Algae Academy

Phycologist : _____
Group #: _____ Period: ____

Essential Question: What does algae look like under a microscope?
How can you distinguish between different types of algae?

Materials:

a. Compound Light Microscope
b. Slides/ slide cover
c. Pipette/ Eye dropper
d. Algae sample

Instructions:

1. Make sure all backpacks are out of the aisles before you get a microscope! Always carry the microscope with one hand on the Arm and one hand on the Base. Carry it close to your body.

2. Remove the cover, **plug the microscope in**, and place the excess cord on the table!

Viewing Algae With A Microscope:

1. Use the pipette to obtain 1 mL of the algae sample and place 1-2 drops on the glass slide.

2. Obtain a cover slip and, starting at a 45-degree angle, place the glass on top of the water sample to hold it in place. Avoid any water bubbles!

3. Place your wet mount slide on the **STAGE** of an open microscope.

4. Now that you have your slide ready to go, make sure your microscope is turned on or has a light source connected.

5. Make sure that the clear hole in the stage where the light shines through is right below the coverslip, as this is where you'll be seeing your sample.

6. Start the microscope with scanning power (**SMALLEST LENS**) to get the algae into focus. Move the slide around while looking in the microscope at the low power. Be on the lookout for anything green; this is almost always green algae.
REMEMBER: Use the coarse adjustment knob to focus.

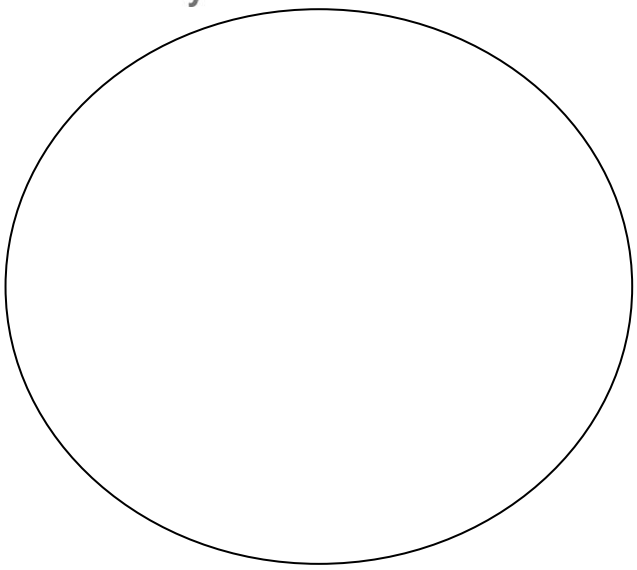
7. Rotate the revolving nosepiece to the **MEDIUM SIZED LENS**. Repeat Step 6 to focus on algae.
CAUTION: Remember to only use the fine adjustment knob now to focus!

8. Increase the magnification to high power (**THE LARGEST LENS**). Repeat Step 6 to focus on algae.
CAUTION: Remember to only use the fine adjustment knob now to focus!

9. After looking at the algae with the microscope, fill out your worksheet:
    a. Draw what you see under the microscope.
    b. What magnification are you zoomed in with?
    c. Describe what your algae looks like (shape, size, color).

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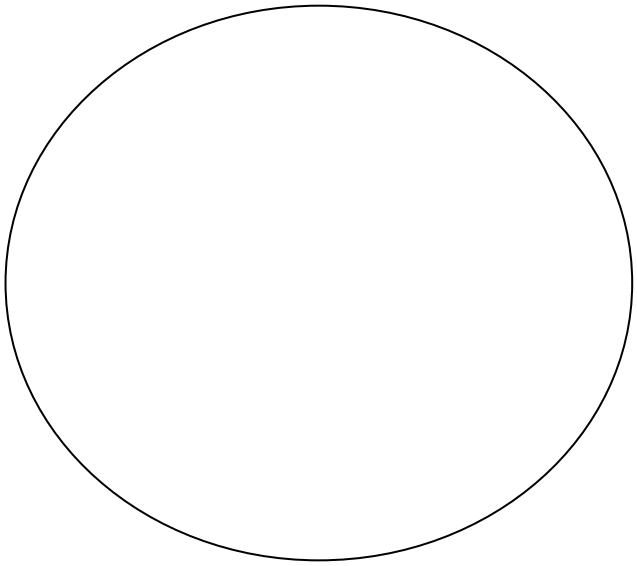
Magnification:

Name of Algae:

Observations:
_____

_____

_____



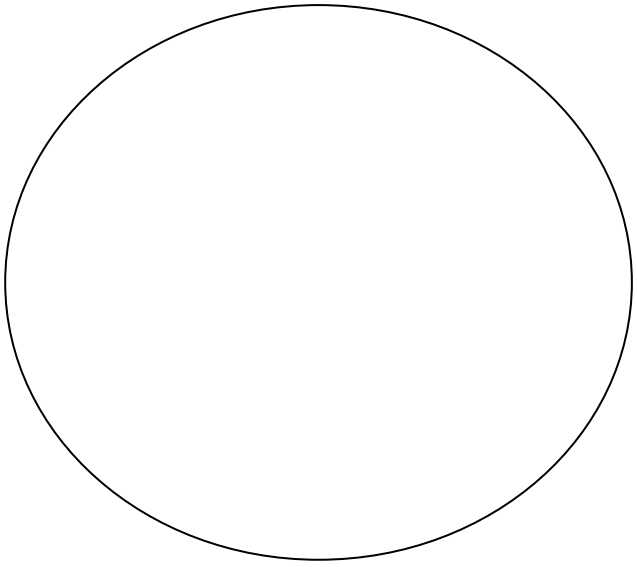
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