BASIC ECOLOGY NOTES PPT WORKSHEET

NAME: _____
DATE: _____
PERIOD: _____

What is ecology?

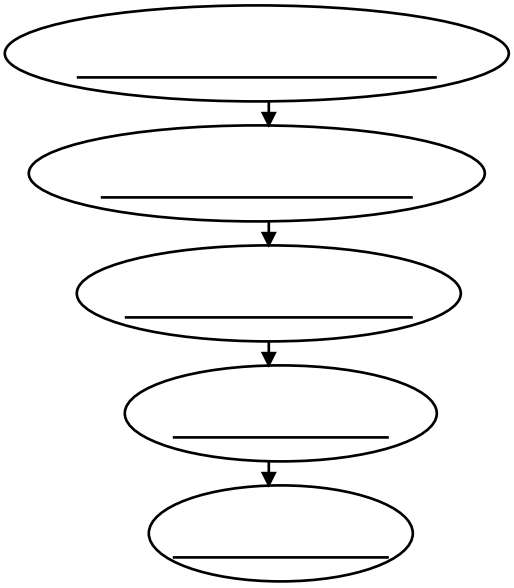
_____ - the scientific_____ of _____ between _____and their_____, focusing on _____transfer

- It is a science of_____.

What do you mean by environment?

The environment is made up of _____ factors:

- _____ **factors**- all _____ organisms inhabiting the Earth
- _____ **factors**- _____ parts of the environment (i.e._____, soil, _____, moisture, _____ currents)



_____- any _____ or _____form exhibiting all of the characteristics of life, an_____.

- The _____ level of organization

_____-a group of organisms ___ _____ _____living in the same _____ at the same _____ that _____ & _____with each other for _____(ex. food, mates, shelter)

_____- _____interacting _____that inhabit a _____environment and are _____.

_____- populations in a _____ & the _____ factors with which they interact (ex._____, terrestrial)

_____- life supporting portions of _____composed of air, _____, fresh water, and salt water.

- The _____ level of organization

Habitat vs. Niche

_____- the _____ a species plays in a community (job)

_____- the _____ in which an organism _____ out its life (address)

A _____is determined by the _____ _____of an organism, or a_____ _____.

_____ **factor**- any biotic or abiotic factor that _____ the _____of organisms in a specific environment.

Examples of limiting factors-

- Amount of _____
- Amount of _____
- _____

Feeding Relationships

- There are ___ main types of feeding relationships

1. _____- _____
2. _____- _____
3. _____- _____

_____- all _____ (plants), they trap _____ from the _____

- _____ of the food chain

_____- all_____: they _____ _____ containing the sun's energy

- _____
- Carnivores
- _____
- Decomposers

Herbivores

- Eat _____

- _____ consumers
- _____ animals

Carnivores

- Eat _____

- _____

  - _____ prey animals for food.

- _____

  - Feed on _____, dead animals

Omnivores

- Eat _____ plants and animals

Decomposers

- _____ the complex compounds of _____and decaying plants and animals into simpler _____ that can be _____

Symbiotic Relationships

_____- _____ species living _____

___ Types of symbiosis:

1. _____
2. _____
3. _____

_____- ____ species _____ and the other is _____ harmed nor helped

Ex. _____ on a tree, _____ bears and cyanobacteria

_____: A_____, such as a tropical orchid or a bromeliad, that _____on another plant upon which it _____for mechanical support but ____for_____. Also called *aerophyte*,___ _____.

_____- _____ species _____(parasite) and the _____ is _____ (host)

- Parasite-_____ relationship

Ex. lampreys, _____, fleas, _____, tapeworms

_____- _____ to _____ species

Ex. cleaning _____ and cleaner shrimp, _____

Symbiosis Review

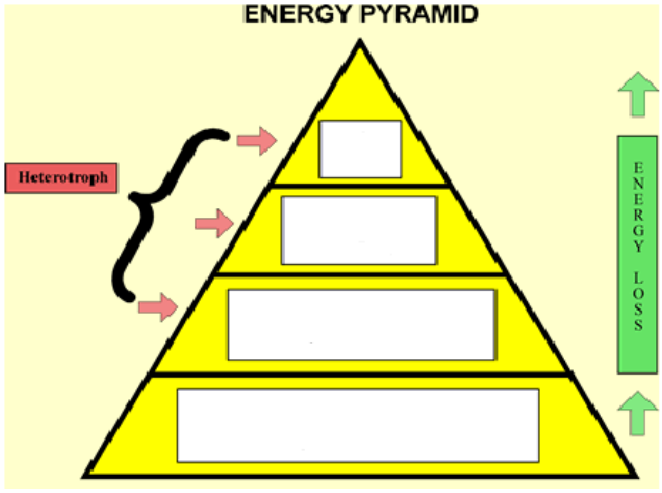
Type of relationship	Species harmed	Species benefits	Species neutral
1.			
2.			
3.			

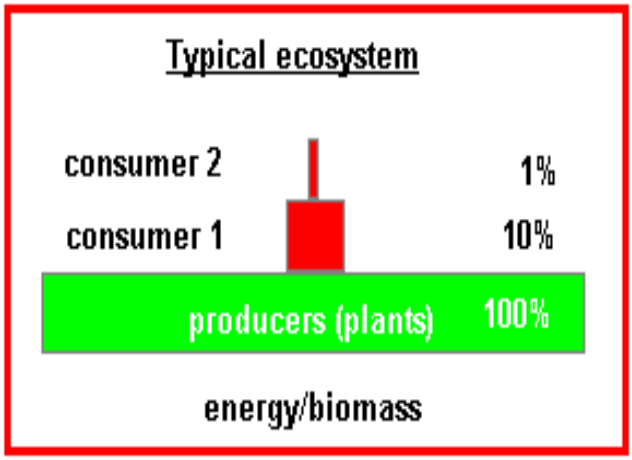
Trophic Levels

- Each _____ in a food _____is known as a _____ level.
- Trophic levels _____ a feeding _____ in the _____ of _____ and matter in an ecosystem.

_____- the _____ of _____ matter comprising a group of organisms in a habitat.

- As you move ___ a food chain, both available _____ & _____ _____.
- _____ is transferred upwards but is _____ with each transfer.





_____ **chain**- _____ model that shows how matter and _____ move through an ecosystem

Draw a sample food chain that you might see in Virginia: include a producer, a primary consumer, a secondary consumer, and a tertiary consumer

_____ → _____ → _____ → _____

Food _____- shows ____ possible feeding _____ in a community at each _____ level

- Represents a _____ of interconnected food _____

Food chain- just ___ path of energy

Food web- ____ possible energy paths

Nutrient Cycles

Cycling maintains _____ (balance) in the environment.

- ___ cycles to investigate:
    1. _____ cycle
    2. _____ cycle
    3. _____ cycle

_____ **cycle-** evaporation, _____, condensation, _____

_____ **cycle-** _____ and _____ cycle carbon and _____ through the environment.

_____ **cycle-**

_____ nitrogen (N_2) makes up nearly ___ %-___ % of air.

Organisms ____ _____ use it in that form.

_____ and _____ convert nitrogen into _____ forms.

Only in certain _____ and industrial _____ can _____ nitrogen.

Nitrogen_____ - _____atmospheric nitrogen (N_2) into _____(NH_4^+) which can be _____ to make organic compounds like_____ _____.

Nitrogen-fixing_____: Some live in a _____ relationship with plants of the _____family (e.g., soybeans, clover,_____).

- Some _____-fixing bacteria live _____ in the_____.
- Nitrogen-fixing _____are essential to maintaining the fertility of semi-_____ environments like _____ paddies.

_____ **in food chains-**

While energy _____ as it moves up the food chain, _____ _____ in potency.

- This is called _____ _____

Ex: _____ & Bald _____