

Anatomy & Physiology

1) Which system of the body do the mouth, lungs, and larynx belong to?

- A. Cardiovascular: The heart, veins, and arteries belong to this system.
- B. **Respiratory: This is the correct answer! ([link](#))**
- C. Muscular: The different types of muscles, tendons, and ligaments belong to this system. ([link](#))
- D. Nervous: The brain, spinal cord, and all your nerves belong to this system. ([link](#))

2) What is the smallest structural and functional unit organism?

- A. **Cell: This is the correct answer! ([link](#))**
- B. Atom: This is the basic unit of a chemical element. ([link](#))
- C. Molecule: An electrically neutral group of two or more atoms held together by chemical bonds. ([link](#))
- D. Electron: A subatomic particle. ([link](#))

3) What is the circulatory system also known as?

- A. Integumentary: This is the organ system that protects the body from various things such as loss of water or abrasions (scrapes) and includes skin, hair, nails, and more! ([link](#))
- B. Lymphatic: It is a vital part of both the immune and the cardiovascular systems, it's composed of vessels that carry a clear fluid called lymph. ([link](#))
- C. **Cardiovascular: This is the correct answer! It includes the heart and its arteries, veins, and capillaries. ([link](#))**
- D. Endocrine: This system is a collection of glands that secrete hormones some of the major glands are the pineal, pituitary, pancreas, ovaries, testes, and the thyroid glands. ([link](#))

4) If the elbow is distal to the shoulder then the wrist is?

- A. Proximal to the elbow: In this example the shoulder and elbow are proximal to the wrist. ([link](#))
- B. Equilateral to the elbow
- C. **Distal to the elbow: This is the correct answer! Distal means that it's further away from both the elbow and shoulder, therefore the body itself. ([link](#))**
- D. Not on the same limb

5) How many ribs do we have?

- A. 6
- B. **24: This is the correct answer! We have two sets of 12 ribs equaling 24 ribs in total. ([link](#))**
- C. 12: We have two sets of twelve ribs equaling 24 ribs in total.
- D. 18

6) Breathing is a(n)

- A. Optional action
- B. Involuntary action: This is the correct answer! We do not have to “think” to breathe, it’s automatic. ([link](#))**
- C. Voluntary action: While we can choose not to breathe for a time, if we choose not to breath for too long, we will “pass out” and automatically resume respirations.
- D. A function of the liver: The liver doesn’t play a role in respiration; its role is in filtration as well as digestion. ([link](#))

7) In what part of the airway are the lungs located?

- A. Upper: The upper airway is comprised of the nose, mouth, and throat.
- B. None
- C. Lower: This is the correct answer! ([link](#))**
- D. They’re a part of the digestive system.

8) The four chambers of the heart are

- A. Nina, Pinta, Santa Maria, and the Ford: These are ships and cars, not chambers.
- B. Upper lobe, lower lobe, side lobe, and the left lobe: There are lobes of the lungs, but not really the heart. [Look here to get more info on the lungs lobes!](#)
- C. Right atrium, right ventricle, left atrium, left ventricle: This is the correct answer!** In short, blood flows from the **right atrium** to the **right ventricle**, the lungs and then to the **left atrium** to the **left ventricle** to the arteries and then back through the veins to the heart. ([link](#))
- D. Omnidirectional quad chambers: This isn’t a real thing.

9) The longest bone in the body is

- A. Humerus: This is the bone in your upper arm. ([link](#))
- B. Femur: This is the correct answer! This is the longest bone in the body and is the bone of your upper leg. ([link](#))**
- C. Tibia: This is one of two bones that make up your lower leg. The other is the Fibula is the bone located on the lateral side of the Tibia. ([link](#))
- D. Stapes: This is the smallest bone on the body and is located in the ear. ([link](#))

10) What body system is the skin a part of

- A. Nervous: This system houses the brain, spinal cord, and your nerves.
- B. Endocrine: This system is a collection of glands that secrete hormones. Some of the major glands are the pineal, pituitary, pancreas, ovaries, testes, and the thyroid glands. ([link](#))
- C. Integumentary: This is the correct answer! The skin belongs to this body system.**
- D. Cardiovascular: Remember me? The heart, arteries, arterioles, capillaries, venioles, and veins!

11) What structure is NOT located in the lungs?

- A. Alveoli: These are found in the lungs, they're hollow cavities, and are the basic unit of ventilation.
- B. Bronchi: Are found in the lungs and are a passage unit that conducts air into the lungs.
- C. **Xiphoid process: This NOT in the lungs! This bone is at the distal tip of the sternum on your chest. ([link](#))**
- D. Bronchioles: Part of the bronchial tree, they're located in the lungs.

12) Which of these structures is NOT in the abdomen?

- A. Stomach: The stomach is in the left upper quadrant and the right upper quadrant of the abdomen. ([link](#))
- B. Liver: The liver is in the left upper quadrant and the right upper quadrant of the abdomen.
- C. **Heart: This answer is correct! The heart is not in the abdomen. It's in the Thoracic cavity. ([link](#))**
- D. Colon: The colon is in the abdomen.

13) What structures carry oxygenated blood away from the heart?

- A. Cardio pathways: This isn't a thing related to blood flow.
- B. Veins: This is how deoxygenated blood returns to the heart. ([link](#))
- C. Colon: This is not a place for blood, but to absorb water during the digestive process. ([link](#))
- D. **Arteries: This the correct answer! It's the arteries that bring oxygenated blood from the heart to the rest of the body so that our tissues may live.**

14) An asthma attack affects which system?

- A. Digestive: This system is for pulling nutrients from food so that we have the fuel from which to live. ([link](#))
- B. Nervous: This system allows our brain to communicate with the rest of our body and the rest of our body to communicate with the brain.
- C. **Respiratory: This is the correct answer! When a patient has an asthma attack there's a tightening of the muscles around the airways, bronchospasms, and it makes it hard or impossible to breathe. ([link](#))**
- D. Integumentary: Remember me? I'm the skin and such, an asthma attack may cause me some trouble but it's not in my system.

15) Which system is responsible for posture and movement?

- A. Integumentary: While this system, which includes the skin, holds a lot together it's not strong enough to keep your posture and allow you to move.
- B. **Muscular: This is the correct answer! The muscles, tendons, and ligaments all play a starring role in your posture and movement.**
- C. Circulatory: Without the blood from the circulatory system the muscular system would fail, but it's not responsible for posture or movement.
- D. Nervous: While the nervous system plays a role in all we do, by sending messages from our brain to muscles and back, it's not the workhorse that actually gets the job done.

- 16) What is the outermost layer of tissue (meninges) that surrounds the spinal cord?
- A. Arachnoid mater: This is the middle layer that makes up the meninges.
 - B. Pia mater: This is the delicate innermost membrane that envelops the brain and spinal cord.
 - C. Epidural space: This is the area in the spinal cord between the spinal wall and the vertebrae. ([link](#))
 - D. **Dura mater: This is the correct answer! It's the tough outermost membrane surrounding the brain and the spinal cord. ([link](#))**

Biology

- 1) What is the largest organ in the human body?
- A. Brain: Your brain is sizable, but it's not the largest. ([link](#))
 - B. Heart: If your heart is too large that could cause a real problem.
 - C. **Skin: This is the correct answer! This is the largest organ in your body. It has to be large, because it's holding everything else in there. ([link](#))**
 - D. Liver: This is the largest internal organ of your body. ([link](#))
- 2) How many Chromosomes does a human somatic cell contain?
- A. 44
 - B. **46: This is the correct answer! Humans have 46 chromosomes and they're organized into pairs of 23. ([link](#))**
 - C. 23
 - D. 26
- 3) What is the function of the hemoglobin?
- A. **Transports oxygen: This is the correct answer! Hemoglobin carries blood from the respiratory organs to the rest of the body. ([link](#))**
 - B. Coagulates blood: Coagulation happens when there's an activation, adhesion, and aggregation of platelets. ([link](#))
 - C. Destroys bacteria
 - D. Prevents anemia: The intake of iron rich foods may help prevent anemia. ([link](#))
- 4) What is the net passive movement of the particles from a region of higher concentration to a region of lower concentration?
- A. Osmosis: This is the result of diffusion, but it's not diffusion. ([link](#))
 - B. Active transport: Does a similar thing as diffusion but needs energy from the cell.
 - C. Facilitated diffusion: Is a specific type of diffusion.
 - D. **Diffusion: This is the correct answer! Diffusion is used in dialysis. Diffusion is the movement from a high concentration of molecules to a low concentration of molecules and does not need energy from the cell.**

5) What causes us to breath?

- A. Hyperosmosis: This is not a thing that causes us to breathe.
- B. **Hypercarbia: This is the correct answer! As CO2 collects in the blood it triggers the need for us to breath thereby expelling CO2 and inhaling fresh oxygen rich air into the lungs.**
- C. Hypotension: This is the medical term for low blood pressure. ([link](#))
- D. Hypoxia: This is the medical term for when our bodies don't get enough oxygen at the tissue level. ([link](#))

6) What is the smallest living unit of matter in the human body?

- A. Atom: The basic unit of a chemical element.
- B. Taste bud: Taste buds contain taste receptor cells, therefore they cannot be the smallest.
- C. **Cell: This is the correct answer! The cell is the smallest living unit of the human body.**
- D. Molecule: A molecule is a grouping of atoms.

7) The tendency toward a relatively stable equilibrium between interdependent elements, especially as maintained by physiological processes is?

- A. Hyperstasis: As far as I know this isn't a thing.
- B. **Homeostasis: This is the correct answer! To further expound on the topic, it is the process that regulates our temperature and our pH balance. ([link](#))**
- C. Mindfulness
- D. A healthy diet including fruit and vegetables: While eating these may help, it is not the correct answer.

8) Which one of these cells are a nerve cell?

- A. Cardiac cell: This type of cell is what makes up the heart. These cells are striated and under involuntary control.
- B. Smooth cell: These cells are located in hollow organs, but not the heart, they are spindle shaped, and they are under involuntary control.
- C. Skeletal cell: These are found in muscles connected to the skeleton, they are striated, and are under voluntary control.
- D. **Neuron: This is the correct answer! The Neuron is a nerve cell and it is an electrically excitable cell that receives, processes, and transmits information through electrical and chemical signals.**

Medical Terminology

1) The front of the body is referred to as the?

- A. Posterior: This is the rear, backside, or dorsal part of the body.
- B. Transverse line: This divides the top and bottom parts of the body.
- C. **Anterior: This is the correct answer! The anterior, or front, of the body is also the part of the body you see when a patient is in the anatomical position, facing forward with palms up.**
- D. Palmar surface: This is the palm of your hand.

2) What does the suffix “-partum” mean?

- A. Gynecology: This is branch of medicine that deals with the health of the female reproductive system and breasts.
- B. **Birth, labor: This is the correct answer! For example, the term “postpartum” is the period after birth.**
- C. Obstetric: This is in relation to child birth.
- D. Vaginal: This is in relation to the female genitalia.

3) What is the definition of bilateral?

- A. Lying flat, face down: This is the position known as prone.
- B. Pertaining to one side
- C. **Pertaining to both sides: This is the correct answer! “Bi” is a suffix that means two.**
- D. At a 90 degree angle

4) What does the prefix “brady-” mean?

- A. **Slow: This is the correct answer! “Brady-” in front of a word root like “cardia” in bradycardia means a slow heartbeat. ([link](#))**
- B. Fast: The term for fast is “tachy-”, as in a patient with tachycardia would have a faster than normal heartbeat. ([link](#))
- C. Shallow
- D. Deep

5) What does the prefix “anti-” mean?

- A. Not
- B. **Against, opposing: This is the correct answer! An example: Antibiotics or antivirus.**
- C. Together
- D. Without, from, absence of

6) What does the prefix “hyper-” mean?

- A. Low: This would be “hypo-”
- B. Unchanged
- C. Regulated
- D. **High: This is the correct answer! An example: Hyperglycemic, or high blood sugar.**

7) Where on a word does the prefix go?

- A. At the end of the word: This is the suffix, it goes at the end of the word.
- B. In the middle of the word: This is where the “word root” or “root word” would be, if there were both a suffix and a prefix.
- C. This is not a real term
- D. **At the beginning of the word: This is the correct answer!**

8) The word root "cardio" pertains to the?

- A. Lungs: "Pulmo" refers to the lungs.
- B. Legs
- C. Liver: "Hepat" refers to the liver.
- D. **Heart: This is the correct answer! "Cardio" refers to the heart, as in cardiopathic surgeon.**

9) The suffix "-itis" refers to?

- A. **Inflammation: This is the correct answer! Arthritis (inflammation of the joints), hepatitis (inflammation of the liver), and encephalitis (inflammation of the brain) are a few examples.**
- B. Swelling: The medical word for this is "edema" and it's the collection of fluids in tissue.
- C. Diarrhea: Loose and watery stool that can cause dehydration and be deadly in younger and older patients.
- D. Skin loss.

10) Which organ is affected by hepatitis?

- A. Lungs
- B. **Liver: This is the correct answer! As noted before hepatitis is an inflammation of the liver. It can be caused by drugs, alcohol, a virus, a fungus, or even a bacterial infection.**
- C. Heart: Myocarditis is an inflammation of the heart muscle. "Myo" indicates muscle, "cardi" indicates the heart, and "itis" refers to swelling.
- D. Kidney: Nephritis is inflammation of the kidney. "neph" being kidney and "itis" being swelling.