

FARM AREA FOOD WEB & CHAIN:

Directions:

1) Construct a **food web** using the animals listed below in the box. This ecosystem represents a farm area. The corn is the main source of food for many of the herbivores in the area. You do not have to draw pictures; you can just use the animal names and draw arrows between them.

- o **CORN**
- o **SNAKE** (*eats: mouse, squirrel*)
- o **CATERPILLAR** (*eats: corn*)
- o **DEER** (*eats: corn*)
- o **CROW** (*eats: corn, snake, mouse, caterpillar*)
- o **MOUSE** (*eats: corn, caterpillar*)
- o **COUGAR** (*eats: deer, mouse, snake, squirrel*)
- o **SQUIRREL** (*eats: corn*)
- o **DECOMPOSERS** (*microorganisms*)



2) What niche do the caterpillar, squirrel & deer have in this ecosystem? _____

3) What niche does the cougar have in this ecosystem? _____

4) Construct a **food chain** using 3 organisms from above (remember you must start with a producer!).

Ecology Review Worksheet

Name: _____ Period: _____ Date: _____

Vocabulary Matching:

- ___1. Feeds on dead organisms
- ___2. Study of how living things relate to each other and to their environment
- ___3. Step in the passage of energy and matter through an ecosystem
- ___4. Relationship between organisms in which one benefits and the other is neither harmed nor benefited
- ___5. Relationship between organisms in which one organism benefits and the other is harmed
- ___6. Breaks down dead organisms
- ___7. Simple model for showing how matter and energy move through an ecosystem
- ___8. Place where an organisms spends its life
- ___9. The role an organism has in an ecosystem (carnivore, omnivore, etc)
- ___10. Manufactures food using energy from the sun; makes their own food
- ___11. Obtains energy and nutrients from autotrophs
- ___12. Network of interconnected *food chains*
- ___13. Group formed by several populations
- ___14. Relationship between organisms in which BOTH organisms benefit
- ___15. Orderly, natural changes that take place in the communities of an ecosystem



- A. food web
- B. mutualism
- C. succession
- D. niche
- E. heterotroph
- F. commensalism
- G. autotroph
- H. scavenger
- I. community
- J. trophic level
- K. decomposer
- L. ecology
- M. food chain
- N. parasitism
- O. habitat

Short Answer: Provide the correct answers.

- 1) The total energy transfer from one trophic level to another is about _____%.
- 2) The clownfish has shelter in the sea anemone and the sea anemone gets food that the fish brings. What type of symbiosis is taking place between a clownfish and sea anemone? Why?
- 3) A tree provides a habitat for lichens, allowing it to receive ample sunlight. What type of symbiosis is taking place between a tree and lichen? Why?
- 4) A dog is infected with heartworms that weaken the heart muscles. What type of symbiosis is taking place between a dog and heart worm? Why?
- 5) Look at the following food chain: **Plant** → **insect** → **small bird** → **hawk**
 - a. How does energy flow in the food chain?