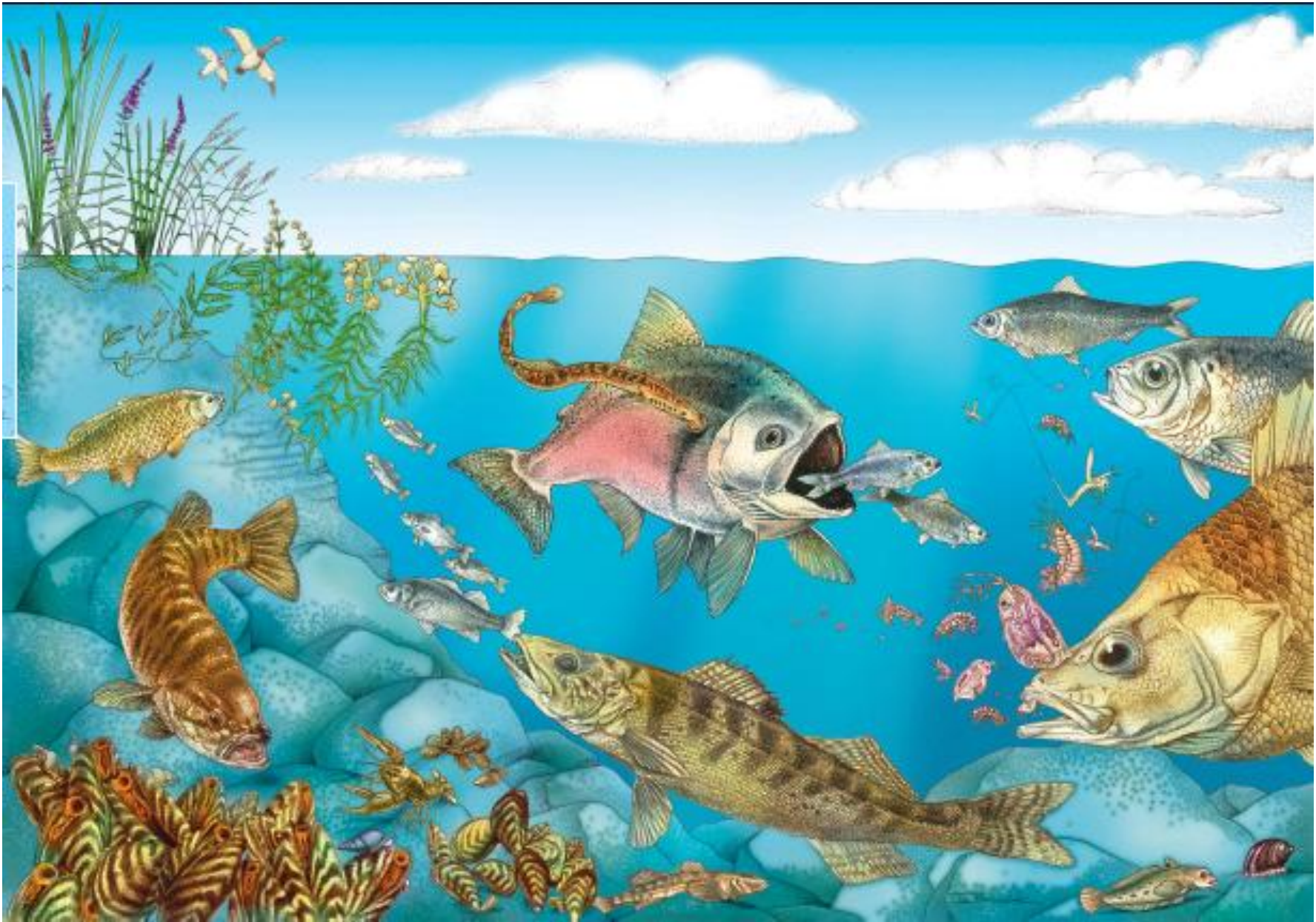


Full Name: _____

Partners: _____

Great Lakes Food Web



From the poster by Jan C. Porinchak for the New York Sea Grant project <http://www.seagrantsunysb.edu/Images/Uploads/PDFs/Poster-GLecosystem.pdf>

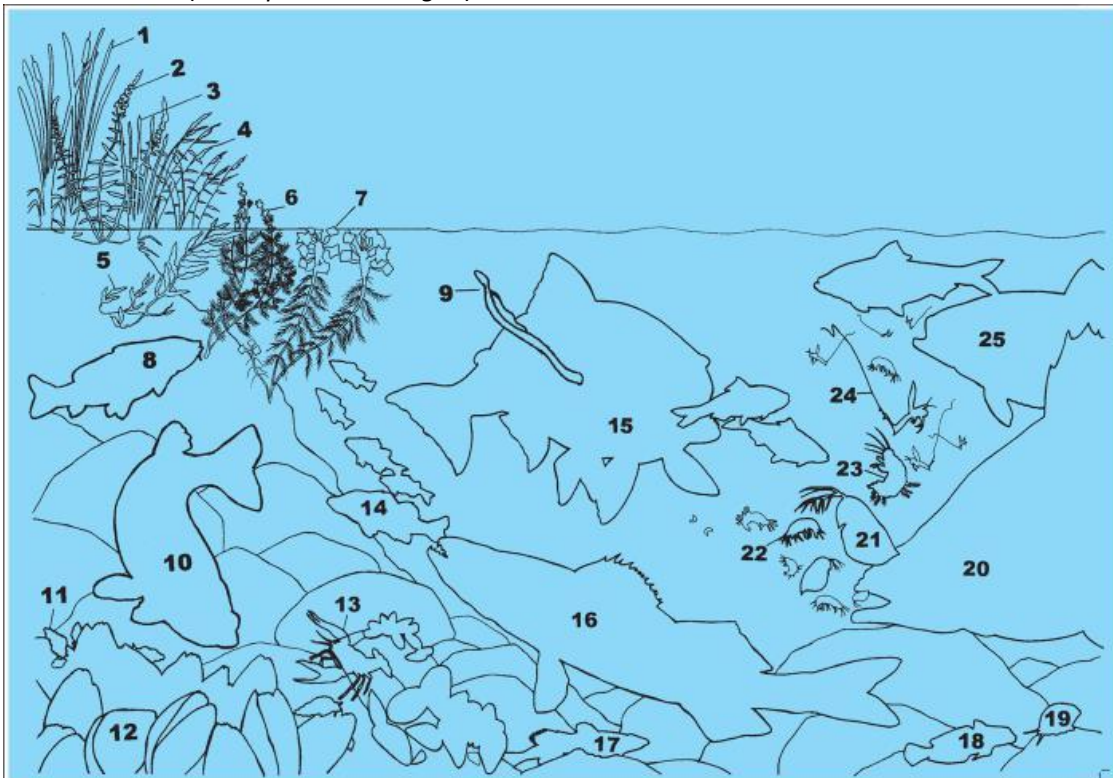
Full Name: _____

Partners: _____

Species Names for Great Lakes Food Web Diagram

The common name, followed by the scientific name. The * shows invasive or nuisance Great Lakes species.

1. Cattail (*Typha angustifolia*)*
2. Purple loosestrife (*Lythrum salicaria*)*
3. Jointed spikerush (*Eleocharis equisetoides*)
4. Common reed (*Phragmites australis*)
5. Curly-leaf pondweed (*Potamogeton crispus*)*
6. Eurasian watermilfoil (*Myriophyllum spicatum*)*
7. Water chestnut (*Trapa natans*)*
8. Common carp (*Cyprinus carpio*)*
9. Sea lamprey (*Petromyzon marinus*)*
10. Smallmouth bass (*Micropterus dolomieu*)
11. New Zealand mud snail (*Potamopyrgus antipodarum*)*
12. Zebra mussel (*Dreissena polymorpha*)*
13. Rusty crayfish (*Orconectes rusticus*)*
14. White perch (*Morone americana*)*
15. Chinook salmon (*Oncorhynchus tshawytscha*)*
16. Walleye (*Sander vitreum*)
17. Deep water sculpin (*Myoxocephalus thompsoni*)
18. Round goby (*Neogobius melanostomus*)*
19. Banded mystery snail (*Viviparus georgianus*)*
20. Yellow perch (*Perca flavescens*)
21. Daphnia or water fleas (*Daphnia sp.*)
22. Amphipods or freshwater shrimp (*Gammarus fasciatus*)*
23. Invasive amphipod or Invasive freshwater shrimp (*Echinogammarus ischnus*)*
24. Fishhook water flea (*Cercopagis pengoi*)*
25. Alewife (*Alosa pseudoharengus*)*



From the poster by Jan C. Porinchak <http://www.seagrant.sunysb.edu/Images/Uploads/PDFs/Poster-GLecosystem.pdf> (for the New York Sea Grant project)

Great Lakes Food Web Worksheet

Full name: _____ Partners names: _____

Work in teams of 4.

1. On the Great Lakes diagram colour all the producers (#1-7) green.
2. What are three important abiotic factors in this ecosystem? _____
3. What is the common name of a freshwater shrimp? _____
4. Name two different crustaceans in the food web. _____
5. What is the scientific name of a walleye fish? _____
6. When everyone is done #1-5 send the partner whose first name starts with the letter closest to Z to get your species cards.
7. Find and put the 4 EXTRA CARDS in the center of your table. **Draw and label** one example of each of the extra organisms on your Great Lakes diagram.
8. Deal the remaining cards to all the teammates. **Take a few minutes and read your cards.** On your Great Lakes diagram put a * on each organism card you have.
9. Use **only the cards in your hand** to answer these questions. You might have to leave an answer blank.
 - a) Which of your organisms are herbivores? _____
 - b) Which of your organisms are omnivores? _____
 - c) Which of your organisms are carnivores? _____
 - d) Which of your organisms are detritivores? _____
 - e) Which of your organisms is the smallest on the Great Lakes diagram? _____
 - f) Which of your organisms is not a fish? _____
 - g) Which of your organisms eats the most different species? Name all the organisms eaten.

10. What are three other interesting facts on your cards?

a)

b)

c)

The following questions require you to share your cards with your teammates.

11. a) Make a food chain by putting cards on the table in order. Remember to start with a producer. Now add one consumer card from each person. **Write out the food chain** in the space below. Take back your cards.
- b) What is the producer in your food chain? _____
- c) What is the top level predator in your food chain? _____
- d) What organism is at the third trophic level in your food chain? _____
- e) How many trophic levels are in your food chain? _____
- f) What is the first level consumer in your food chain? _____
- g) Which organism do you think has the largest population? Explain why.
12. Between partners find and explain two examples of **competition** between your organisms. Be sure to name the competing organisms and name the resources being competed for.
- 13.a) Which organism is an example of a parasite? _____
- b) Which of **your** species cards would this parasite likely attack? _____
14. What species could be in a **commensalistic** relationship with zebra mussels? Explain.
15. How did two different invasive species arrive in the Great Lakes? Use specific details from the cards.
- a)
- b)
16. What is a **limiting factor** in the population of invasive round goby?
17. Describe two **relationships** between yellow perch and other organisms.

Collect your cards. There must be 22 cards to hand in to your teacher.