Quiz 3B Notes



VOCABULARY

Producer – organisms that make their own food through photosynthesis or chemosynthesis

Consumer – organisms that eat other organisms as their food

- Herbivore eats only producers
- Carnivore eats only other animals
- Omnivore eats producers or animals
- Scavenger eats dead organisms
- Decomposer eats decaying organisms and returns nutrients to ecosystem

Trophic Level – "trophic" means "feeding" – "level" meaning how much energy available

- 1st Level –producers
- 2nd Level herbivores
- 3rd and 4th Levels omnivores & carnivores
 - As you go UP in level, the available energy decreases.
 - As organisms get bigger, they need more energy to survive.

VOCABULARY

Food Chain – a diagram to show the flow of energy in an ecosystem

- Food chains always start with a producer
- Consumers are next -an
 herbivore or omnivore
- Then another consumer an omnivore or carnivore
- Ends with the top predator

 a carnivore OR
 scavenger/decomposer

FOOD CHAIN beginnings

- The ORIGINAL source of ENERGY is _____
- WHY is this true? _____
- The EXCEPTION to this is when __.

FOOD CHAIN example

Tree \rightarrow Caterpillar \rightarrow Bluebird \rightarrow Bird of Prey



FOOD CHAIN arrows

Arrow show ...

Claim • Evidence • Reasoning

QUESTION: Using the article, "Chemosynthesis" <<u>click here for link</u>>, identify what chemosynthesis is, where it happens, what organisms do it, and why they need to do it. Explain chemosynthesis citing evidence from the article.

CLAIM (the answer to the question in one sentence):

EVIDENCE (the clues from the text which support the claim)

EVIDENCE #1 – WHAT is chemosynthesis?

HOW does it work – mention biotic and abiotic involvement?

EVIDENCE #2 – WHERE does chemosynthesis happen?

EVIDENCE #3 - WHO are the organisms which perform chemosynthesis?

EVIDENCE #4 – WHY do they need to do chemosynthesis?

REASONING (your thoughts that show how the evidence supports your claim):

FOOD WEBS

VOCABULARY

Food Webs – overlapping or interconnected food chains in the same community

- The oak tree doesn't just provide acorns to squirrels.
- Squirrels are not eaten just by foxes.

Complete this section of notes using the ASYNCH LESSON Google Form

- Arrows <u>still show</u> the direction of energy flow!
 - **ACTION ITEM:** Energy is acquired by living things in three ways:
 - 1. _____ 2. 3. _____ Cost P nsectivorous birds Spider redaceous Jan 20 insects Rabbits Squirrels Mice Seed-eating Herbivorous birds insects) VKK IHV XCXKN Plants
- Use of Energy in the Ecosystem: Because organisms use some of the energy that is transferred to them, there is less energy available to the next organism which consumes them as food.
 - And, remember, the bigger you are the more energy you need.
 - ACTION ITEM: What do organisms USE this energy for?
 - 1. ___ 2. __
- **ACTION ITEM:** What do you think would happen if the PRODUCERS were removed from the food web?

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