

Question One:

Identify the proper terms for the descriptions given below. (2 marks)

- a) The position of a living thing in a food chain.
- b) The living things that eat and recycle dead animals and plants
- c) animals that eat both plants and animals.
- d) Animals that eat only animals.

Question Two:

(2 marks)

Choose the correct answer from the given choices.

1. Biomass is the Energy in living organisms.

- a) Minerals
- b) Nutrients
- c) Energy

2. Autotrophs, the Producers in a food web, convert the sun's energy into biomass.

- a) Producers
- b) Primary Consumers
- c) Secondary consumers

3. There is always more biomass in lower trophic levels than in higher ones.

- a) More
- b) Less

4. Which of the following is a reason why not all the energy at one trophic level is passed to the next level?

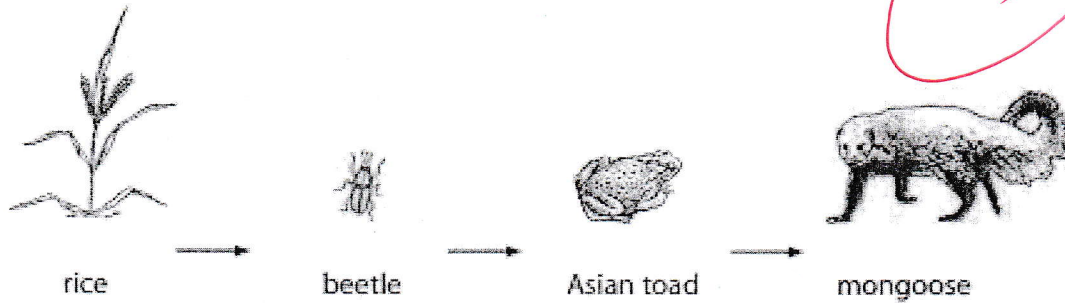
- a) Animals can eat and digest all of a plant or animal
- b) The energy can't be passed
- c) Energy is used in life processes such as movement

Question Three:

(5 marks)

The food chain below shows feeding relationships in paddy fields in Sri Lanka.

Use the food chain to answer the following questions.

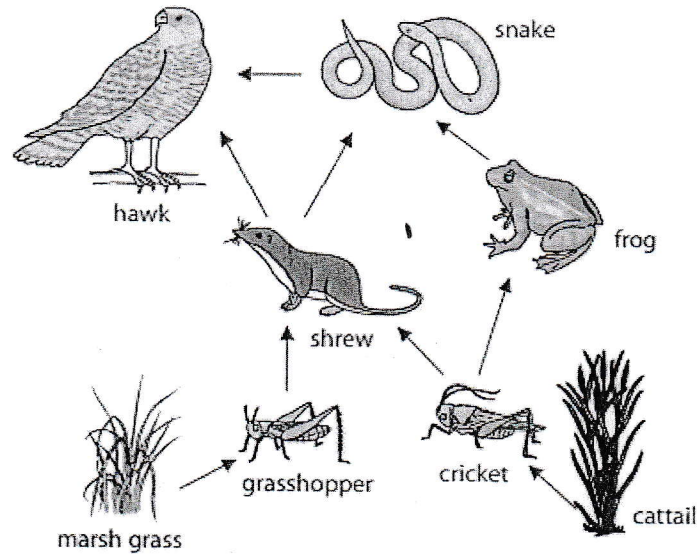


1. Name the secondary consumer.
2. Which organism is both a prey and a predator.
3. Which trophic level is the beetle?
4. Calculate the amount of energy that will be transferred to the mongoose if the energy available in rice is 10,000 J.
5. What do the arrows in a food chain represent?

Question Four:

(6 marks)

The diagram shows a food web from a habitat. Use it to answer the following questions.



1. How many producers are represented in this food web? 2

2. The hawk catches and eats its prey.
Give the name used to describe the hawk in this food web. tertiary consumer

3. Which animals eat the shrew? hawk and snake

4. List two herbivores. grasshopper and cricket

5. A pesticide can be used to kill the grasshoppers in this habitat.
State whether the following statements are **true** or **false**.

- I. Killing grasshoppers would increase the number of shrews. false
- II. Killing grasshoppers would increase the number of marsh grass plants. true

6. Write one food chain that you could find from the food web. marsh grass -> grasshopper -> shrew -> hawk

Question Five:

(5 marks)

George and Rafi are investigating the position of decomposers in a food chain.

George says that decomposers should be at the beginning of a food chain, while Rafi says that they are placed whenever there is waste.

1. Which answer is correct? Give the reason.
2. Why are decomposers called the cleaners in nature?
3. What would happen if decomposers were absent from a forest ecosystem?
4. People need a lot of food and produce a lot of bodily waste.
Give two ways in which decomposers are used to help us solve these problems.
5. Give one example of a decomposer.
