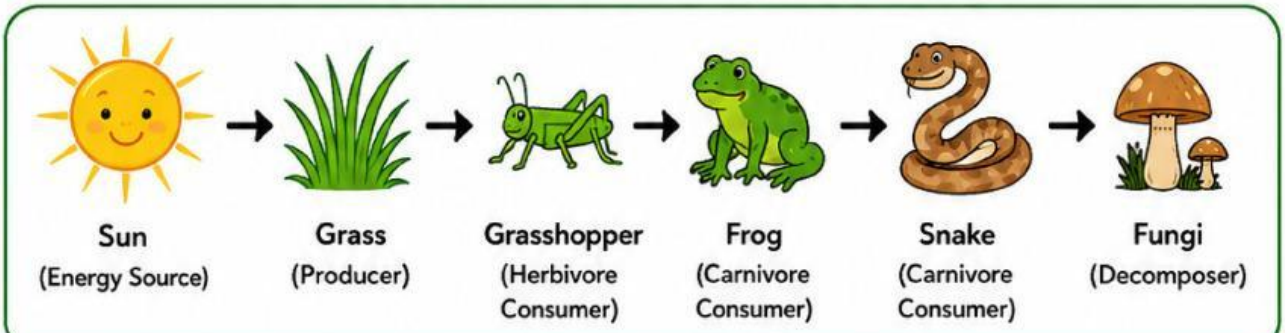
Name: _____ Date: _____

Page 1 – Low Level (Easy)

ENERGY TRANSFER IN ECOSYSTEM

Choose the correct answer (A, B, C or D).



1. What is the main source of energy in an ecosystem?
- A. Water
- B. Sun
- C. Soil
- D. Wind

2. Which of the following is a producer?
- A. Frog
- B. Grass
- C. Snake
- D. Mushroom

3. Which organism in the food chain above is a herbivore consumer?
- A. Frog
- B. Snake
- C. Grasshopper
- D. Mushroom

4. Which organism is a carnivore consumer in this food chain?
- A. Grass
- B. Grasshopper
- C. Frog
- D. Snake

5. Which organism is an omnivore consumer? (Eats both plants and animals)
- A. Grasshopper
- B. Frog
- C. Snake
- D. Mushroom

6. Which organism breaks down dead plants and animals?
- A. Sun
- B. Grass
- C. Fungi
- D. Snake

7. In a food chain, energy flows from _____ to _____.
- A. consumer to producer
- B. small to big
- C. producer to consumer
- D. big to small

8. Which of these is the first organism in almost every food chain?
- A. Herbivore
- B. Producer
- C. Carnivore
- D. Decomposer

9. What do all living things need for energy in an ecosystem?
- A. Air
- B. Sunlight
- C. Rocks
- D. Plastic

10. What is a food web?
- A. A single path of feeding
- B. Many food chains connected together
- C. A type of animal
- D. A place where food is cooked

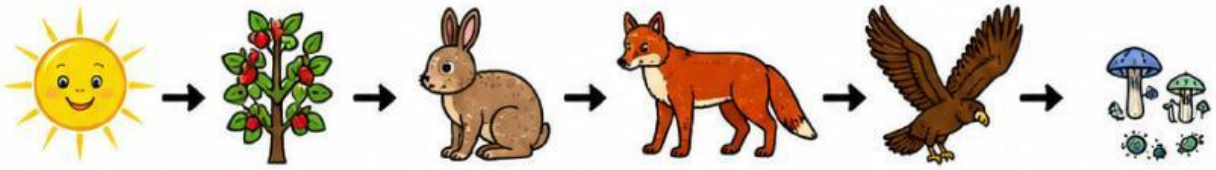
LIVEWORKSHEETS

Name: _____ Date: _____

Page 2 – Medium Level

ENERGY TRANSFER IN ECOSYSTEM

Choose the correct answer (A, B, C or D).



Sun	Berry Bush	Rabbit	Fox	Hawk	Bacteria & Fungi
(Energy Source)	(Producer)	(Herbivore Consumer)	(Carnivore Consumer)	(Carnivore Consumer)	(Decomposer)

1. Which of the following best describes the ultimate source of energy for almost all ecosystems on Earth?
   - A. Soil
   - B. Sun
   - C. Water
   - D. Wind

2. In the food chain shown above, which organism converts sunlight into food?
   - A. Rabbit
   - B. Berry Bush
   - C. Fox
   - D. Hawk

3. The rabbit in this food chain is an example of _____ consumer because it eats plants.
   - A. carnivore
   - B. omnivore
   - C. herbivore
   - D. decomposer

4. The fox is classified as a carnivore because it _____.
   - A. eats only plants
   - B. eats both plants and animals
   - C. eats only other animals
   - D. makes its own food

5. If the berry bush population suddenly disappears, which organism will most likely be affected first?
   - A. Hawk
   - B. Fox
   - C. Rabbit
   - D. Decomposer

6. Which of the following organisms in this food chain acts as a decomposer?
   - A. Rabbit
   - B. Hawk
   - C. Bacteria and Fungi
   - D. Fox

7. Energy transfer in a food chain mainly happens in a _____ direction.
   - A. backward only
   - B. both forward and backward
   - C. circular
   - D. one-way (forward)

8. Which statement best explains why a hawk has less energy available than a rabbit in this food chain?
   - A. Hawks are larger in size.
   - B. Energy is lost at each step of the food chain.
   - C. Hawks eat different kinds of food.
   - D. Rabbits store more energy.

9. Which of the following is an example of an omnivore consumer?
   - A. Rabbit
   - B. Fox
   - C. Hawk
   - D. Bacteria

10. What is a food web?
    - A. A single food chain with 2 or 3 organisms
    - B. Many interconnected food chains in an ecosystem
    - C. The place where animals live
    - D. A source of water for living things

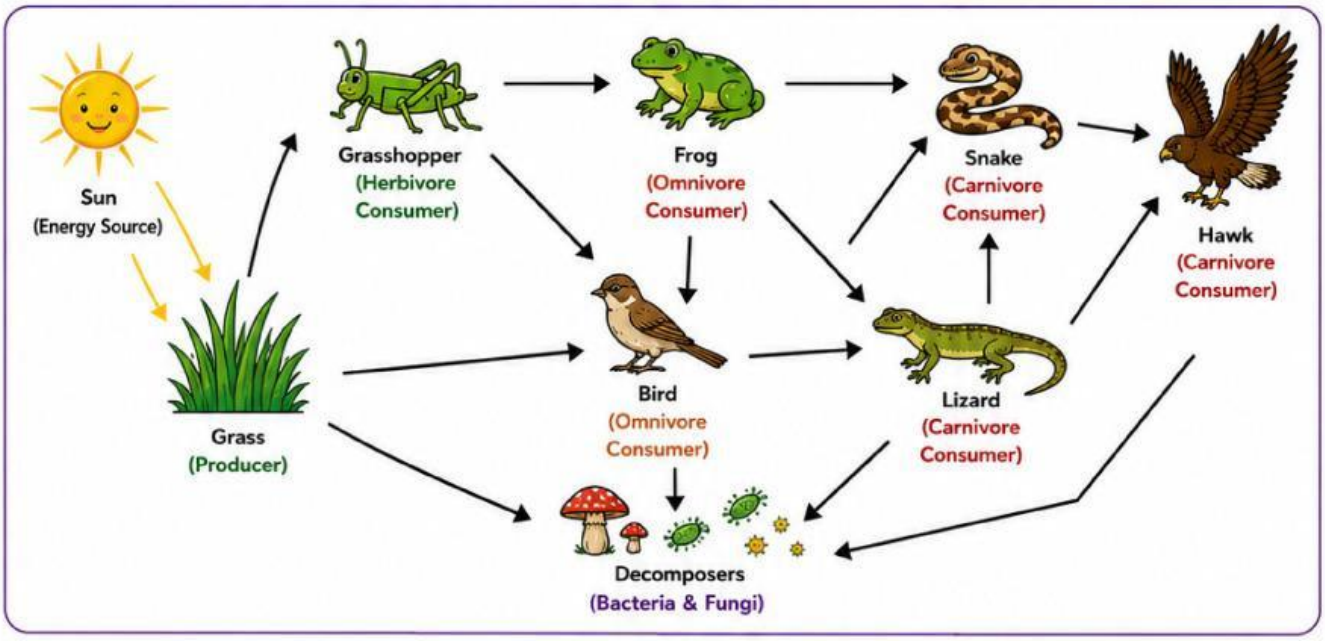
LIVEWORKSHEETS

Name: _____ Date: _____

Page 3 – High Level (Challenging)

ENERGY TRANSFER IN ECOSYSTEM (FOOD WEB)

Study the food web below carefully and answer the questions.



1. Which statement best describes the role of the Sun in this food web?
- A. It is a decomposer that breaks down dead matter.
- B. It provides light and energy for producers.
- C. It is a consumer that eats herbivores.
- D. It returns nutrients to the soil.

2. If the grasshopper population decreases drastically, which organisms would be most directly affected?
- A. Frog and hawk
- B. Lizard and bird
- C. Bird and snake
- D. Frog and bird

3. Which organism in this food web is an omnivore?
- A. Frog
- B. Bird
- C. Snake
- D. Hawk

4. Why are decomposers important in this ecosystem?
- A. They make their own food using sunlight.
- B. They help return nutrients to the soil.
- C. They control the population of hawks.
- D. They provide energy from the Sun.

5. If the berry bush (not shown in the web) disappeared from the environment, which organism would most likely be least affected?
- A. Rabbit
- B. Grasshopper
- C. Frog
- D. Hawk

6. Which organism can have more than one food source in this web?
- A. Grass and decomposers
- B. Bird and frog
- C. Snake and hawk
- D. Grasshopper and lizard

7. The arrows in a food web show the direction of _____.
- A. energy flow
- B. water flow
- C. wind flow
- D. soil flow

8. What would most likely happen if the decomposers disappeared from this ecosystem?
- A. More producers would grow.
- B. Dead organisms would pile up and nutrients would not recycle.
- C. Energy from the Sun would increase.
- D. Predators would get more food.

9. Which is the top carnivore in this food web?
- A. Snake
- B. Lizard
- C. Hawk
- D. Frog

10. What is a food web?
- A. A web made by a spider
- B. A network of interconnected food chains showing different feeding relationships
- C. A chart of plants in an ecosystem
- D. A single path of energy flow

Challenge: If the hawk population increases greatly, which organism would most likely decrease in number first? Why? _____

_____

LIVEWORKSHEETS