

## Body Chart Assessment

### Concepts Assessed

There are four major systems (respiration, circulation, digestion and excretory) for transporting nutrients and waste around the body. Each system is made of specific organs that perform specific functions. The functions of the systems are inter-related.

### Time

60 minutes + 15 minutes individual writing

### Materials

Per Partner\* (See advance preparation)

2 Life size chart papers (or 2 blank body shapes that will fit into science notebook)

Organ system cutouts (life size or scaled for the notebook)

Glue

Scissors

Markers/colors

Sharpies (blue or black)

### Advance Preparation

1. Decide if this will be a “model” size that will be constructed in the student’s notebooks, or if each student will make a life-size poster. The latter is more engaging, but more time consuming. If you use the life size poster, remind girls to wear pants on this day.
2. Copy appropriate size cut-outs (notebook or life size) for each student.

### Procedure:

1. As the whole class: what body system allows you to breathe? To eat your food and give you energy? To get rid of your body waste? To transport oxygen and nutrients to your cells?.
2. Explain that today students will have an opportunity to build a (model or life size) representation of the systems in their body and explain how they work and interact.
3. Tell them they will work with a partner and will cut out, color and glue the organs in their notebooks (or on the full size paper) and draw in other organs as needed. Using a sharpie, they will label all of the organs.

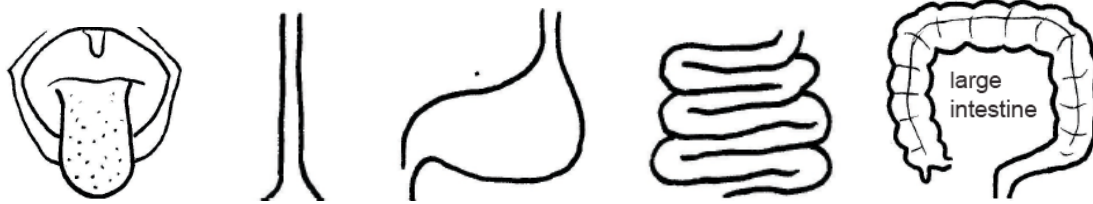
*Teacher Note: If using the life size poster, have students put the paper down, lie on top of it, and have the other student trace around their body.*

*To help students organize the task and follow which system is which, suggest coloring all organs in one system one color*

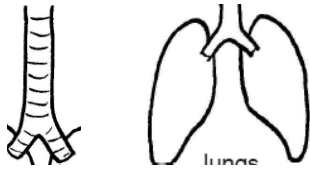
4. Partner students and sent them to the material stations. Walk around the room and monitor each group's progress. Look for correct organs for the specific system as well as placement in the body.
5. After 20-30 minutes, have partners form groups of 4.
6. Tell groups that they will be given a prompt and that they will have to present their poster and the answer to their prompt. Several groups may have the same prompt:
  - You are a blood cell. Describe your purpose and your journey through at least 2 systems.
  - You are a piece of cake. Describe your purpose and your journey through at least 2 systems.
  - You are carbon dioxide. Where did you come from? How did you get there? Explain your journey in at least 2 systems.
  - You drank a lot of soda and have to go to the bathroom. Describe how the urine formed in your body. Include at least 2 systems.
7. Provide one of the above prompts to each student and ask him/her to write an answer.
8. Use both body chart and individual student writing to evaluate their learning.

### Notebook Size Body Part Cut Outs

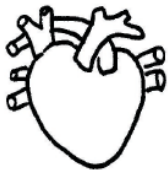
Digestive system (mouth, esophagus, stomach, small intestine, large intestine)



Respiratory system (trachea, lungs)



Circulatory system (heart) need to draw arteries and veins



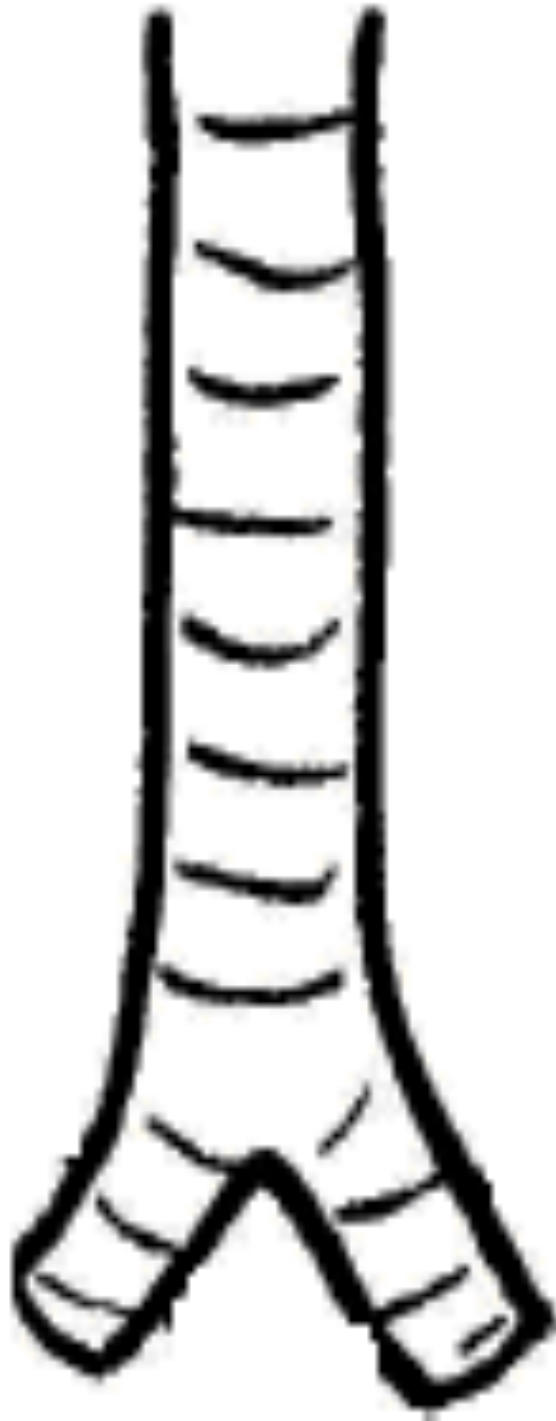
Excretory system (kidneys, ureters/bladder) , students need to draw urethra

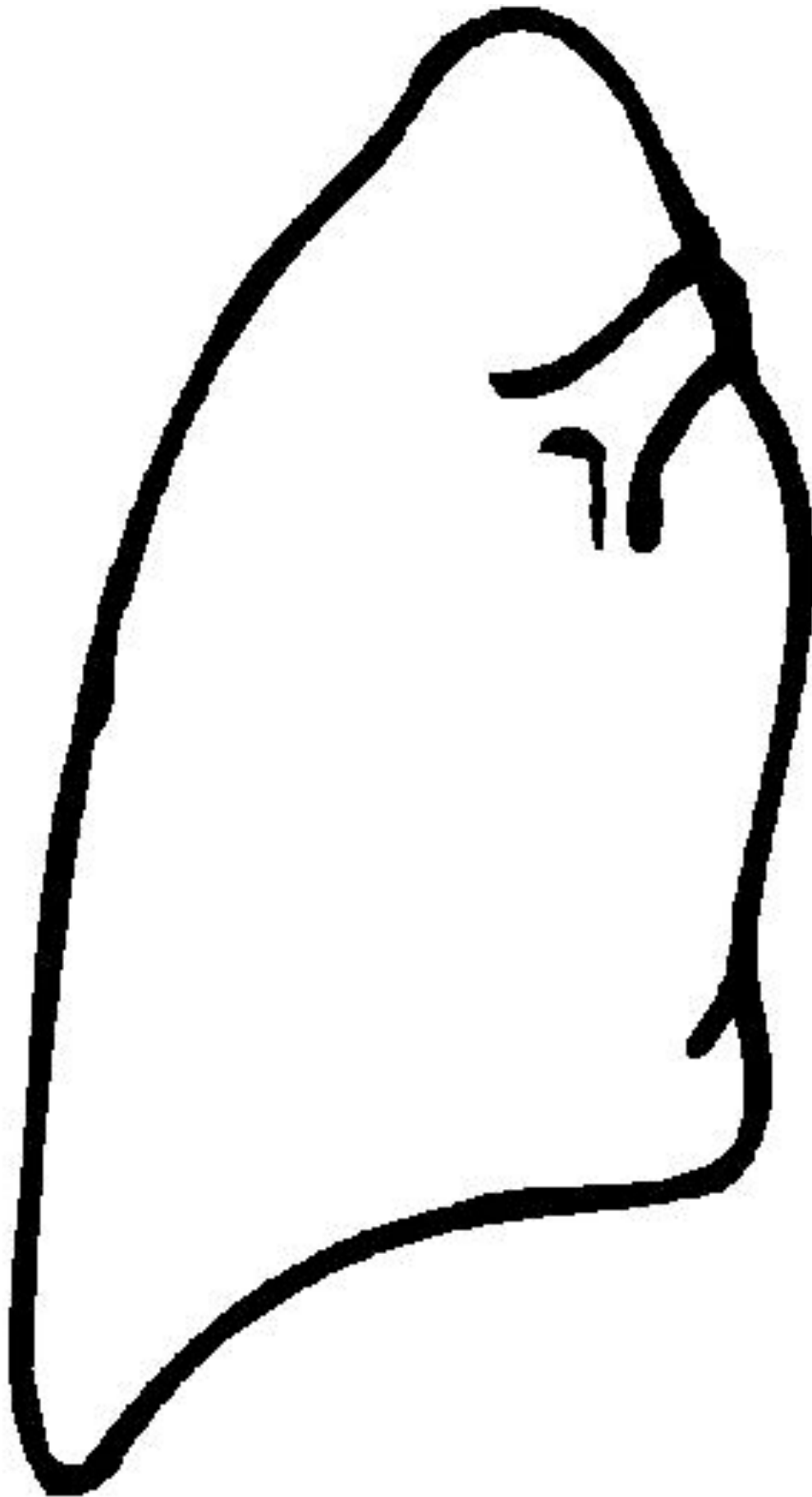


**LIFE SIZE CUT OUTS**

Respiratory (trachea and lungs)

Trachea



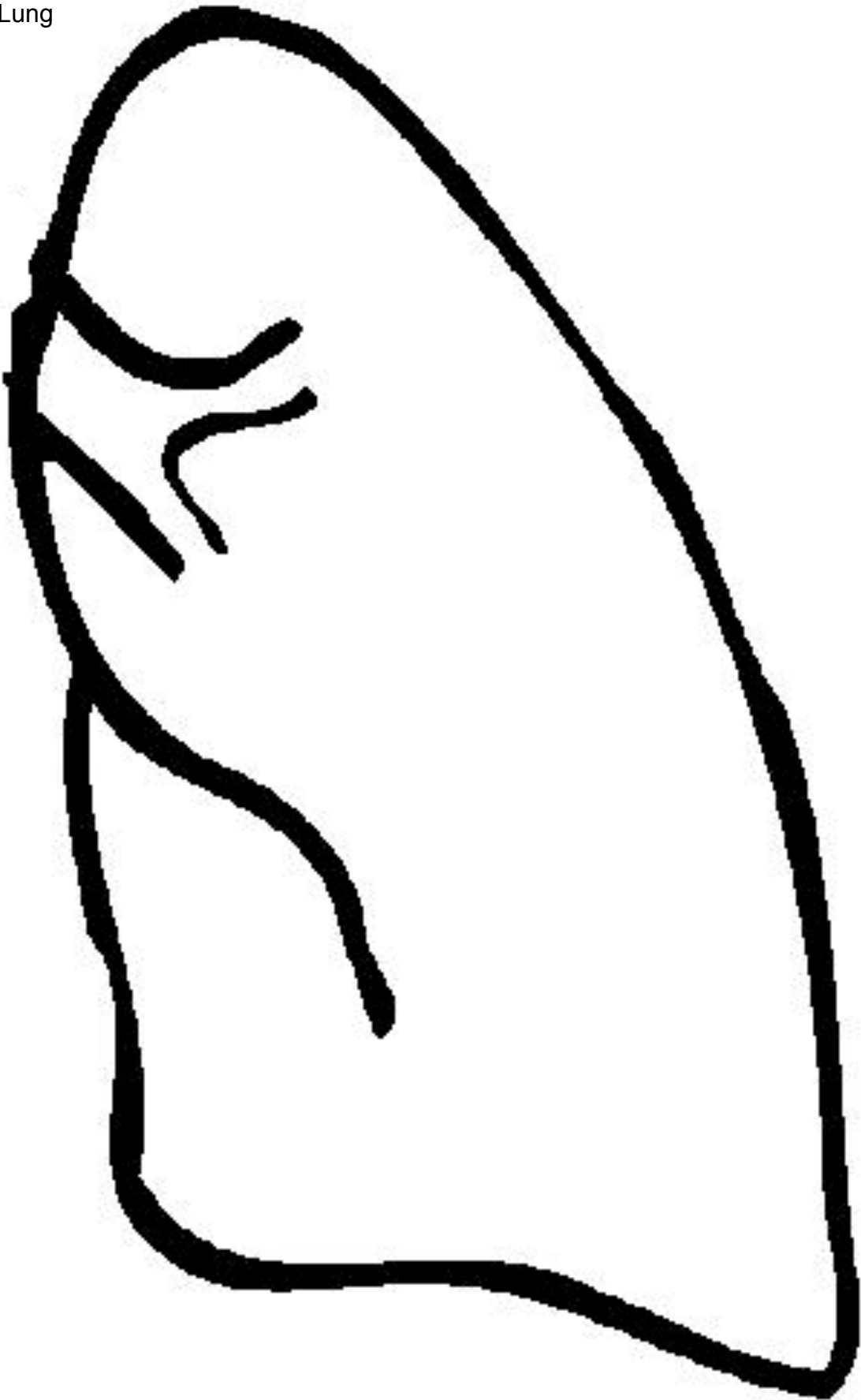


Right Lung

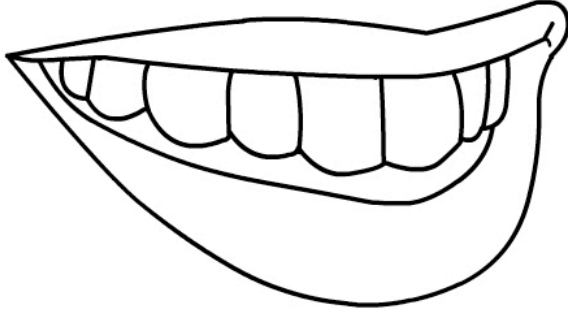
5.E Formative Assessment #4

\*SCIENCE MATTERS

Left Lung



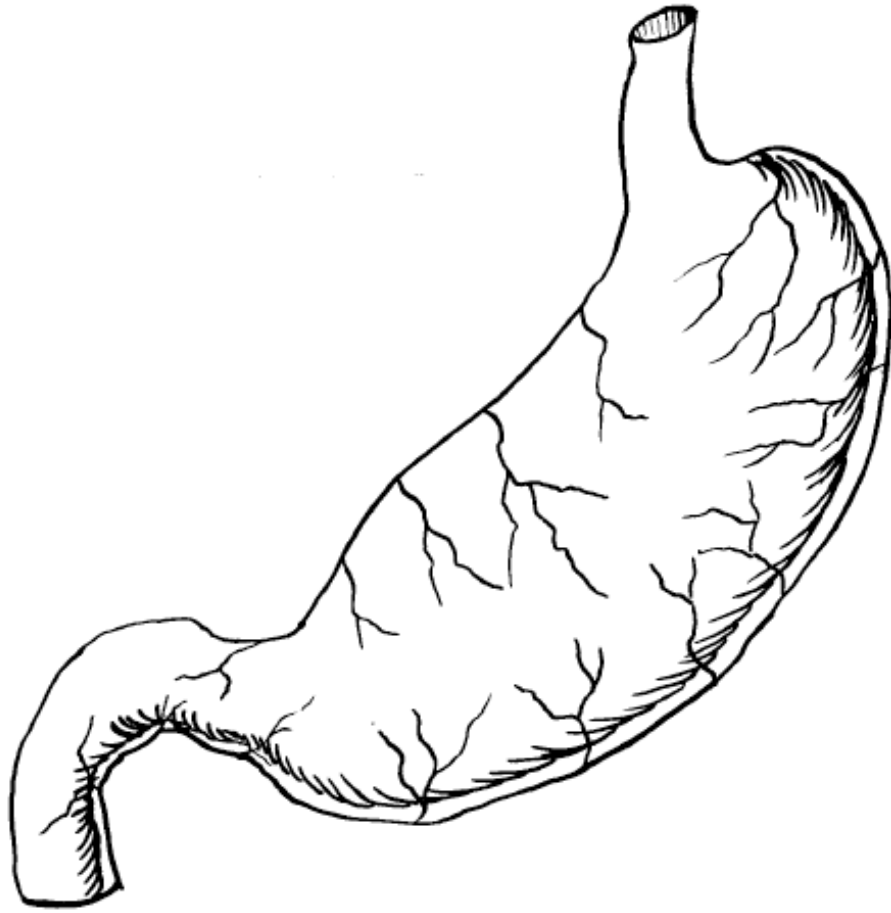
Digestive system (mouth/teeth, esophagus, stomach, small intestine, large intestine/anus)



Esophagus

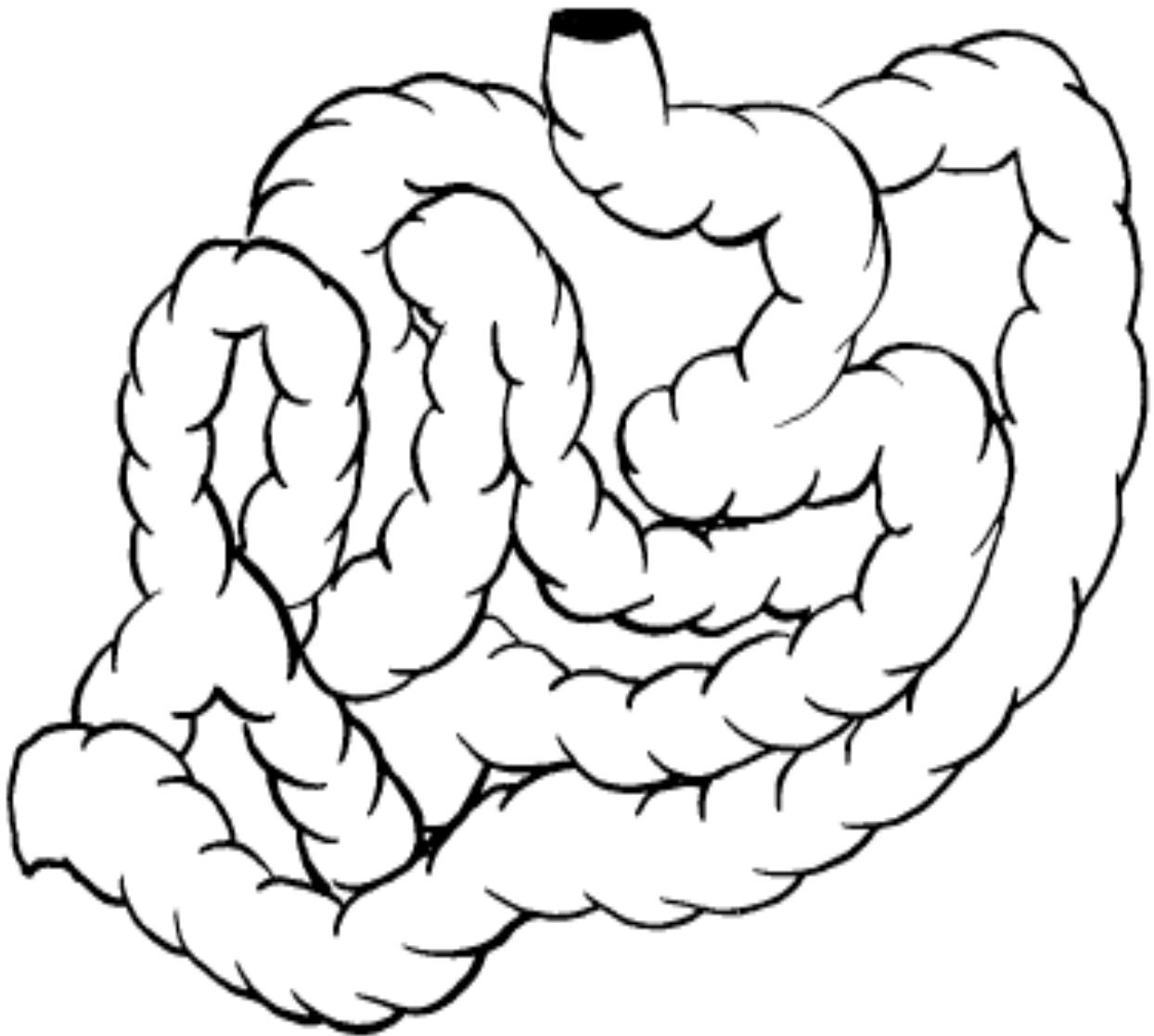




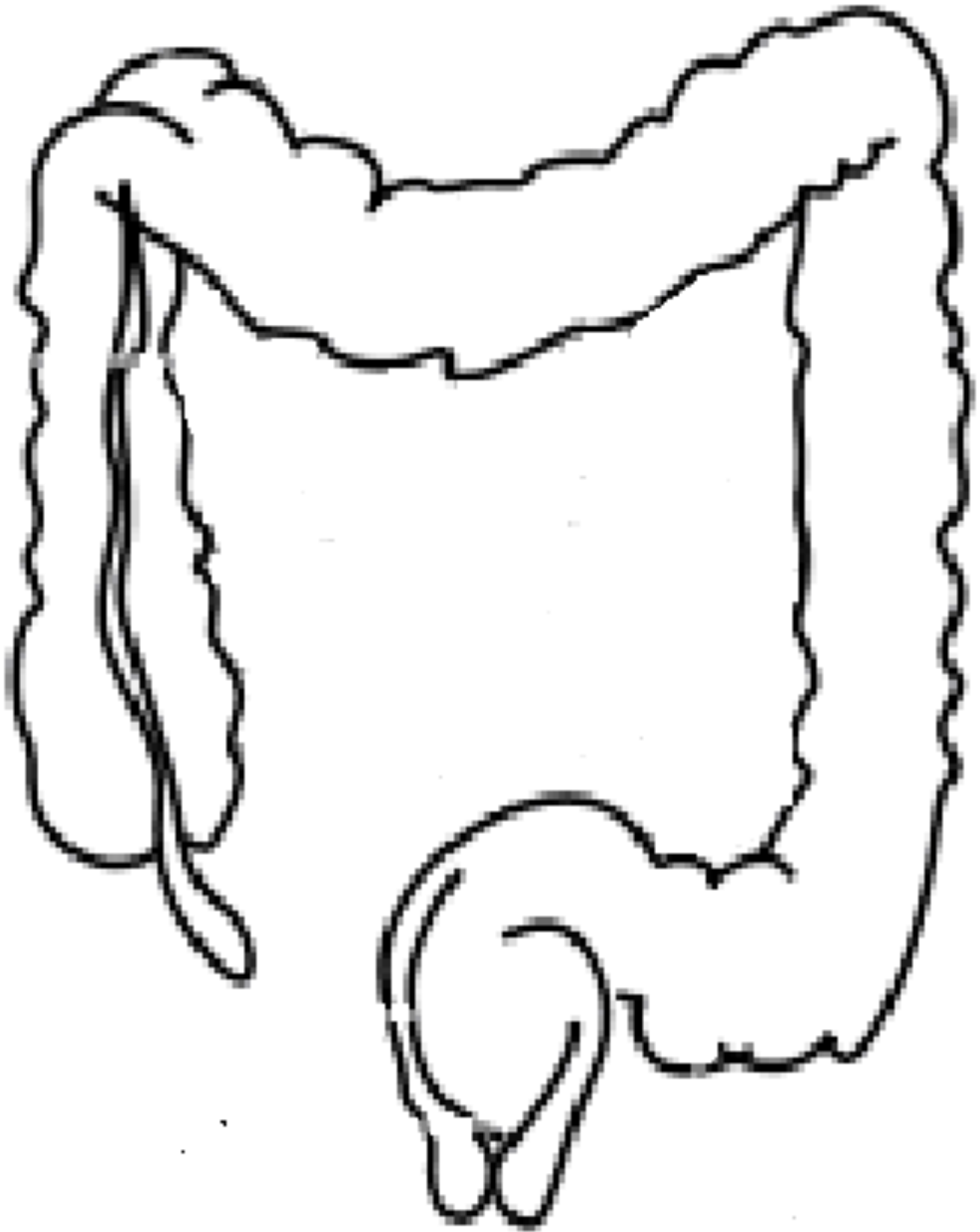


Stomach

Small Intestine

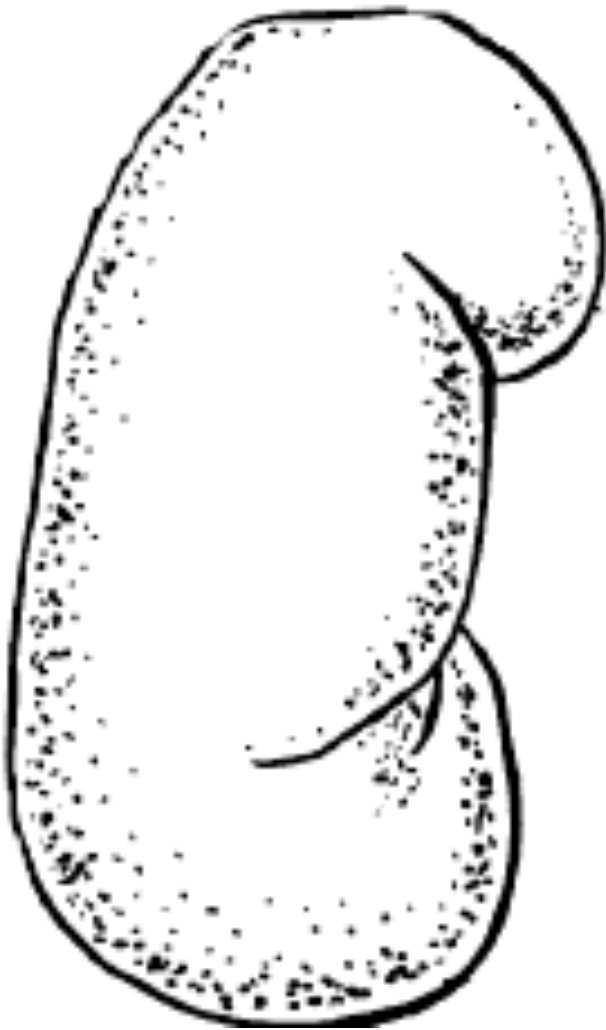


Large intestine

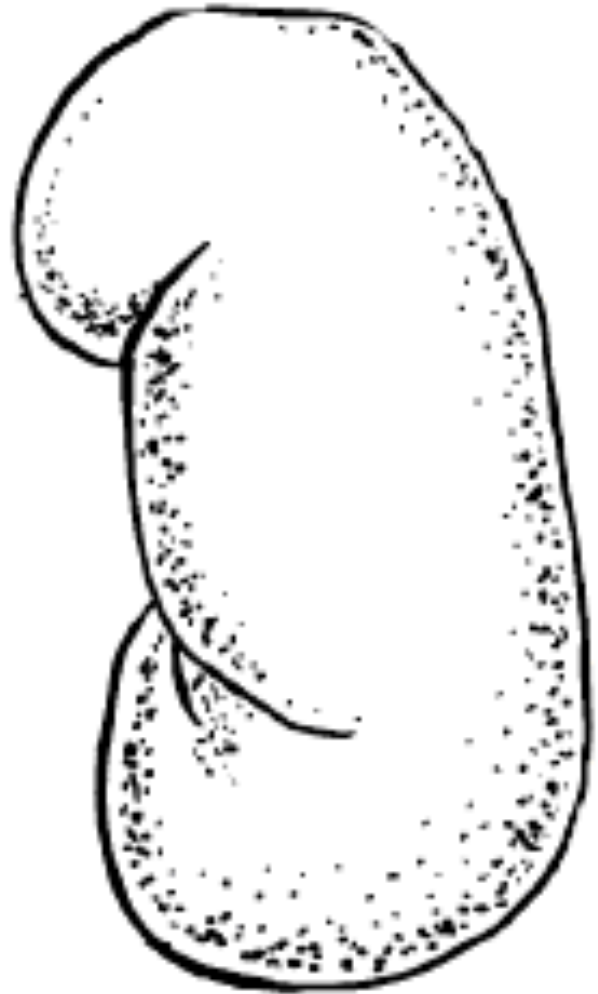


Rectum/Anus

Excretory (left and right kidneys, ureters, urinary bladder—students need to draw urethra)



Right Kidney



Left Kidney

Right Ureter

Left Ureter





Urinary Bladder

Circulatory system (students need to draw arteries and veins)

Heart

