

Name\_\_\_\_\_

### ***Lab: Pickle Dissection***

#### ***Objectives:***

- \*To introduce students to the proper dissection techniques
- \*To examine the contents of a fruit (it's **NOT** a vegetable)
- \*To learn the terms ventral, dorsal, anterior and posterior
- \*To keep careful records and sketches
- \*To practice statistical analysis

**Background information:** Organisms are described with a special vocabulary. The following are terms that relate to directions on a body:

Anterior: The top or front end of an organism's body, or at or towards the front. Posterior: The behind or end of an organism, or at or towards the rear.

Dorsal: The back of an organism, or on or towards the back.

Ventral: The bottom of an organism, or on or at the bottom.

Lateral: The sides of an organism.

Basal: The bottom of an elongated structure or towards the base.

Distal: Towards or at the tip farthest away from the base.

Symmetry: An organism is bilaterally symmetric if when cut from anterior to posterior the resulting halves are equal. Humans exhibit bilateral symmetry.

Exterior - Outside the body

Interior - Inside the body

#### **Procedure: (Read directions carefully)**

1. Create a hypothesis based on the level of difficulty you would encounter if you were extracting seeds from the pickle.

Hypothesis:\_\_\_\_\_

2. Look at the pickle; in the space below describe the shape, color and texture.

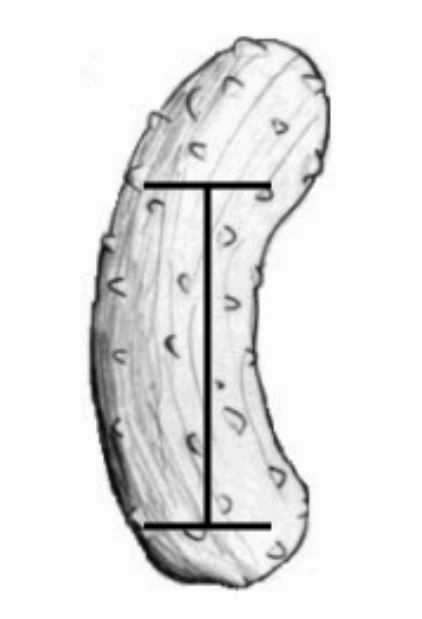
3. Identify the anterior, posterior, ventral and dorsal sides of the pickle. Draw in space below.

4. Pin the anterior and the posterior ends of the pickle to the dissecting tray with the dorsal side down.

5. Measure the pickle in cm. Write the pickle measurement here \_\_\_\_\_

6. With the scalpel, make a vertical incision, about half way through the pickle (DO NOT cut the pickle in half!) from the anterior end to the posterior end.

7. Use the scalpel to open the ventral "body cavity" by making a deep I-shaped incision about 1 cm away from posterior and another one cm from the anterior end. This area can be opened like hinged doors to expose the "internal organs." **Do Not** cut the pickle in half. See picture below.



8. Open up the pickle using the dissecting pins.

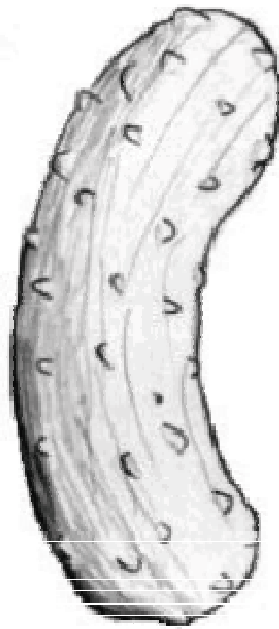
9. Make a sketch of the open pickle, *Figure 2*.



10. Using the dissecting probe, or the dissecting needle, carefully remove the seed without removing or harming the flesh. Each student shall successfully remove 10 seeds minimum.

***Analysis questions:***

1. When using the scalpel, what are some safety procedures you should keep in mind? List 4.
2. Why is it important to record your sketches and data carefully?
3. If this pickle were an animal, what would be the function of the exterior surface?
4. Why is the pickle considered a fruit and not a vegetable?
5. Label the following parts of the pickle: Anterior, posterior, dorsal, ventral, lateral



6. Does the pickle have bilateral or radial symmetry? \_\_\_\_\_
7. Did the data support your hypothesis supported or not? Explain.