

# What's this One?

(Post visit)

**Grade Level:** 2<sup>nd</sup>-5<sup>th</sup> and 6<sup>th</sup>-8<sup>th</sup>

**Purpose:** To use the plankton net they made to catch plankton for identification. To have students work with microscopes and learn about magnification.

**Materials:**

- Plankton net
- Water source
- Microscopes or Petri dish, slides, eye droppers
- **Identification Information (can be found at <http://www.ume.maine.edu/ssteward/phyto.htm>)**

**Teacher Background Information:**

Plankton, which means “wanders”, can be broken into two groups. These groups are determined by how much of the animal’s life is spent as plankton. Animals that spend their entire lives as plankton are called holoplankton while those animals that start as plankton but end up as something else as an adult belong to the meroplankton group. Examples of meroplankton include sea stars, crabs, etc. Although we frequently think of plankton as microscopic it can grow to a much larger size. Jellyfish or sea jellies are an example of plankton. In fact, the Lion’s Mane Jelly fish can have a bell with a diameter of 8 feet and tentacles that can stretch 200 feet. Lion’s mane jellies can be found off the coast of North Carolina.

However, in this activity we will be dealing with the smaller plankton and the samples are likely to include both mero- and holoplankton. For younger students, just have them practice using a microscope and drawing what they see. Do not worry to much about identification.

**Procedure:**

- 1) Take students to a relatively calm section of water and have them tow or scoop their net through the water.
- 2) After collecting for a few minutes have the students remove their jar from the stocking and place their jars under light, which will attract the plankton to the top.
- 3) Use eyedroppers to put a few drops of water in a clean Petri dish or on a microscope slide.
- 4) Take a look and see if you can identify the types of plankton that you have. If you can’t figure out the exact type, see if you can decide if it is zooplankton or phytoplankton.

**Discussion Questions:**

- 1) Did you find more plant or animal plankton? If you found more animal, does that seem possible? If not, why not?
- 2) What do plankton need in order to survive (think back to “Catch that Plankton” for the answer)? What would cause plankton to increase in number?
- 3) Draw three types of plankton that you found.