

## Unit 7 Ecology Review Biology K/H

1. What is the difference between a community, population and organism?
2. Describe the following and give an example for EACH.
  - a. decomposers
  - b. omnivores
  - c. producers/autotrophs
  - d. carnivores
  - e. detritivores
  - f. heterotrophs
3. What is a trophic level?
4. Pyramids – draw and label trophic levels with level of consumers
  - a. Energy – where does it go and how is it used?
  - b. Numbers – how can it not look like a pyramid?
5. Why are there more producers than consumers in an energy pyramid?
6. What is carrying capacity? Draw a graph that illustrates this.
7. What is an ecosystem?
8. What is primary succession? What does it look like?
9. What is secondary succession? What does it look like?
10. What is a climax community?
11. A pioneer community?
12. Symbiotic relationships – define and give an example of each
  - a. Mutualism
  - b. Commensalism
  - c. Parasitism
13. What is a nutrient? How is it different from energy?
14. What is the Competitive Exclusion Principle? How is it related to a niche?
15. What is biological magnification? How does it affect top predators? Examples?
16. What is exponential growth?
17. What is a limiting factor?
18. Describe the different types of limiting factors.
19. Describe nitrogen fixation and denitrification in the nitrogen cycle.
20. List steps of the carbon cycle.
21. Know all of the nutrient cycles, including reservoirs (where nutrients are stored).
22. What is special about matter? (hint: why do we have cycles?)
23. Describe the following and give an example of each.
  - a. Food chain
  - b. Food web
24. What are the effects on consumers if a producer is removed?
25. List ways to decrease/increase biodiversity.
26. What are ways humans are impacting the environment?
27. Explain conservation biology; sustainability.