



Section 2.1

Energy Flow in Ecosystems

Study Notes

By the end of section 2.1 you should be able to understand the following:

- In an ecosystem, energy flows from producers to primary consumers to secondary and tertiary consumers.
- Food chains and food webs show the energy flow and feeding relationships.
- Each step in a food chain is called a trophic level.
- Food pyramids model how energy is lost at each trophic level in an ecosystem.

NOTES

What is biomass? What units are used to measure biomass?

1.

2.

3.

What are the two ways every organism interacts with its ecosystem?

1.

2.

What is energy flow? Define the words "producers" and "consumers".

1.

2.

3.

NOTES

What is decomposition?
Define biodegradation.

1.

2.

Sketch a food chain. Label each trophic level as primary producers, primary consumers, secondary consumers or tertiary consumers. Draw arrows to symbolize the flow of energy through the food chain.

1.

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Define the terms detritivore, herbivore, carnivore and omnivore?

1.

2.

3.

4.

NOTES

Sketch a food web. Draw arrows to symbolize the flow of energy through the food web.

1.

What happens to 90% of the food energy you consume?

1.

What is a food pyramid? Sketch a food pyramid. How much energy is lost as you move from level to level in the food pyramid? What two important points does a food pyramid illustrate regarding plant life?

1.

2.

3.

4.

5.

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