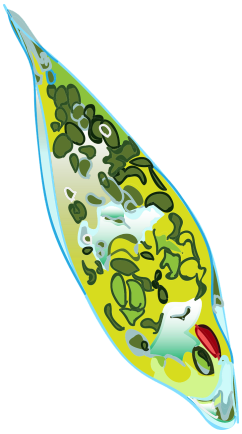
Name _____

Observing Live Algae with a Microscope



Euglena

1. Use the scanning lens to focus the slide. At this point, euglena will appear as small green dots. Estimate how many you see in your viewing field under this magnification: _____

2. Focus using the low power objective. Estimate how many euglena you see now: _____

3. Focus using the high power objective. Estimate how many euglena you see now: _____

4. The microscope's magnification is probably not powerful enough to see the euglena's flagella. What is the purpose of the flagella? _____

5. The euglena also moves by scrunching up or rolling into a ball. This type of movement is called EUGLENOID MOVEMENT. Locate a euglena and watch it to see if you can recognize this special type of movement.

6. Darken half your viewing field. You can do this by placing dark paper over the microscope's light, or you can rotate the diaphragm slightly (not clicked into place). The goal is to have a "half-moon" dark spot on your slide. View the euglena as they interact with this dark area. **Describe your observations**.

7. Sketch the euglena. **LABEL** the chloroplasts, cell membrane (pellicle) and the eyespot.

Spirogyra

8. View a slide of spirogyra under scanning, low power, and high power. On one filament of spirogyra, estimate how many cells are present: _____

9. Sketch the spirogyra. **LABEL** the chloroplasts and the cell wall.

Volvox

10. View the volvox under scanning and low power. Sketch the volvox.

11. Compare and Contrast each of the 3 Algae you looked at by filling out the Venn Diagram (you should be able to come up with at least 3 items for each group)