Food Web Worksheet

Part A: Use the marine food chain below to answer questions 1 to 5

The Marine Food Chain

Mammals

Bigger Fish   Small Fish

Phytoplankton   Zooplankton
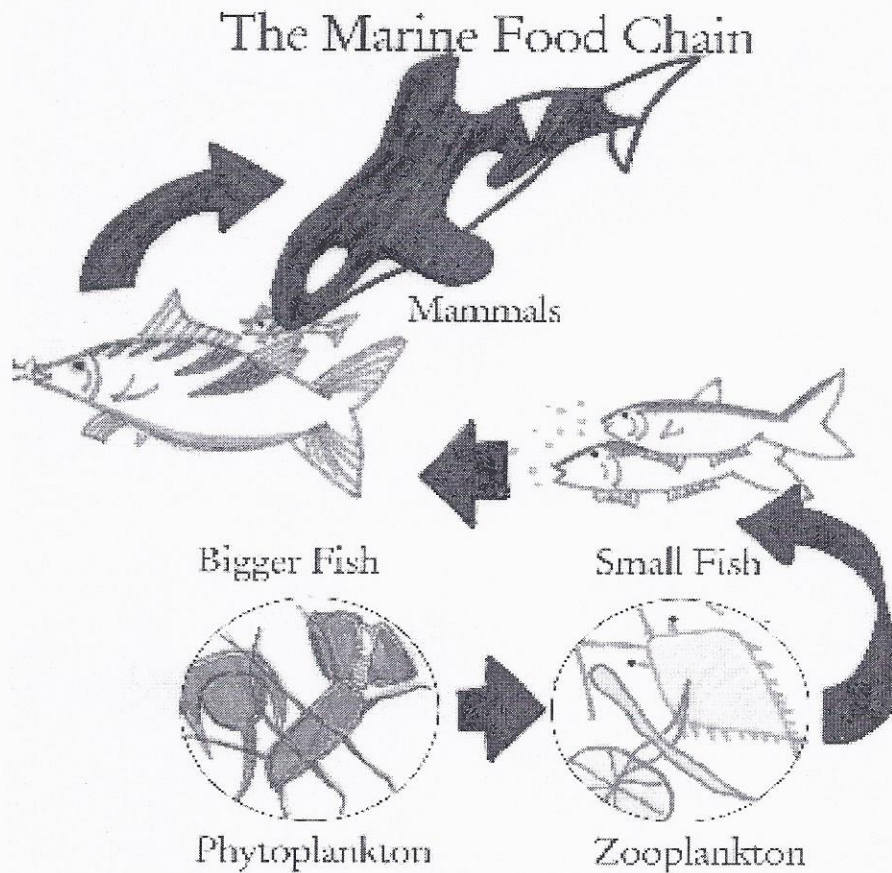
1) Identify the organism (s) that are producers.

  phytoplankton

2) Identify the organism (s) that are consumers.

  Zooplankton, Small & big fish + mammals

3) Identify the primary consumer (s) or 1st order consumer (s).
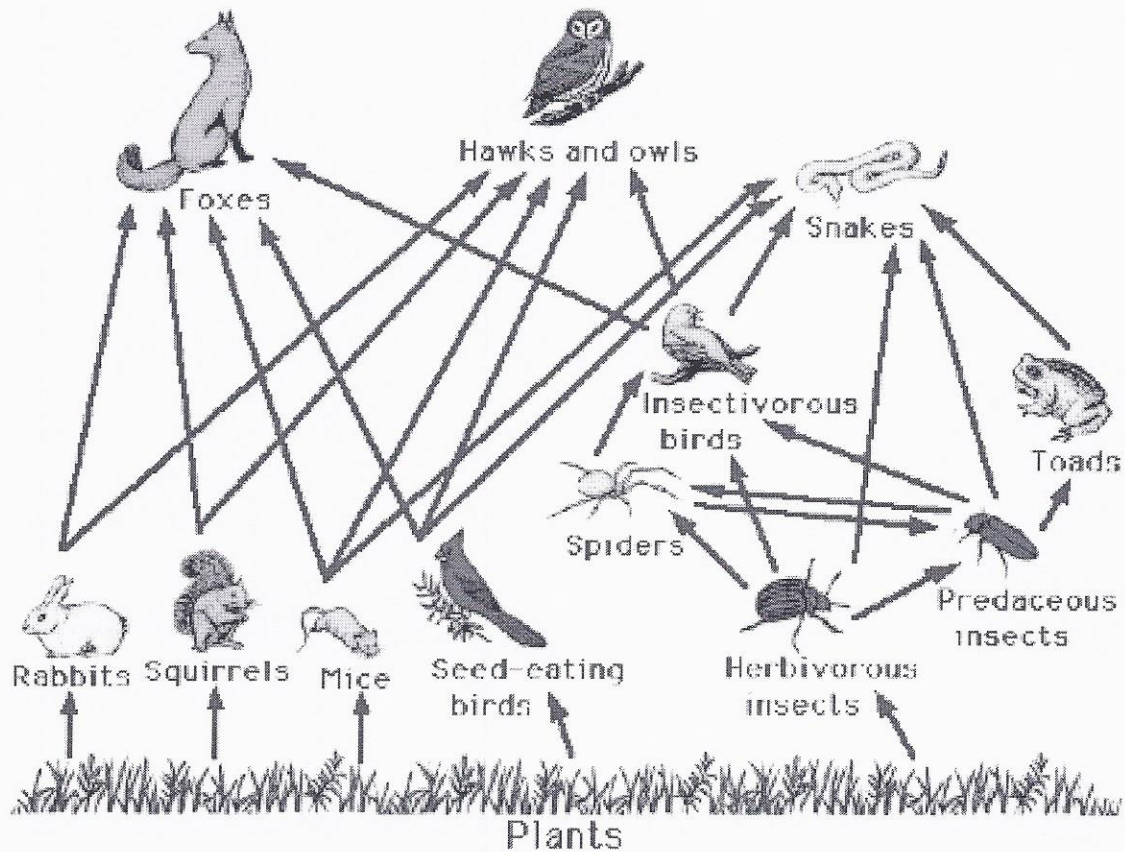
  Zooplankton

4) Identify the secondary consumer (s) 2nd order consumer (s).

  Small fish

5) Identify the tertiary consumer (s) 3rd order consumer (s).

  bigger fish

Part B: Use the following food wed to answer question 6 to 9

http://www.champaignschools.org/science/images/foodweb.gif

Make 4 different food chains according to the criteria below:

6)

The owl is a second order consumer:

Plant → mice → owl

7)

The owl is a third order consumer:

plant → herb. ins. → Ins. birds → owl

8)

The owl is a fourth order consumer:

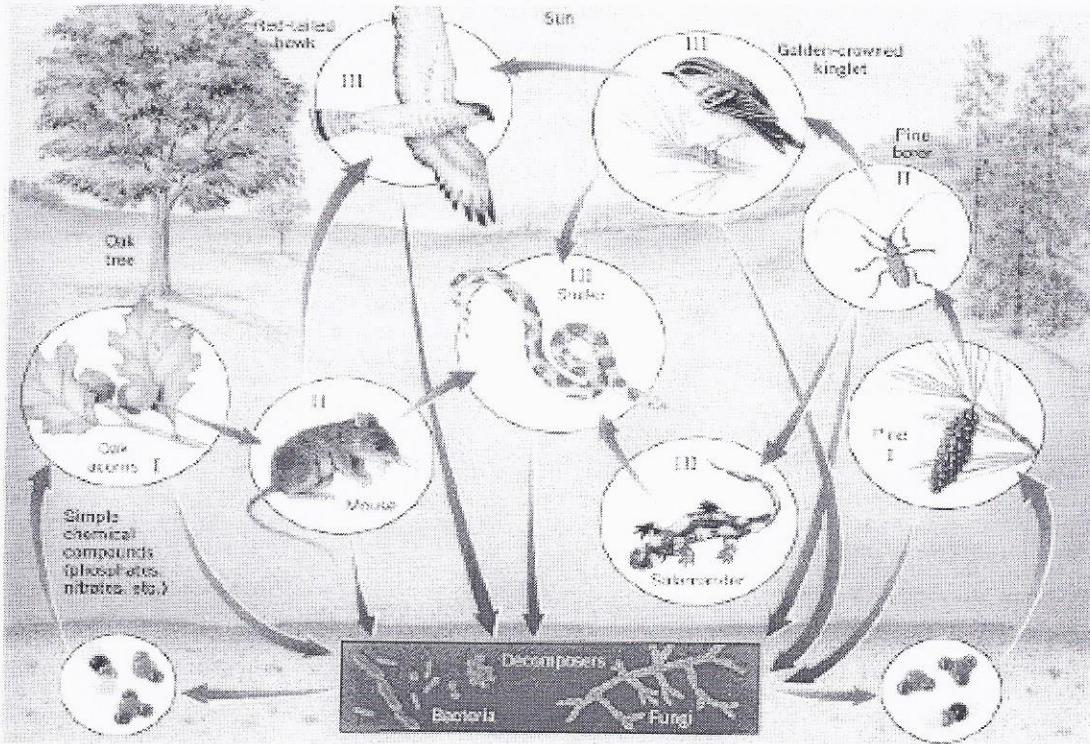plant → herb. ins. → spider → ins. bird → owl

9)

The owl is a fifth order consumer:

plant → herb. ins → spider → pred. ins → ins. bird → owl

Part C: Use the food web below to answer questions 10 to 13.

Figure 6.3 Food webs: (a) a typical terrestrial food web.
Roman numerals identify trophic levels.

http://weedeco.msu.montana.edu/class/LRES443/Lectures/Lecture20/Food
Web.JPG

10) Explain the consequences to the food web if mice were removed from the ecosystem.
- ~~Salamander~~, fire, Snake, Hawk & Kinglet ↓
  - Acorns ↑
  ↑ Salamander

11) Explain the consequences to the food web if hawk was removed from the ecosystem.
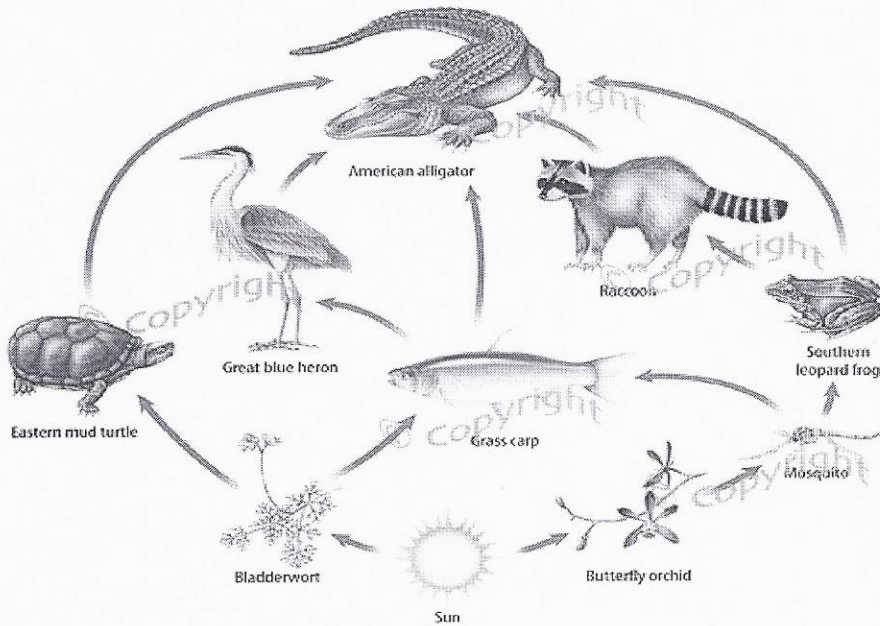- Kinglet, mouse, salamander ↑
- acorn, fire & Snake ↓

12) All the organisms in the food web above have arrows pointing to the decomposer. Why does this happen?

all organisms die & decompose

13) Name the organisms which are part of the biomass.

All except Simple Chemicals, Sun & Soil

Part D. Use the diagram below to answer the questions 14 and 15

American alligator
Raccoon
Great blue heron
Southern leopard frog
Eastern mud turtle
Grass carp
Mosquito
Bladderwort
Butterfly orchid
Sun

14. Name an animal that could be a second, third or fourth order consumer. Give the food chain for each example. *alligator*

2nd = bladderwort → grass carp → alligator
3rd =   "   "   heron → alligator
4th = orchid → mosquito → frog → Raccoon → alligator

15. Which trophic level is missing from the food web?

decomposer