FOOD CHAINS/WEBS

(WHAT ARE THEY AND WHY?)

- A food chain is a _____ series of organisms, each dependent on the next as a source of food.
- A food chain describes the different _____ at which organisms eat and the direction that _____ flows within the ecosystem.

TROPHIC LEVELS

- Definition: How the levels of _____ in the food chain are divided.
- The trophic levels are the individual levels of the hierarchy in which organisms _____ the same function in the food chain and the same nutritional _____ to the primary sources of energy.
- The most common trophic levels are:
    - Producer
    - _____ Consumer
    - Secondary Consumer
    - Tertiary Consumer
    - Apex Predators
    - Decomposers

Producers

- Are organisms that make their own food; they are also known as _____. They get energy from chemicals or the sun, and with the help of water, convert energy into a useable form such as _____.
- This usable form of energy or _____ can then be used by an organism at a higher trophic level.
- The most common examples of a _____ are plants.

WHERE DOES THE ENERGY IN A FOOD CHAIN START? _____

Consumers

- After producers there are _____.
- Also called _____. Consumers are species that must obtain their energy from _____ other organisms, either plants or animals.

<u>Primary Consumers</u>

- An organism that feeds on _____ producers.
- Usually _____ that feed on autotrophic plants.

Secondary Consumers

- An organism that consumes the _____ that eat only plants.

Tertiary Consumers

- Carnivores at the topmost level in a food chain that feeds on other _____.
- Can also eat primary consumers.

Apex Predators

- Also known as an _____ predator or top predator.
- A predator that is at the top of a food chain, with no _____ predators.
- In terms of trophic levels, they occupy the highest trophic level.
  - Examples: Wolf, Eagle

WHERE ARE HUMANS ON THE FOOD CHAIN?

- Not all humans are in the same trophic level.
- Humans are _____, which means that they consume both plant and animal material.
  - Other examples include: Bears, Hedgehogs

What is a food web?

- A food web is a system of _____ and interdependent food chains.
- A food web can be _____ or complex.

WHY FOOD CHAINS?

- Food chains let us understand _____ in an ecosystem.
- If we know this, we can identify important _____ to the ecosystem.
- If we know the food chain, we can _____ the outcome of losing one of the species.
- Knowing the food chain can let us know the way energy and even _____ flow within an ecosystem.
  - Example: if wolves are removed due to overexploitation (hunting) what happens to the other species?
    - (There is a population increase in small herbivores, which leads to a decline in biodiversity because they eat all the small vegetation.
  - Example 2: If there are lots of one type of insect due to increasingly warm temperatures, what happens to the population birds who eat them?
    - (There is a population increase in the birds)