

SPECIES CARDS FOR LESSON 12

The trophic levels in a basic food chain/web are the sun, primary producers, primary consumers, secondary consumers, and tertiary consumers.

Food chains are very interconnected and become huge food webs. This concept may be very difficult to understand at first.

Have students make up the species cards, providing the information needed for each species. Once the cards are made, they can be used in a food chain game or in any other manner the instructor wishes.

If it makes food using energy from the sun it is a primary producer

If it eats primary producers it is a primary consumer

If it eats primary consumers it is a secondary consumer

If it eats secondary consumers it is a tertiary consumer

If it eats dead material, it is a detritivore or a decomposer

If it eats both producers (plants) and consumers (animals), it is an omnivore

Some species are more than one type and fit into more than one category illustrating the complexity of food chains as parts of more complex food webs

Some animals are called top-level consumers, apex predators or top predators because they have no known predator

Note: The sources consulted do not always agree on the placement of an animal in the food chain. It is important to understand that sometimes an animal is omnivorous (eating both plants and other animals)

The following chart is meant to be used as a guide. The instructor may wish to check other sources. Use a ratio of 4 plankton or 4 zooplankton to 1 other species as you choose from the following list and adapt the food chain

number to the number of members in the class. If the class is small, the phytoplankton and zooplankton cards could be sketched with 4 on each card.

Primary Producers	Primary Consumers	Secondary Consumers	Tertiary Consumers	Top Level consumer
Makes food from energy of the sun	Herbivores eat plants	Carnivores eat herbivores	Carnivores eat carnivores	No known predator
4 phytoplankton Algae Seaweed Seagrass	4 zooplankton Copepods Larval crustaceans (like lobsters, crabs, shrimp) Larval invertebrates (like clams, mussels, quahog, scallops) Larval fish Krill Amphipods Dabbling Ducks (like the Black Duck) Many snails Sea urchin Clam Mussel Quahog Scallop Oyster Shrimp Limpet Sponge Jellyfish Some fish (Alewife-juveniles) Barnacles	Sandworm Bloodworm Milky ribbon worm Shrimp Moon snail Crab (omnivore) Lobster (omnivore) Sea star Mummichog Herring Flounder Codfish Pollock Haddock Eel (omnivore) Gull Many seabirds Many shore birds (like the plover) some whales (like the North Atlantic Right Whale) Squid Whelks Alewife-adults	Striper Spiny Dogfish Bluefish Seal Cormorant Sea otter Octopus Many seabirds Dolphin Porpoise Puffin Halibut	Some sharks Killer whale Osprey Great Blue Heron Bald Eagle Human

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The students could make all of the local species cards then the instructor could select the ratio from each category

INFORMATION NEEDED FOR SPECIES CARDS

for "The Chain of Command" Lesson 12

Common species name

Binomial or scientific name

A list of what it preys upon (eats)

A list of what preys upon it (what eats it)

Options: average adult length in metric measurement

average adult weight in metric measurement

2 more facts about this species