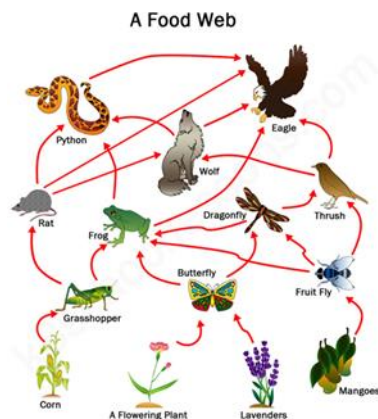
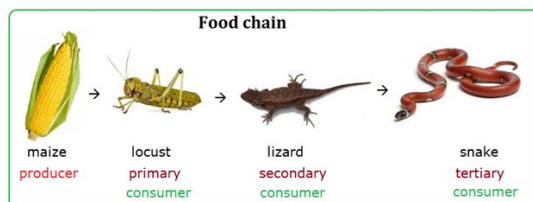


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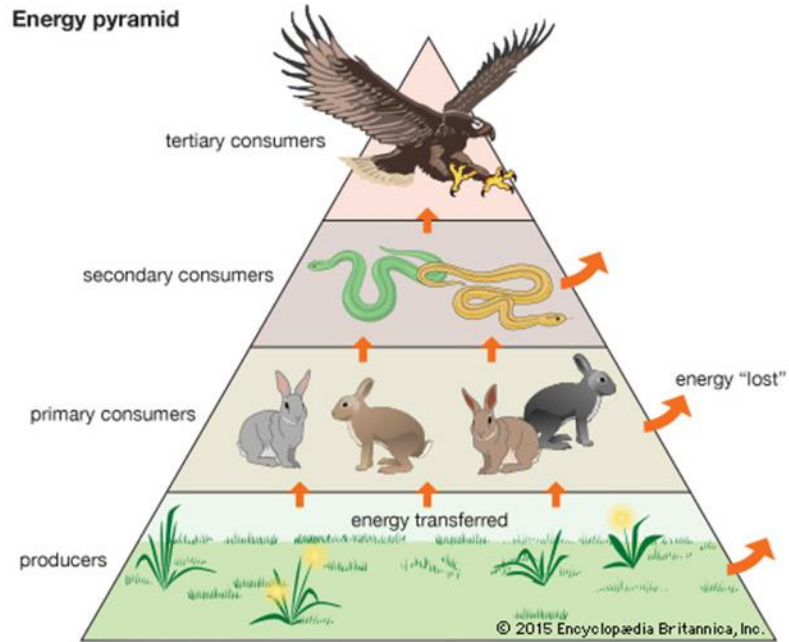
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Ecology Final Exam Study Guide

1. Define biotic and abiotic. Differentiate between biotic and living vs abiotic and nonliving.
2. Define Niche. How does an organism's niche affect the ecosystem of which it is a part?
3. Define all of the following:
 - a. Consumer
 - b. Producer
 - c. Predator
 - d. Prey
 - e. Decomposer
 - f. Scavenger
 - g. Carnivore
 - h. Herbivore
 - i. Omnivore
4. What is the difference between a food web and a food chain? Draw a food chain and include all of the following terms: producer, primary consumer, secondary consumer, and tertiary consumer.



- How much of the sun's energy is captured by producers? How much energy is then passed between each trophic level of the food chain/energy pyramid?
- Draw and label an energy pyramid. Include the names of each trophic level and how much energy is passed between each level.



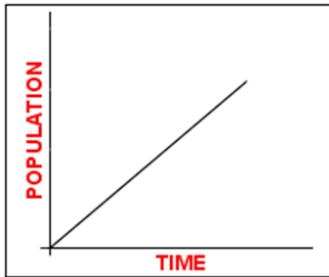
- What are limiting factors? List 3 ways they affect populations. Then list 4 examples of common limiting factors in ecosystems.
- Define biological accumulation. What percentage of toxins and poisons are passed between each trophic level of a food chain?
- What is carrying capacity? How do limiting factors affect carrying capacity?

10. Draw the following graphs. Label the Y-axis # of Organisms and the X-axis # of Generations for each one.

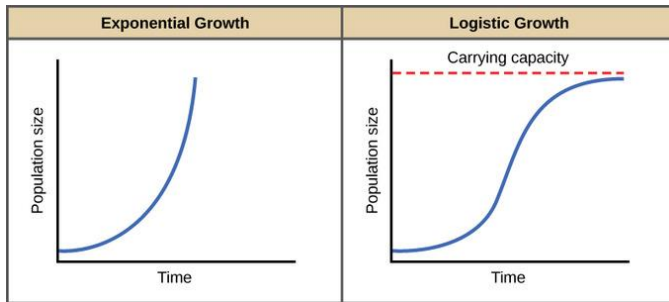
A. Exponential Growth Graph:



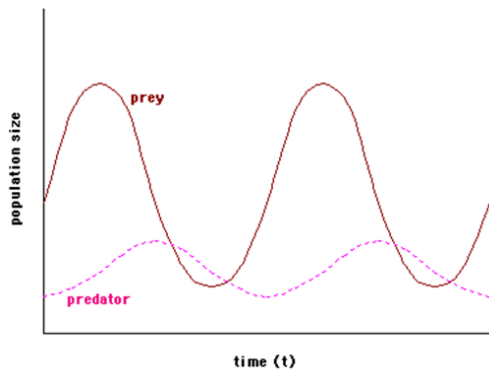
B. Linear Growth Graph:



C. Exponential Growth to Carrying Capacity: (draw in the line for carrying capacity)



D. Predator-Prey Graph



11. Define non-native aka invasive species, and list 3 examples of the impact they can have on the places they invade.

12. What is deforestation, and what are 3 impacts of it?

13. What is the primary reason humans clear (cut down) large areas of forest?

14. What is overgrazing, and what are 3 consequences of it?

15. What is the purpose of a man-made dam? Why do we build them?

16. What can dams do the freshwater biomes we build them in? List 3 impacts:

17. What is a person's carbon footprint, and how is it related to global warming aka climate change?