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| **GVC #6: I can understand how energy flows, how matter cycles, and how organisms interact in an ecosystem.** |
| **Learning Target - a.** I can use an energy pyramid and food chain to analyze how energy flows in an ecosystem. |

**Ecology Book Notes**

**(Pages 4 –13)**

1. Define the following terms

* Ecology
* Ecosystems
* Abiotic Factors
* Biotic Factors

2. What are the levels of ecological organization? Describe from the smallest to the largest.

3. Explain the difference in a producer and a consumer.

4. How are food chains and food webs the same? How are they different?

5. Make a food chain with 4 levels.



6. Using the food web to the right, construct two food chains.

7. What is the producer for this food web?

8. Name 3 consumers in the food web.

9. How much energy is transferred from one level to the next in an energy pyramid?

10. When energy is transferred, there is also a loss of energy. What form of energy is lost?

11. If it took the same amount of energy to chase a mouse as it did to chase a rat, which do you think a cat would choose to chase? Why?



7.If there is 12,345 kcal of energy available to the producers, how much will be available to the primary consumers? \_\_\_\_\_\_\_\_\_\_\_ How much will be available to the secondary consumers? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_How about the tertiary consumers? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. What is an example of a strategy used to balance the energy an organisms has to use to obtain food with energy it gains from the food?