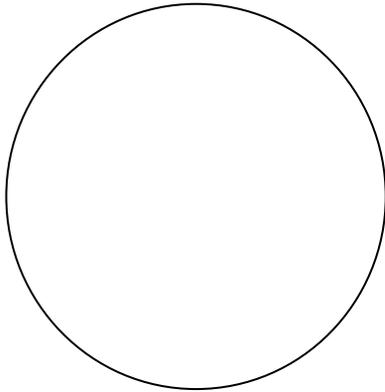


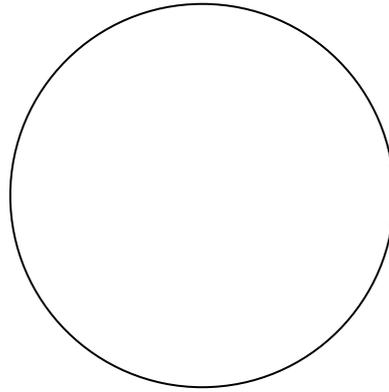
Part II –Observing Cytoplasmic Streaming Chloroplasts in *Elodea*

1. Prepare a wet mount of an *Elodea* leaf with tap water. To do this, place a drop of water in the center of the slide. Take one leaf of *Elodea* and lay it flat in the drop of water. Cover with a cover slip.
2. Observe the leaf at 100X and record your observations. Label the cell wall, cell membrane, chloroplasts, and any other feature you can observe.
3. Increase the power to 400X, observe, and record your observations.

Med Power



High Power



TOTAL Magnification _____ x

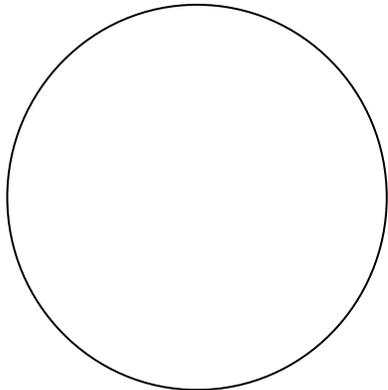
TOTAL Magnification _____ x

4. Place your slide onto the light source on the microscope for one minute.
5. Observe your slide over 100x and 400x. Write your observations in the space provided below. Are the chloroplasts moving clockwise or counterclockwise?

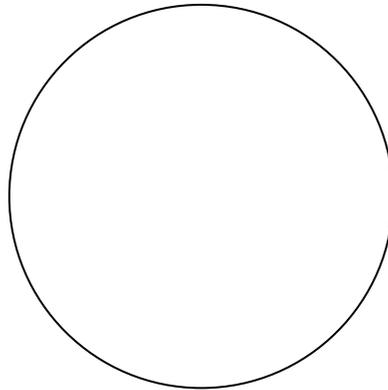
Part IV—Observing Stomata in *Wandering Jew*

1. Place a piece of a *Wandering Jew* leaf directly on a slide. Do not cover with a cover slip.
2. Observe the leaf at 100X and record your observations. Label the guard cells, stomata, and any other features you can observe.
3. Increase the power to 400X, observe, and record your observations.

Med Power



High Power



TOTAL Magnification _____ x

TOTAL Magnification _____ x

Part V – Conclusions

Answer the questions in the space provided.

1. What compound was produced when carbon dioxide was mixed with water? _____
2. How could you test for the production of this compound?

3. The BTB solution that was left in the light for 24 hours changed from yellow to blue. How did the solution become less acidic?

4. What happened to the chloroplasts when you shined a light on the *Elodea* leaf?

5. What structures were involved with the movement of chloroplast? What is this process called?

