

**Intermediate Science 7**  
**Unit 1: Interactions In An Ecosystem**  
**Topic 3: Interactions In An Ecosystem**



Student Name \_\_\_\_\_

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**Interaction** refers to how the actions of an organism affect its environment. There must be interactions within our environment in order for organisms to survive.

Example: A bear eating berries and drinking from a stream.

Interactions in an ecosystem can be classified as:

**1) Abiotic – Abiotic**

Example:

Sunlight causes water to evaporate

**2) Biotic – Abiotic**

For Example:

Polar uses water to move from one location to another  
A worm aerates the soil

**3) Biotic – Biotic Interaction**

For example

A bird nesting in a tree  
A bear eating a moose  
A mosquito biting a person

Living things interact within their ecosystem to obtain:

- 1) Food
- 2) Oxygen
- 3) Water
- 4) Shelter
- 5) Protection
- 6) Transportation

## PART A: MULTIPLE CHOICE

1. Which of the following describes how the actions of an organism affects its ecosystem?
  - (A) Abiotic Factors
  - (B) Biotic Factors
  - (C) Habitat
  - (D) Interactions
  
2. Living things rely on non-living things for their survival?
  - (A) True
  - (B) False

Use the following below to answer questions 3 to 5

- I. A moose eats 25 kilograms of fir trees a day
  - II. Bears hibernate in rock cave during the winter
  - III. Cold temperatures causes water to freeze
3. Which of the above describes an abiotic-abiotic interaction?
    - (A) I
    - (B) II
    - (C) III
    - (D) I and III
  
  4. Which of the above describes an biotic-abiotic interaction?
    - (A) I
    - (B) II
    - (C) III
    - (D) I and III
  
  5. Which of the above describes an biotic-biotic interaction?
    - (A) I
    - (B) II
    - (C) III
    - (D) I and III
  
  6. Why does a bird built a nest in a tree?
    - (A) Recreation
    - (B) Shelter
    - (C) Transportation
    - (D) Water
  
  7. Why do animals need plants in an ecosystem?
    - (A) Food
    - (B) Oxygen
    - (C) Shelter
    - (D) All are correct

**PART B: WRITTEN RESPONSE**

1. What is an interaction?

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2. Describe two interactions that you have had today with the biotic parts of your ecosystem

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3. Describe two interactions that you have had today with the abiotic parts of your ecosystem.

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4. List four reasons why living things interact within their ecosystem and provide an example of each.
