Name: _____Period: ____Date: _____
Ms. Randall Anatomy & Physiology
Autopsy of a dill pickle

Lead Dissector:
Asst. Dissector:
Set up/clean up:
Reader/recorder:

Tools needed:
Tools: scalpel, forceps, dissecting pan, scissors, dissecting needles, dropper, pH paper, slides, microscopes

Objective:

- To practice using dissecting materials
- To strengthen your knowledge of anatomical planes and body cavities.

Pre-Lab – Identify the Dissection Tools

A

B

C

D

E.

F.

Match the tool letter above to its name and function below.
Forceps _____
Used for slicing and cutting large specimens_____
Scissors _____
Will grasp delicate tissues _____
Blunt Probe _____
To cut skin and fascia or to spread tissue layers _____
Dissecting needle _____
Used to manipulate or to poke at objects/openings _____
Scalpel _____
Used to hold back layers for better viewing or to keep on the tray _____
Dissecting Pins _____
To inspect small organs or tease apart tissues _____

Vocabulary:

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:
The exterior of the body is examined for abnormalities such as wounds or scars from injuries or surgeries. Give your summation using correct anatomical descriptions below:

Draw both the dorsal and ventral (posterior and anterior) views of your pickle. Be sure to indicate (with arrows) your findings from the previous paragraph. Label the views **dorsal** and **ventral**.

Dorsal: Ventral:

1. Turn your specimen so that its ventral side is up. Cut a deep "Y" incision with the arms of the Y (label this A on your picture) start at the **anterior** surface of shoulders and join at the **inferior** point of the sternum to form a single cut that extends to the **pubic** area. The sternum area should be labeled B, abdominal area C and the pubic area should be labeled D.

a. What type of cut are you making when you cut the "Y" incision? (**sagittal? transverse? frontal?)** Explain.

b. Draw the pickle and label the areas A-D.

2 After the ribcage is sawn through, the **abdominopelvic** region (E) can be opened like a hinged door (F) to expose the internal organs (G). The contents of the **thoracic cavity** (H) will also be visible. The second stage of the autopsy includes careful examination of many or all of the internal organs. The brain is to be examined as well and a portion of the skull must be removed by using a **transverse cut** at the very top of the head. The face, arms and legs are usually not dissected unless there is a specific reason for doing so.

a. Label E-H and indicate the superficial and deep layers on the drawing you did for #1b.

b. Note **ALL** abnormalities, objects, etc. and their locations. (using appropriate terms for locations) Ex: a deep cut is located in the anterior end proximal to the face.

c. Remove 2 "organs" and take the mass. (you might need to pretend certain parts are organs)

Organ 1 _____ mass = _____g
Description: _____

Organ 2 _____ mass = _____g
Description: _____

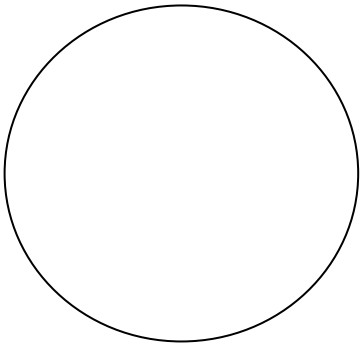
d. Remove the skull cap and remove the brain. Take the mass of the brain and look for any abnormalities.
mass = _____g
Record findings here:

e. Note any abnormalities, objects, etc. and their locations. (using appropriate terms for locations) Ex: a **deep** cut is located in the **anterior** end **proximal** to the face. Be sure to draw anything that will be necessary for your final report.

3. After the organs are returned to their proper body cavities, and the body is sewn up, the third phase of the autopsy begins. It is a microscopic examination of tissues collected during the first two stages. Tests to analyze the chemical content of body fluids or to determine the present of infectious organisms may also be performed. Examine a thin slice of patient (pickle) tissue under the microscope. BE SURE TO USE A COVERSLIP!

a. **Microscopic Examination:** Examine a **thin** slice of pickle tissue under the microscope and draw the structure of the tissue below:

Magnification used for sketch = _____x



b. **Toxicology**: The normal pH of this specimen's body tissues is 5-6.5. Collect a sample of body fluid from the epigastric region (I) and label I on sketch of internal examination.

pH = _____
Is the body fluid of normal color? _____
Is the fluid with in normal range, too acidic, or too basic? _____

(Normal pH of human body tissues is 7.35-7.45)

(pH of pickle juice is around 4)

(pH is on a scale of 0-14, low is acidic)

Conclusions:

What is your finding about the cause of death of this patient? Support your opinion with specific details from the autopsy. (Use appropriate terminology from this unit and apply within your answer. Create a story that involves how the death happened, when it happened, why it happened, what was discovered during the autopsy (cause of death), who this person, and who is the suspect in this case. (Causes of death include: loss of blood, lack of oxygen, lack of energy, build-up of toxins within the body, or no brain stimulation.) Support your opinion of the cause of death with specific details from the autopsy. Ex: Mr. Dill was stabbed in the heart with a knife that caused massive blood loss.

Burial Preparation: Prepare you patient for burial by replacing the organs and closing the flaps. Wrap your patient in paper towel and have a brief memorial service for him or her. Dispose of the remains in the trash receptacle.