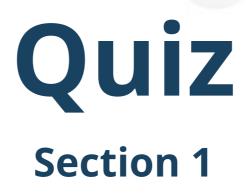
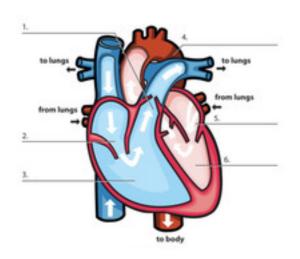
# Pump It Up!

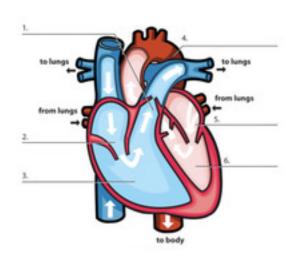
The first slide will ask you for your school, team and team members. 1 person should submit answers for the team. Once the section gets to 0:00, the test moves on but DOES record the answers you have clicked.





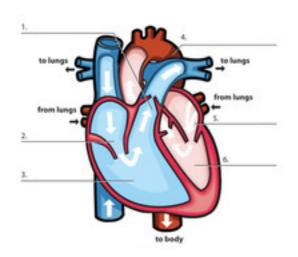
Look at the heart diagram in the picture. You can click it to make it bigger. #1 is pointing to what part of the heart?

- Aorta
- Pulmonary Artery
- ─ Right Atrium
- Right Ventricle



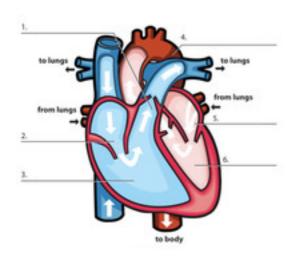
Look at the heart diagram in the picture. You can click it to make it bigger. #2 is pointing to what part of the heart?

- Aorta
- Pulmonary Artery
- ─ Right Atrium
- Right Ventricle



Look at the heart diagram in the picture. You can click it to make it bigger. #3 is pointing to what part of the heart?

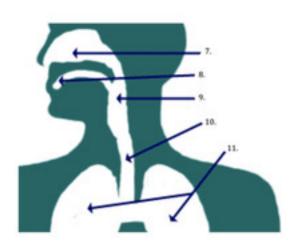
- Aorta
- Pulmonary Artery
- ─ Right Atrium
- Right Ventricle



Look at the heart diagram in the picture. You can click it to make it bigger. #4 is pointing to what part of the heart?

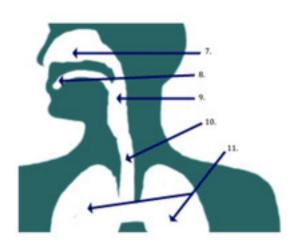
- Aorta
- Pulmonary Artery
- ─ Right Atrium
- Right Ventricle





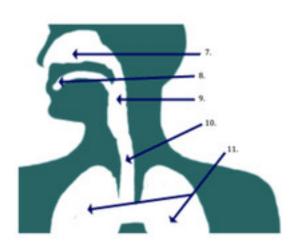
Look at this picture, you can click it to make it bigger. What is #7 pointing to?

- trachea
- lungs
- nose
- omouth



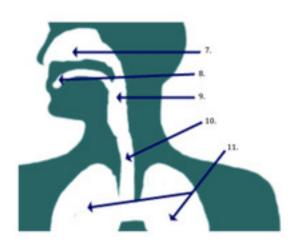
Look at this picture, you can click it to make it bigger. What is #8 pointing to?

- trachea
- lungs
- nose
- o mouth



Look at this picture, you can click it to make it bigger. What is #10 pointing to?

- trachea
- lungs
- nose
- o mouth



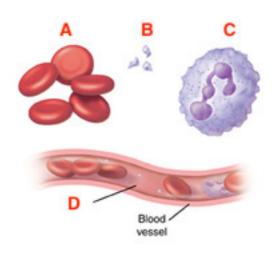
Look at this picture, you can click it to make it bigger. What is #11 pointing to?

- trachea
- lungs
- nose
- mouth



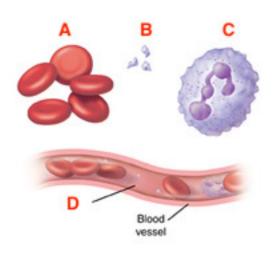
## Compared to an artery, the wall of a vein differs in which of the following ways?

- Veins have thicker walls
- Veins have thinner walls
- Arteries have valves
- Veins are much deeper



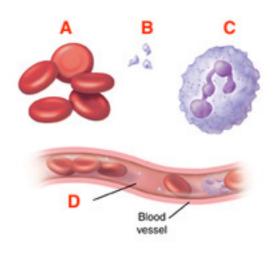
This picture shows the components of blood. What does letter A show?

- Plasma
- Platelets
- Red blood cells
- White blood cells



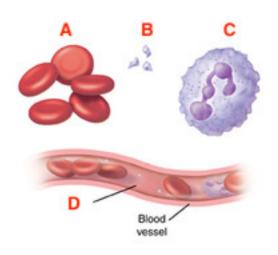
This picture shows the components of blood. What does letter B show?

- Plasma
- Platelets
- Red blood cells
- White blood cells



This picture shows the components of blood. What does letter C show?

- Plasma
- Platelets
- Red blood cells
- White blood cells



This picture shows the components of blood. What does letter D show?

- Plasma
- Platelets
- Red blood cells
- White blood cells



#### When will your pulse rate be highest?

- When you are sleeping
- On a long car trip
- After jumping rope 30 times in gym class
- While you are eating lunch



This boy can only hold his breath for about 30 seconds because his body need a constant supply of what from the air?

- carbon dioxide
- helium
- nitrogen
- oxygen

There is s very important metal in your blood which helps make your red blood cells. What is it called?

- calcium
- o iron
- potassium
- zinc

#### **Approximately how big is your heart?**

- The size of your foot
- The size of a golf ball
- The size of your fist
- The size of a football



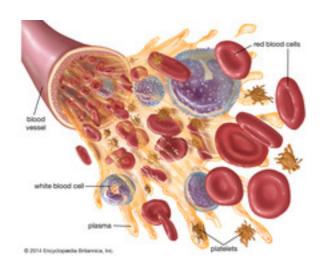
## Which of the following is the correct pathway of blood through the heart and lungs?

- From the body ->Aorta ->Right Ventricle->Right Atrium->Pulmonary Veins->Lungs ->Pulmonary Artery->Left ventricle->Left Atrium->Superior Vena Cava ->body
- From the body ->Pulmonary Artery ->Right Atrium->Left Atrium -> Pulmonary Veins->Lungs -> Superior Vena Cava -> Right Ventricle->Left ventricle->Aorta ->body
- From the body -> Superior Vena Cava -> Right Atrium -> Right Ventricle -> Pulmonary Artery ->Lungs -> Pulmonary Veins -> Left Atrium -> Left ventricle -> Aorta ->body
- From the body -> Pulmonary Veins-> Left Atrium-> Left ventricle-> Pulmonary Artery-> Lungs ->Superior Vena Cava-> Right Atrium-> Right Ventricle-> Aorta -> body

#### What color is oxygenated blood?

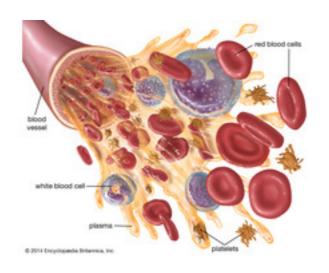
- blue
- clear
- purple
- red





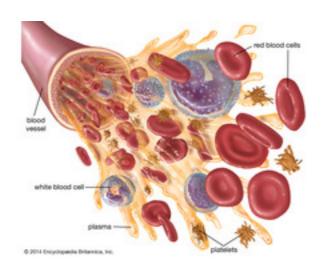
#### Which of the following is responsible for clotting?

- red blood cells
- white blood cells
- platelets
- plasma



Which of the following is composed mostly of water, it is the portion of the blood in which all other parts are suspended?

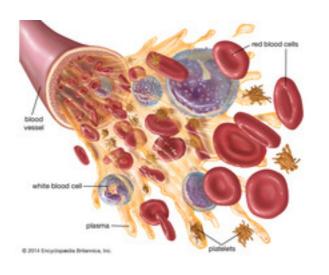
- red blood cells
- white blood cells
- platelets
- plasma



Which of the following's primary function is fighting infection or other foreign objects in the body?

- red blood cells
- white blood cells
- platelets
- plasma





## Which of the following carries hemoglobin to which oxygen attaches and is then distributed to body tissues?

- red blood cells
- white blood cells
- platelets
- plasma







#### Identify the disease pictured here.

- atherosclerosis
- cystic fibrosis
- sickle cell anemia



#### Do environmental or genetic factors cause this disease?

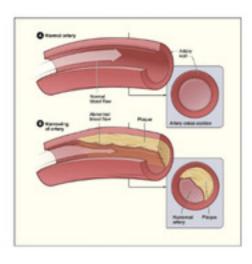
- environmental
- genetic



Which of the following are treatments for this disease?

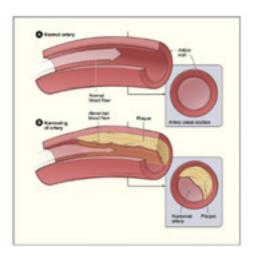
- Medications
- Exercise
- Blood transfusions
- Stem cell transplants





#### Identify the disorder shown.

- asthma
- atherosclerosis
- cystic fibrosis



Which of these is NOT a way to lower your risk for developing this disorder.

- change your diet
- odo not smoke
- exercise several times a week
- get gene therapy

#### The force of blood on the walls of the arteries is known as:

- blood pressure
- heart rate
- pulse
- respiratory rate



Which pair of lungs shown are healthy lungs – the left or the right?

- left
- right





The Big Bad Wolf has just arrived at the doctor. "I just can't huff and puff like I used to, doc! I can't even blow down a straw house any more." After some tests, the doctor has found that airways and air sacs in the wolf's lungs have lost their elastic quality, the walls between many of the air sacs were destroyed, and the remaining walls of the air sacs have become thick and inflamed. What diagnosis will the doctor give the Wolf?

- cystic fibrosis
- COPD
- lung cancer



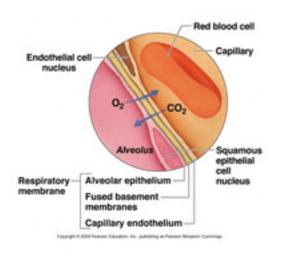
## What is the most common risk factor for this disease?

- diet
- exercise
- genetics
- smoking

This disease includes two main disorders. Select the two from the list below.

- Asthma
- Chronic bronchitis
- Emphysema
- Hypersensitivity Pneumonitis





# The process shown occurs in which structure of the respiratory system?

- diaphragm
- lungs
- nose
- trachea

## Which structure in the respiratory system is responsible for the breathing process (the movement of air in and out)?

- diaphragm
- lungs
- nose
- trachea

# During an episode of this disease, the passageways in the lungs are inflamed and produce mucus, causing difficulty breathing.

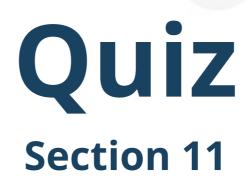
- asthma
- lung cancer
- emphysema

## Which of these environmental conditions would NOT make the disorder worse?

- o dust
- smoke
- allergens
- low humidity

#### Which of these is NOT a treatment for the disorder?

- Avoiding triggers
- Intense exercise
- Quick-relief medicines
- Long-term control medicines

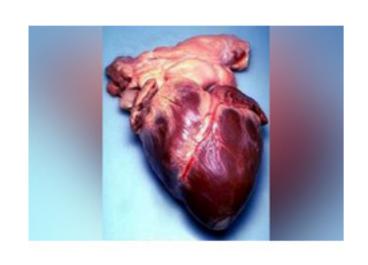




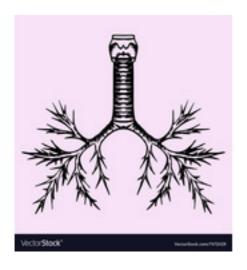
- Circulatory
- Respiratory



- Circulatory
- Respiratory



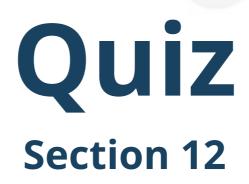
- Circulatory
- Respiratory



- Circulatory
- Respiratory



- Circulatory
- Respiratory





What is the most likely disease presented in the X-Ray?

- cystic fibrosis
- lung cancer
- asthma



## What is the leading cause of this disease?

- smoking
- genetics
- unhealthy diet



This picture shows models of 2 different people's blood. Which person is most likely sick?

- Patient A (left )
- Patient B (right)

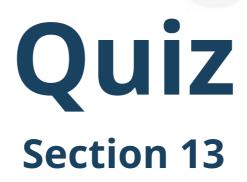


## How can you tell?

- extra platelets
- extra red blood cells
- extra white blood cells
- plasma color is murky

If a patient's blood does not have enough platelets, what problems might this cause?

- Trouble with prolonged bleeding from cuts
- Low oxygen levels in the blood
- Unable to fight infection
- Poor kidney function



## Which system of the body does cardiovascular disease affect?

- Digestive system
- Circulatory system
- Respiratory system
- Skeletal system

## The heart is divided into how many chambers?

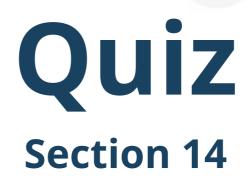
- $\bigcirc$  1
- <u>2</u>
- <u>3</u>

## What parts of the heart act like doors to control blood flow in the heart?

- arteries
- capillaries
- valves
- o veins

## Which blood vessels carry blood away from the heart?

- arteries
- capillaries
- valves
- o veins



## Which of the following is a function of the respiratory system?

- gas exchange
- absorption of nutrients
- transport of oxygen
- structural support

## When the diaphragm contracts (is pulled downward), \_\_\_\_\_ occurs.

- inhalation
- exhalation
- a hiccup
- lung deflation

## Which chambers of the heart are the thickest and strongest?

- Atria
- Valves
- Ventricles
- Aorta

### Which is NOT a function of the circulatory system?

- deliver O2 and nutrients to cells
- break down carbohydrates into glucose
- remove CO2 and wastes from cells
- transport other materials through body

## Arteries, veins, and capillaries are three types of \_\_\_\_\_\_

- cells
- valves
- o veins
- blood vessels



When you breathe, your lungs take in \_\_\_ and remove \_\_\_.

- air/oxygen
- oxygen/carbon dioxide
- carbon dioxide/waste
- waste/air

### What is the purpose of the little hairs inside the nose?

- They fight disease.
- To tickle the nose and cause sneezes.
- They serve no purpose.
- To keep dust and foreign particles out of the lungs.

## Why would someone need a blood transfusion?

- for a paper cut
- for a major trauma
- for fun
- to improve their skin tone

#### Plaque build-up in arteries and veins is primarily caused by

- Cholesterol found in fatty foods
- Proteins found in meat.
- Sugar found in cakes and candies
- Fiber found in fruits and vegetables.