

Catch That Plankton!

(Pre-visit)

Grade Level: 2nd-5th and 6th-8th

Purpose: To give the students a chance to make a basic scientific tool that can be used to study microscopic animals. Students will see how even everyday items can be turned into something useful.

Materials: (per child or team)

- One pair of nylon stockings/pantyhose
- Wire coat hanger or small needlepoint holder
- Pliers, scissors, duct tape, rubber bands, and string
- Small jar (plastic) with a small mouth such as film containers

Teacher Background Information:

Plankton, which means wanderers, are plants and animals that drift on ocean currents. These organisms are often found near the surface of the water and are the basis of the oceanic food chains. Plant plankton is called phytoplankton while animal plankton is called zooplankton. Phytoplankton use sunlight for photosynthesis and are the major food source for the zooplankton.

Plankton nets strain the water for these organisms, and they are collected into small jars. These nets are frequently used for sampling purposes and help scientists learn what species of plankton are found in different types of water and in different parts of the country.

Procedure:

- 1) Give each student/team one set of materials. Have them cut the nylons near the top of the stocking and using their pliers and wire hanger make a circle for the stocking to fit on (for younger students have them use pre-made hoops or the needle point hoop). Make sure the top of the stocking fits over the circle.
- 2) Take the wider end of the stocking through the circle and fold it over the wire circle.
- 3) Tape or staple the stocking in place and cut a small hole at the other end (the toe) of the stocking. Make sure the hole is the size of the mouth of your jar.
- 4) Slide the stocking over the mouth of the jar and use a rubber band to hold the stocking in place.
- 5) Tie three strings to the circle in a way that will make a cone. This is how you will tow your plankton net.
- 6) Now take it out and see what you catch!

Discussion Questions:

- 1) Do the words phyto- and zoo- mean anything special when you are dealing with plankton?
- 2) Why did you use nylons and not mosquito netting or some other material with bigger holes?
- 3) Do you catch more plankton at the top or the bottom of the water? Why?
- 4) What does the word plankton mean? Is this an accurate way to describe plankton?