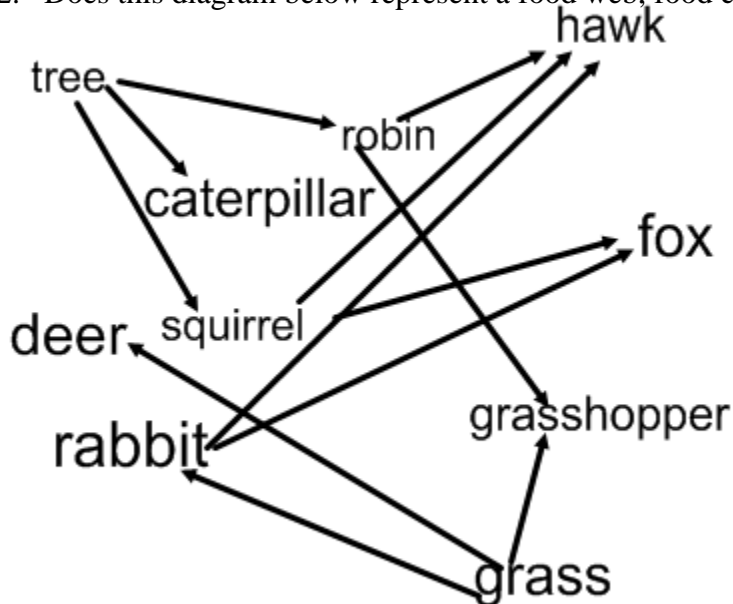


Science 9 Ecosystem Exam Review
Answers

1. For each of the following descriptions about animals state if it is
- a. Endangered
 - b. Extinct
 - c. Extirpated
 - d. Threatened
 - e. Vulnerable

- i. Dinosaurs are no longer found anywhere **(B)**
- ii. The grey fox is at risk because of low or declining numbers **(E)**
- iii. The grizzly bear is no longer found in Manitoba and Saskatchewan, but is still found in Alberta and BC **(C)**
- iv. The piping plover is likely to become endangered if factors that ensure its survival are not improved **(D)**
- v. The whooping crane is close to extinction in all parts of Canada or a significantly large location **(A)**

2. Does this diagram below represent a food web, food chain or food pyramid? **Food Web**



b. Name one animal that fits each of these categories

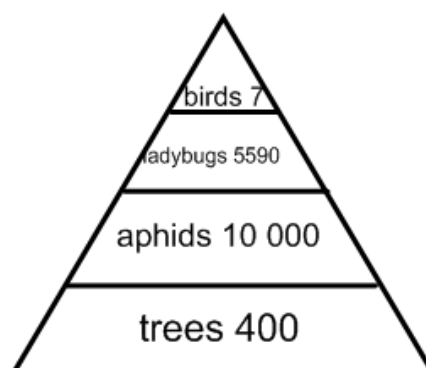
- i. producer – **tree or grass**
- ii. Secondary consumer **grasshopper, fox, robin, hawk**
- iii. Herbivore – **caterpillar, robin, squirrel, grasshopper, rabbit, deer**
- iv. Primary consumer – **rabbit, grasshopper, deer, caterpillar, squirrel, robin**

c. If the tree was removed from this diagram what other organisms would be effected and in what ways? **The robin, caterpillar and squirrel would decrease in numbers and have to find another food source. The organisms that eat these organisms would also experience a decline because their food source has been depleted.**

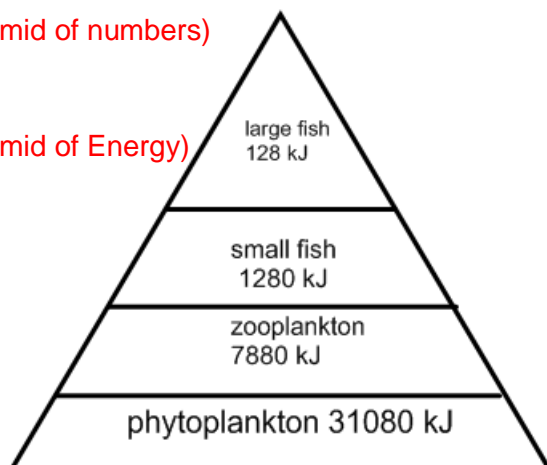
d. If there were an increase in the number of foxes, explain how would it affect the other organisms? **The other organisms would benefit from more food source and would also increase.**

3. For each of the following
- a. Draw the pyramid
 - b. Label the type of pyramid

i. **(Pyramid of numbers)**



ii. **(Pyramid of Energy)**



iii. **(Pyramid of Biomass)**



For each of the following fill in the blanks provided:

1. ecosystem
2. food chain
3. herbivores
4. carnivores
5. omnivores
6. detritus
7. decomposer
8. increase
9. decrease
10. grass (answers will vary)
11. deer (answers will vary)
12. habitat
13. skin/ecosystems
14. extinct
15. endangered
16. extirpated
17. threatened
18. vulnerable
19. biodiversity
20. passenger pigeon (answers will vary)
21. ecology
22. abiotic
23. sunlight/water
24. biotic
25. animals/plants
26. population
27. community
28. ecotone
29. artificial
30. natural
31. trophic level
32. autotroph
33. heterotroph
34. food web
35. primary consumer
36. secondary consumer
37. 1st law of thermodynamics
38. 2nd law of thermodynamics
39. numbers, energy and biomass
40. ecological niche
41. exotic species

42. a. **hunting by humans decreases the number of different species and decreases the biodiversity. Also if humans hunt the organisms too much it can get to a point where it is incapable of recovering.**

b. increasing the amount of pollution affects a species because for example with the frog they absorb everything through their skin and any pollutants would affect the frog. If the frog is affected than all other species that eat the frog or that the frog eats will also be impacted.

c. the new species will compete for food and space with the naturally occurring species thus causing the naturally occurring species population to decrease.

d. the earth is warming up and global warming could cause organisms to have to live in different areas than what they are accustomed to. Thus changing their food sources and having an impact on food chains and webs that those organisms are in.

e. the species does not reproduce enough to increase the population quickly.