

# Cells and Systems - Section 1.3 / 3.0 / 4.0

## Body Systems Quiz

Student Name \_\_\_\_\_

Class \_\_\_\_\_

### 1.3 Organs and Organ Systems

1. This organ is the largest organ in the body and belongs to this system ...
  - A. Heart – Circulatory system
  - B. Brain – Nervous system
  - C. Small Intestine – Digestive system
  - D. Skin – Integumentary system
2. This body system defends the body against disease ...
  - A. Digestive system
  - B. Integumentary system
  - C. Nervous system
  - D. Circulatory system
3. The chemical digestion of food begins in this structure, which breaks down the food into nutrients that can be used by the various cells in the body. It is the ...
  - A. stomach
  - B. esophagus
  - C. mouth
  - D. small intestine
4. The sensory organs belong to this body system ...
  - A. Muscular
  - B. Skeletal
  - C. Circulatory
  - D. Nervous
5. This organ system removes chemical and gaseous wastes from the body. This body system is the ...
  - A. Digestive system
  - B. Excretory system
  - C. Circulatory system
  - D. Respiratory system
6. These structures move organs such as the heart and stomach, so they can perform their function...
  - A. nerves
  - B. muscles
  - C. bones
  - D. capillaries

### 3.0 Healthy human function depends on a variety of interacting and reacting systems

7. Peristalsis is the action caused by contractions of muscles in this structure in the digestive system ...
  - A. liver
  - B. pancreas
  - C. esophagus
  - D. trachea
  
8. Gastric Juice is composed of mucus, hydrochloric acid, water and digestive enzymes. The purpose of the mucus is ...
  - A. digest proteins into smaller particles
  - B. prevent the gastric juice from digesting the stomach
  - C. assist the hydrochloric acid with digestion
  - D. prevent heartburn from occurring
  
9. Each body system works with other body systems to perform its function effectively. When different gases are exchanged in the lungs and then transported throughout the body, the systems working together are the respiratory system and the ...
  - A. circulatory
  - B. digestive
  - C. sensory
  - D. integumentary
  
10. Oxygen-rich air is drawn into the lungs through tube-like passageways called bronchi. The bronchi are lined with tough connective tissue in order to ...
  - A. keep the walls from collapsing
  - B. expand the surface area
  - C. extend the life of the bronchi
  - D. allow the air to pass through easily
  
11. This part of the heart is the part that receives the oxygen rich blood from the lungs and pumps it into the left ventricle ...
  - A. right atrium
  - B. left atrium
  - C. right ventricle
  - D. aorta
  
12. Capillaries have two adaptations for exchanging gases and nutrients: they are made of specialized epithelial tissue that is only one cell thick and they ...
  - A. are reinforced with a double membrane
  - B. can reverse the flow of gases when they need to
  - C. are very narrow, so the blood cells have to pass through in single file
  - D. can collapse on bacteria, preventing it from getting to the heart
  
13. The liver is a very important organ in the excretory system. The function of this organ is to convert a highly toxic substance into a less harmful substance. The highly toxic substance that is converted into urea in the excretory system is ...
  - A. hydrochloric acid
  - B. ammonia
  - C. sodium chloride
  - D. gastric juice
  
14. In the excretory system, the bladder's primary function is to ...
  - A. filter urine
  - B. perform dialysis
  - C. store urine
  - D. clean urea
  
15. A neuron receives messages from small branches of the nerve cell called ...
  - A. axons
  - B. interneurons
  - C. somatic nerve
  - D. dendrites

16. A knee-jerk reaction is a simple example of a feedback system that is controlled by the nervous system in the body. A sharp tap of the reflex hammer to the knee sends a signal, up the spinal cord, to the brain, where the brain interprets and then sends a message to the leg to react. The stimulus in this example is the ...
- A. reflex hammer
  - B. brain
  - C. spinal cord
  - D. leg

#### 4.0 Scientific investigation leads to new knowledge about body systems and new medical applications

17. In the late 1700's, Edward Jenner, an English country doctor, developed the first vaccine. The vaccine he developed made people immune to smallpox. This vaccine was ...
- A. insulin
  - B. cowpox
  - C. e-coli
  - D. rabies
18. Louis Pasteur was originally a chemist. His first great discovery was finding out what made beer and wine spoil. He discovered micro-organisms, floating in spoiled batches of beer and wine. The micro-organisms were ...
- A. spoiled grapes
  - B. alcohol insects
  - C. yeast
  - D. anthrax
19. The respiratory system can also malfunction due to poor lifestyle choices. When the cilia (which remove airborne particles when they beat continuously) are clogged by mucus they cannot perform their function properly and over time, can become inflamed. This condition (which can be treated) is called ...
- A. bronchitis
  - B. ciliaitis
  - C. emphysema
  - D. lung cancer
20. This disorder of the respiratory system is common in children in Canada. There are half a million children who suffer from it. It can be triggered by many different environmental factors. The disorder is ...
- A. bronchitis
  - B. asthma
  - C. emphysema
  - D. collapsed lungs
21. The reason why fries and chocolate taste so good is because they contain a lot of fats. These fats are converted into a lipid, called cholesterol, which enters your arteries and can clog the flow of blood. This disorder, or condition is referred to as ...
- A. high blood pressure
  - B. arteriosclerosis
  - C. hypertension
  - D. peptic ulcer
23. The digestive system can also malfunction, causing severe repercussions for an individual and even death. These disorders are caused by poor lifestyle habits or disease. One such disorder may lead to colon cancer. It is caused by ...
- A. over exertion
  - B. low fiber diet
  - C. high fiber diet
  - D. excessive use of aspirin

**Bonus ... Label the main chambers, arteries and veins of the heart**

