

Abdominal Cavity Anatomy & Physiology Worksheet

1. Search online or in your school library to identify the major organs of the abdominal and pelvic cavities. Write the name of the organ in the space provided. The first one (the esophagus) is provided.

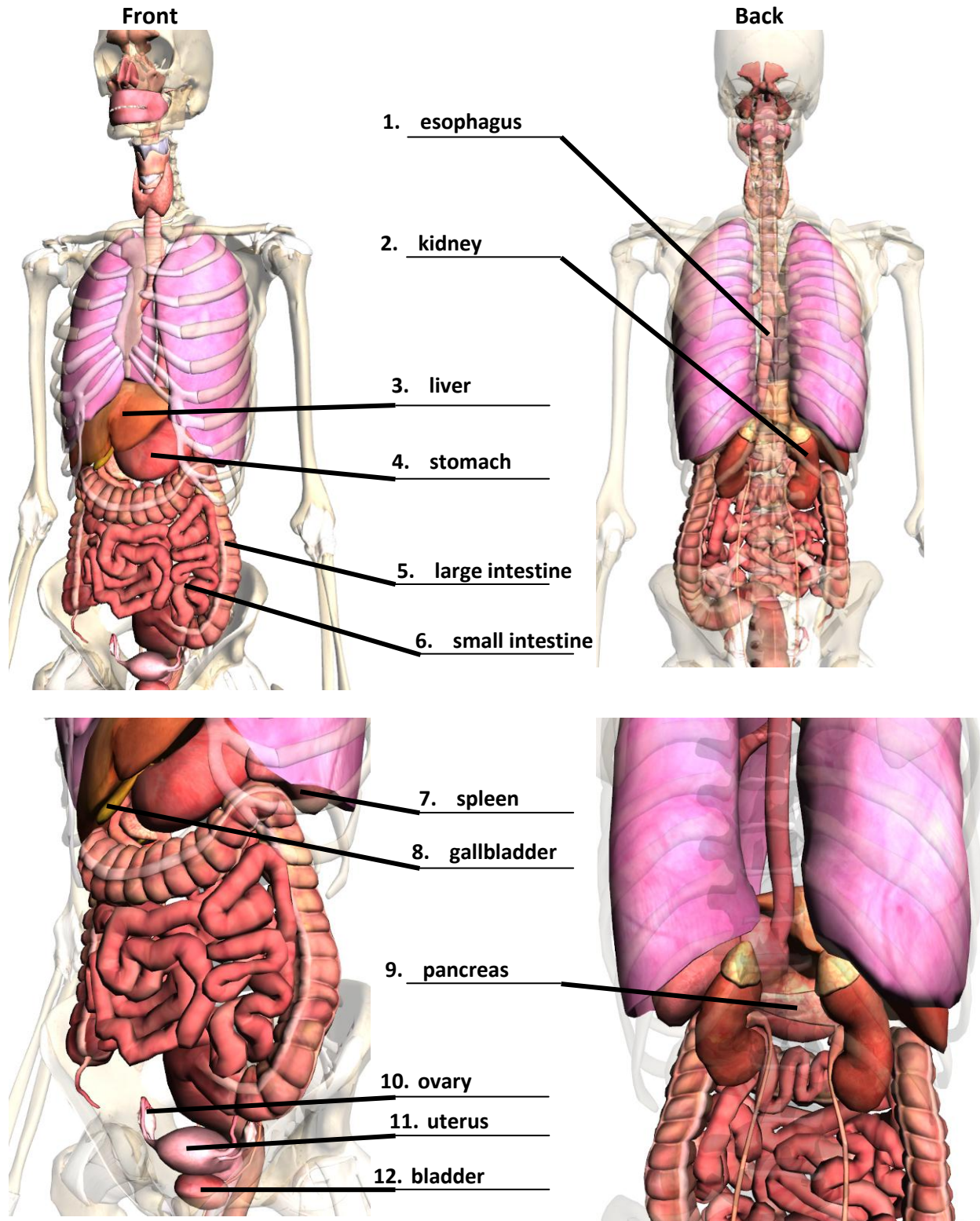


Image source: 2010 Benjamin S. Terry, ITL Program, University of Colorado Boulder (created using Google's 3D anatomy viewing software)

2. Write one brief sentence that physically describes each organ identified above.
Also write one sentence that describes the function of each organ. An example is provided.

Organ Name	Physical Description and Function
1. esophagus	A 25-30 cm long muscular tube that connects the pharynx to the stomach.
	Transports food from the mouth to the stomach.
2. kidney	A bean-shaped organ, ~12 cm long and 6 cm wide.
	Filters blood, regulates blood pressure and electrolyte levels, among other functions.
3. liver	A large, reddish-brown organ with multiple, equally-sized lobes. It weighs ~1.5 kg.
	Removes toxins from blood arriving from the small intestine, synthesizes proteins, and produces bile (used for digestion).
4. stomach	Further digests food using muscular contractions that mix the food with acids and protein-digesting enzymes.
	A hollow, muscular organ with sphincters on either end that act as “valves” for receiving food and regulating its release.
5. large intestine	A 1.5-meter long tube, much wider than the small intestine (> 5 cm wide). Connected to the exit end of the small intestine on one end and the rectum on the other.
	Absorbs water from the nutrient-depleted digested material. Provides a fertile environment for bacterial flora essential for vitamin production.
6. small intestine	A 5-meter long tube, ~3 cm wide. It is connected along its length to a thin membrane called the mesentery, which serves as its blood supply.
	Further digests food by mechanically mixing the “chyme” (fluid ejected by the stomach) and absorbing nutrients.
7. spleen	Part of the lymphatic system. About ~11 cm long and weighs ~200 g. Purplish gray.
	Synthesizes antibodies and removes antibody-coated bacteria. Performs many other functions related to fighting disease and infection.
8. gallbladder	Small, hollow sack that receives and stores bile produced by the liver.
	Releases bile (up to 50 mL) into the small intestine when fatty foods have entered the digestive tract.
9. pancreas	Has four prominent features referred to as the head, neck, body, and tail. Located below the stomach and about one-third of the stomach’s size.
	Secretes pancreatic juice that helps dissolve food. Also produces chemicals for the endocrine system (hormones).
10. ovary	Female reproductive, oval-shaped organ attached in pairs to the outer layer of the uterus.
	Produces and stores ova (eggs) and hormones that regulate the menstrual cycle.
11. uterus	Female reproductive, muscular organ consisting of a “body” and “cervix.” The cervix protrudes into the vagina.
	Accepts a fertilized ovum (egg); nourishes, and protects the resulting embryo.
12. bladder	A hollow, elastic, muscular organ.
	Stores up to 350 mL of urine (which is ~15 times its empty, unstretched capacity).