animals:

* + - * Plants:

Chaparral

* + - * Climate:
      * Animals:

* + - * Plants:

Tropical Rain Forest

* + - * Climate:
      * Animals:
      * Plants:

Desert

* + - * Climate:
      * Animals:
      * Plants:

Grassland

* + - * Climate:
      * Animals:
      * Plants:

Water Biomes:

Flowing Water

* + - * Examples:
      * Animals:

Standing Water

* + - * Examples:
      * Animals:

Inland Wetland

* + - * Examples:
      * Animals:

Coastal Wetland

* + - * Examples:
      * Animals:

Estuary

* + - * Examples:
      * Animals:

Marine Biome

* + - * Examples:
      * Animals:

Population Growth

Exponential growth –

Carrying capacity –

Limiting factor –

Examples:

Density-dependent limiting factor –

Examples:

Density-independent limiting factor –

Examples:

Stable Population –

Unstable population –

Immigration –

Emigration –

Interaction between organisms

A. Competition –

B. Predators and Prey –

1. prey –
2. predator –
3. Prey adaptations

a. camouflage –

b. defensive chemicals –

c. warning coloration –

1. Symbiosis –
   1. Mutualism –

Example:

* 1. Commensalism –

Example:

* 1. Parasitism –
     1. parasite –
     2. host –

Example:

Food chain –

Food web –

3 Main Parts of the food chains and webs

A. Producers –



B. Consumers –



1. Methods for obtaining food

Herbivore –

Carnivore –

Omnivore –

1. Where they fit in a food chain/food web

1st Order consumers –

2nd Order consumers –

3rd Order consumers –

C. Decomposers –

Flow of Energy in Ecosystems

The sun –

Energy is:



1. Energy Pyramid –

Conservation of wildlife –

* 1. Why?



* 1. Classification –
     + Extinction –

Examples:

* + - Extirpated –

Examples:

* + - Endangered –

Examples:

* + - Threatened –

Examples:

* + - Limited –
    - Declining –
    - Endemic species –

Examples:

* + - Introduced species –

Examples:

* 1. Causes of extinction

16. Natural cycles

A. Water cycle -

* + - Where is water found?

4. * + Processes of water cycle:
5. evaporation –
6. transpiration –
7. condensation –
8. precipitation –
9. runoff –
10. groundwater –

B. Carbon cycle:

1. photosynthesis –
2. respiration –
3. decomposition –
4. combustion –

C. Nitrogen cycle:

1. nitrogen fixation –
   * + bacteria –
     + lightning -