

What's in YOUR Water? Making a Plankton Net

Objectives:

- Make a plankton net
- Identify organisms found in local body of water
- Understand plankton and their place in the food chain

Background:

Plankton are microscopic organisms that float freely in bodies of water. Plankton is made up of tiny plants (called phytoplankton) and tiny animals (called zooplankton). The word plankton comes from the Greek word "planktos" which means, "drifting."

Phytoplankton are primary producers (also called autotrophs), such as algae. As the base of the aquatic food web, they use chlorophyll to convert energy (from sunlight), inorganic chemicals (like nitrogen), and dissolved carbon dioxide gas into carbohydrates.

Zooplankton are small or microscopic animals that eat other plankton. Some zooplankton are larval or very immature stages of larger animals, including mollusks (such as snails), crustaceans (like crayfish and crabs), fish, and jellyfish. Zooplankton conisits of organisms such as copepods, isopods, and rotifers.

Plankton is the first link in the aquatic food chain; it is eaten by many organisms, including mussels, fish, birds, and mammals (like baleen whales).

Materials:

- nylon stocking or pantyhose
- wire
- sturdy plastic cup
- small fish weight
- heavy thread
- lightweight rope

- needle
- scissors
- wire cutters
- a magnifying glass or microscope
- an aquatic life identification booklet









Directions:

- 1. Cut a section of wire and bend it to form a ring to fit the open end of the stocking.
- 2. Loop the stocking over the ring and secure with needle and thread.
- 3. Cut toe of stocking to fit around sturdy plastic cup.
- 4. Wrap stocking around neck of cup and secure it with wire.
- 5. Run four sections of rope from the ring to a single section of rope for towing.
- 6. Attach a small fish weight to rope.
- 7. Hold in a stream, pull through a pond, or tow in a lake.
- 8. Investigate what you find in the cup.

Activities and questions:

- After pulling in your local water body, identify at least three organisms you've collected.
- Draw what you find and label the parts.
- How do these organisms fit into the food chain? What do they eat? What eats them?

