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Circulatory system multiple choice questions

5 litres 50 cm3 50 litres 20 litres Why is blood that flows from the lungs to the heart more bright red than blood flowing from the rest of the body to the heart? They are transparent and do not absorb or reflect light, which gives them a colorless appearance. Platelets form this clot. This connection between arteries and veins through capillaries is crucial for maintaining proper blood flow and ensuring that oxygen and nutrients are delivered to the tissues while waste products are removed. These clumps of platelets, along with fibrin and other proteins, form a temporary seal over the injured area, preventing further blood loss. 9 - the spine : Test your knowledge of the bones of the spine 10 - the skin : understand the functions of the integumentary system Free Anatomy Quiz © 2011- ExplanationThe heart is the central organ of the circulatory system. There are only two types of blood cell. Name the component of blood shown in the diagram White blood cells Red blood cells Platelets Plasma Which part of the heart has the thickest walls? Questions come under ‘medium’ category. The number of heartbeats increases while we sleep. The heart is protected by the rib cage, which helps shield it from physical damage. Platelets are small cell fragments found in the blood that play a crucial role in the clotting process. The left atrium receives oxygenated blood from the lungs and passes it to the left ventricle, which then pumps it out to the rest of the body. Oxygen helps the blood to clot. Sweat Oxygen Carbon dioxide Hormones Which of the following is a function of blood? Hormones in the blood make it a bright red. Carbon dioxide leaves the capillary to the alveolus, and oxygen enters the capillary. They transport oxygen-rich blood from the heart to the tissues and organs, except for the pulmonary arteries, which carry oxygen-depleted blood from the heart to the lungs for oxygenation. These chambers work together to pump blood throughout the body. Questions come under ‘ medium ’ category. The pericardium not only cushions the heart from physical shocks and trauma but also helps prevent the heart from over-expanding when blood volume increases. Oxygen leaves the capillary to the cell, and nitrogen enters the capillary. The heart is a vital organ responsible for pumping blood throughout the body. Percentage score will be displayed along with right answers. Aorta Pulmonary vein Left atrium Valve The blood vessel that carries deoxygenated blood from the body to the right side of the heart is called the vena cava pulmonary vein aorta pulmonary artery When oxygen-rich blood leaves the lungs for the heart, it enters the heart through the pulmonary vein into the left atrium left ventricle right ventricle right atrium How many times does the average adult heart beat per minute while at rest? Haemoglobin in red blood cells is used to carry oxygen around the body. ExplanationThe aorta is the largest blood vessel in the human body. Correct Answer B. This is because during the process of respiration, oxygen is taken in by the lungs and transported to the cells, while carbon dioxide is produced as a waste product by the cells and carried back to the lungs through the bloodstream. Choose from the following : Anatomy - Identify the main arteries and veins : Quiz 1 --- Quiz 2 --- Quiz 3 --- Quiz 4 Physiology --- How does the cardiovascular system work? ExplanationPlasma is the liquid component of blood and is composed mostly of water. Platelets ExplanationBlood clotting is made possible by platelets. The lungs add a dye to the blood as it flows through. Without platelets, the blood would not be able to form clots effectively, leading to excessive bleeding and potentially life-threatening situations. carry carbon dioxide to the body's cells. This is because the right side of the heart receives deoxygenated blood from the body through the veins and pumps it to the lungs via the pulmonary artery. ductus venosus C. From, to ExplanationThe right side of the heart pumps blood from the heart to the lungs. Without the heart's constant pumping action, the entire system would come to a stop, making it essential to life. Oxygen brings food to the cells. How many chambers are there in the human heart? When you've finished answering as many of the questions as you can, scroll down to the bottom of the page and check your answers by clicking 'Score'. The heart muscle, known as cardiac muscle, is unique and different from other types of muscle in the body. The heart acts as a pump, pumping oxygenated blood to the body's tissues and organs through a network of blood vessels, and then receiving deoxygenated blood back to be reoxygenated. Blood cells are transported in the plasma. This analogy helps people understand the organ’s dimensions more easily. Quiz 1 --- Quiz 2 Anatomy of the heart : Quiz 1 --- Quiz 2 --- Quiz 3 Pathology (disorders and diseases) of the cardiovascular system : Quiz 1 --- Quiz 2 Circulatory first aid - what do you do when someone has circulatory problems? Simultaneously ExplanationThe heart is divided into two halves, the left and the right, each consisting of an atrium and a ventricle. ExplanationThe heart is made up of muscle tissue. You will get a different set of questions each time you attempt this quiz. Watching TV for 8 hours each day Exercising regularly Not smoking Eating a healthy diet changes in blood pressure in an artery the valves in an artery opening and closing red blood cells colliding with each other in the arteries oxygen entering the blood in the lungs What substance gives red blood cells their colour? Away from the heart ExplanationArteries carry blood away from the heart to various parts of the body. Identify X and Y in the diagram of the heart shown. The walls of capillaries are thick. It plays a crucial role in controlling the cell's activities and is responsible for the cell's growth, reproduction, and response to stimuli. This simultaneous pumping action is what allows the circulatory system to function effectively. Veins carry blood into the heart. After the oxygen-rich blood is delivered to the body's tissues by the arteries, the veins collect the oxygen-depleted blood and transport it back to the heart. Therefore, red blood cells play a crucial role in delivering oxygen to all parts of the body, ensuring proper functioning and survival. This allows them to move easily through the bloodstream and carry out their functions of fighting infection and disease. They are responsible for carrying oxygen from the lungs to all the tissues and organs in the body, and also help remove carbon dioxide and waste products. 5 - the axial skeleton : How about the bones of the axial skeleton? This quiz is designed to assess your basic knowledge in ‘ circulatory system '. The left side of the heart pumps oxygen-rich blood to the body, while the right side pumps oxygen-poor blood to the lungs for oxygenation. ExplanationThe septum is a thick wall of tissue that divides the right and left sides of the heart. Bone marrow Heart Lungs Kidneys Which one of the following is NOT transported by blood around the body? Then, the oxygenated blood returns to the left side of the heart via the pulmonary veins to be pumped out to the rest of the body. Correct Answer A. In this section we've added a few alternative study aids to help you along. The nucleus is a membrane-bound organelle that contains the genetic material of the cell. The right atrium receives deoxygenated blood from the body and passes it to the right ventricle, which pumps it to the lungs for oxygenation. This continuous flow of blood is essential for delivering oxygen and nutrients to the cells, removing waste products, and maintaining overall bodily functions. You get varicose veins. White blood cells ExplanationWhite blood cells could be compared to soldiers because they play a crucial role in defending the body against foreign invaders, just like soldiers protect their country against enemies. What causes this clot? 1 - the skeleton : test your knowledge of the bones of the full skeleton 2 - the brain : can you name the main anatomical areas of the brain?3 - the cell : learn the anatomy of a typical human cell 4 - the skull : Do you know the bones of the skull? Correct Answer D. Then the blood thickens and hardens. Nitrogen leaves the capillary to the cell, and carbon dioxide enters the capillary. This fluid plays a crucial role by reducing friction as the heart beats, allowing smooth and effortless movement within the chest cavity. White blood cells Red blood cells Lungs If you cut yourself, you will bleed for a short time. Identify them. Haemoglobin leaves red blood cells to form the clot. 1. Additionally, it serves as a defense barrier, reducing the risk of infections spreading to the heart from nearby organs. All blood cells are produced in the kidneys. They form a network throughout the body, allowing for the exchange of oxygen, nutrients, and waste products between the blood and surrounding tissues. Oxygen is necessary for cellular respiration, where it is used to produce energy. When you've finished answering as many of the questions as … This set of Class 11 Biology Chapter 18 Multiple Choice Questions & Answers (MCQs) focuses on “Human Circulatory System – 1”. Which one of the following statements is correct? Capillaries have thin walls that allow for easy diffusion of substances, and their large surface area enables efficient exchange. Therefore, the primary function is to provide the body with oxygen for metabolic processes and overall well-being. Small toe Wrist Neck Chest Which of the following would be least likely to reduce heart disease? Carry oxygen ExplanationWhite blood cells, also known as leukocytes, are an essential part of the immune system and play a crucial role in defending the body against infections. It requires strong, contractile muscles to generate the force needed to circulate blood effectively. Between its two layers is a small amount of lubricating fluid called pericardial fluid. They are responsible for connecting arteries to veins and allow for the exchange of oxygen, nutrients, and waste products between the blood and surrounding tissues. Which of the following parts of a fetal circulatory system contains the most highly oxygenated blood: A. Which of these is not included in the vascular system? The walls of veins are thin. Word Roots - When you learn the word roots, prefixes and suffixes contained within anatomical and medical terms, you can often work out what they mean. Colon Artery Vein Capillary Which one of the following describes a vein? Each heartbeat causes a pulse. It is distinct from urine, which is produced by the kidneys to eliminate waste products from the body. left atrium D. When there is an injury or damage to a blood vessel, platelets rush to the site and form a plug to stop bleeding. Haemoglobin Platelets Plasma Glucose There are three main types of blood cells. Which one of the following is not a blood cell? The main function of red blood cells is to carry oxygen to the body's cells. It has a very thin wall with valves and carries blood under pressure. Articles - Here you'll find a range of short articles on basic anatomy and physiology topics, complete with a few 'test yourself' questions for each one. What is the circulatory system? Mar 07, 2025 Quiz Edited byProProfs Editorial Team Expert Reviewed byStephen Reinbold Jan 28, 2010 Quiz Created byKnoelking1993 This quiz is designed to assess your basic knowledge in ‘circulatory system'. Quiz Review Timeline + Our quizzes are rigorously reviewed, monitored and continuously updated by our expert board to maintain accuracy, relevance, and timeliness. Pericardium ExplanationThe pericardium is a protective, double-layered membrane that encases the heart. This structure is crucial in preventing the mixing of oxygenated and deoxygenated blood. To the heart ExplanationVeins carry blood back to the heart. Antibodies from white blood cells. It has the ability to contract and relax rhythmically, allowing the heart to beat and pump blood continuously. White blood cells contain haemoglobin. Red blood cells, on the other hand, lack a nucleus to make more space for the protein hemoglobin, which is responsible for carrying oxygen to the body's tissues. It works as a powerful pump that keeps blood moving throughout the body, delivering oxygen and nutrients to cells while removing waste products. Right atrium Left atrium Right ventricle Left ventricle Which one of the following statements is incorrect? Where will you find antibodies? The right side of the heart receives deoxygenated blood from the body and pumps it to the lungs for oxygenation, while the left side of the heart receives oxygenated blood from the lungs and pumps it to the rest of the body. Left ventricle Left atrium Right atrium Right ventricle Blood plasma does NOT transport alveoli digested food urea hormones How many blood vessels leave the heart? Each of the quizzes includes 15 multiple-choice style questions. ExplanationWhen blood pools in the veins, it can cause the veins to become enlarged and twisted, resulting in varicose veins. carry oxygen … Questions and model answers on 11.1 Circulatory System for the Cambridge (CIE) O Level Biology syllabus, written by the Biology experts at Save My Exams. Try it as often as you like. Aorta Pulmonary artery Pulmonary vein Vena cava Identify X and Y in the diagram of the heart shown. The septum ensures this separation, maintaining the efficiency of blood circulation and ensuring that oxygenated blood reaches the body’s tissues, while deoxygenated blood is routed for re-oxygenation in the lungs. Plus there are links to lots of other great … Multiple choice quiz of 20 questions. An athlete's heart rate increases during exercise to provide their muscles with more oxygen carbon dioxide water glucose Which of the items is correctly labelled in the diagram of the heart shown? In blood ExplanationPlasma is a component of blood that makes up about 55% of its total volume. Capillaries have thin walls, which enable them to facilitate the diffusion of substances. (iv) Red blood cells attack harmful bacteria.Which of the above statement(s) is/are correct? It is a yellowish fluid that carries various substances such as nutrients, hormones, waste products, and antibodies throughout the body. Capillaries ExplanationCapillaries are the smallest blood vessels in the body. The oxygen in the blood makes it a brighter red. Aorta Vena Cava Capillary Pulmonary vein Where are red blood cells made? clot wounds fight disease The diagram shows a platelet, red and white blood cells. Entry VersionCARDIOVASC SYSTEM Entry Term(s) Circulatory System See Also Blood Circulation Entry Combination abnormalities:Cardiovascular Abnormalities physiology:Cardiovascular Physiological Phenomena surgery:Cardiovascular Surgical Procedures Date Established 1966/01/01 Date of Entry 1999/01/01 Revision Date 2018/02/28 Multiple choice quiz of 20 questions. right atrium E. Where would you be most UNLIKELY to find a pulse? They are produced in bone marrow. It has thin walls with valves, and carries blood to the heart. It forms a clot. This high water content allows plasma to carry nutrients, hormones, and waste products throughout the body, regulate body temperature, and maintain blood pressure. They are responsible for fighting parasites and attacking bacteria, but they do not carry oxygen. ExplanationThe human heart is roughly the size of a closed fist. Skull Blood Blood vessels Heart What is the name of the organ that pumps blood around the body? umbilical vein Circulatory System - Multiple Choice Test ©Sheri Amsel • www.exploringnature.org Name _____ Date _____ … Free multiple-choice quizzes on the anatomy, physiology and pathology of the human cardiovascular system (part of the circulatory system). (iii) White blood cells contain haemoglobin. From there, the blood is pumped to the lungs to be oxygenated again before returning to the rest of the body. The type of muscle surrounding the heart is known as cardiac antagonistic skeletal biceps Name the parts of the heart labelled A and B in the diagram. This makes them crucial for delivering oxygen and nutrients to cells and removing waste products from the body. A = red cell, B = white cell, C= platelet A = red cell, B = platelet, C= white cell A = white cell, B = platelet, C= red cell A = white cell, B = red cell, C= platelet (i) Platelets are circular in shape. ExplanationPlatelet plugs are formed when platelets in the blood clump together to stop bleeding from an injured blood vessel. 6 - the heart : name the parts of the human heart 7 - the muscles : Can you identify the muscles of the body? Carbon Dioxide ExplanationWhen in the lungs, carbon dioxide leaves the blood. It makes up about 90 percent of plasma, with the remaining 10 percent consisting of various solutes such as proteins, electrolytes, hormones, and waste products. Your heart ExplanationThe heart is the correct answer because it is constantly working to pump blood throughout the body, supplying oxygen and nutrients to all the other muscles. Our pulse rate can be increased by exercise. This can be a useful skill as you progress in your studies, so we've provided a dictionary to help you! Games - Finally in the resources section, we've added some simple games to make anatomy and physiology practice a little bit more fun. They are capable of fighting infection. Plasma also plays a crucial role in maintaining blood pressure and regulating body temperature. The carbon dioxide in the blood makes it a brighter red. Both oxygenated and deoxygenated blood Deoxygenated blood only Oxygenated blood only Which one of the following statements is incorrect? Both sides of the heart work together in a coordinated manner to ensure that oxygen-rich blood is supplied to the body's tissues and organs while deoxygenated blood is sent to the lungs for reoxygenation. ExplanationThe human heart has four chambers, which are the left atrium, left ventricle, right atrium, and right ventricle. Choose the best answer from the four options given. This central positioning allows it to effectively pump oxygenated blood throughout the body while also maintaining efficient venous return from the body’s tissues. Unlike organs like the stomach or brain, which are located elsewhere, the heart’s position within the thoracic cavity enables optimal blood flow and circulatory function essential for overall health. 8 - anatomical planes and directions : Do you know the language of anatomy? Correct Answer C. As blood circulates, it supplies vital nutrients and carries away waste products, ensuring cellular function. This happens when the valves in the veins that help regulate blood flow become weak or damaged, causing blood to flow backward and accumulate in the veins. (ii) only (i), (ii) and (iii) (ii) and (iv) (iii) only Which one of the following is NOT a blood vessel? It is the main artery that carries oxygenated blood from the heart to the rest of the body. They also release chemicals that activate other clotting factors, leading to the formation of a fibrin clot that seals the wound. aorta B. This constant activity makes it the most active muscle in our body. Colorless ExplanationWhite blood cells are colorless because they lack pigmentation. From the alveoli, carbon dioxide is then exhaled out of the body. Quiz 1 --- Quiz 2 Or if you fancy something different, try a French Quiz instead! Or how about an Astronomy Quiz? Varicose veins can be painful and unsightly, and they commonly occur in the legs. It originates from the left ventricle of the heart and branches out to supply blood to all organs and tissues. Oxygen leaves the capillary to the cell, and carbon dioxide enters the capillary. It beats around 100,000 times a day, even when we are at rest. clot blood. Capillaries ExplanationCapillaries are the tiny blood vessels that connect arteries to veins. Arteries and veins are larger blood vessels that transport blood to and from the capillaries. Why is oxygen important to blood and to the cells? fight disease. (ii) Plasma carries heat around the body. It has thick walls with valves and carries blood under pressure. A = left atrium, B = septum A = septum, B = right ventricle A = left atrium, B = valve A = right atrium, B = aorta Which blood vessel carries oxygenated blood from the left side of the heart to the main organs of the body? Red blood cells are produced in the bone marrow and have a lifespan of about 120 days. Together, the pericardium and its fluid ensure the heart remains stable, protected, and functioning efficiently with every beat. Plasma Red blood cell Platelet White blood cell The main function of platelets cells is to form clots. remove carbon dioxide from cells in the body. White blood cells are part of the immune system and help fight off infections and diseases, similar to how soldiers protect against threats to the nation. They have no definite shape. From what source do cells get their food? They both serve a protective function and are essential for maintaining the overall health and well-being of the body or country. Its size also reflects the strength required to pump blood under pressure through the large blood vessels, such as the aorta, which carries oxygenated blood to the body’s tissues and organs. In the lungs, the blood picks up oxygen and releases carbon dioxide, becoming oxygenated. What type of blood flows in capillaries? This is because red blood cells contain a protein called hemoglobin, which binds to oxygen molecules in the lungs and carries them to the body's tissues. ExplanationThe statement is true because the movement of blood through the heart and body is indeed called circulation. Pulse rate of a person generally changes throughout the day. Oxygen is necessary for cell growth and … carry oxygen around the body. The heart’s size is proportional to its function, as it needs to be strong and efficient enough to pump blood throughout the body. Therefore, carrying oxygen is not a function of white blood cells. It has thin walls and carries oxygenated blood away from the heart. ExplanationThe heart's essential role in circulation involves pumping blood to deliver oxygen to the body's tissues. Working alongside blood and blood vessels, the heart ensures the circulatory system functions effectively. X = left ventricle and Y = pulmonary artery X = left atrium and Y = pulmonary artery X = right ventricle and Y = pulmonary vein X = left ventricle and Y = valve In the capillary blood vessels, an exchange of gases takes place with cells. Which chamber of the heart does deoxygenated blood enter when returning from the body? An overall score is given at the end of each quiz. To maintain body temperature To produce bile To transport food to the stomach To support the body Which one of the following statements is NOT true for white blood cells? It circulates through blood vessels and is found throughout the body. Therefore, the correct answer is "To the heart." Correct Answer B. ExplanationThe heart is located in the chest, slightly to the left of the sternum (breastbone) and between the two lungs. If you get a question right the next one will appear automatically, but if you get it wrong we'll tell you the correct answer. Due to its size and function, the aorta is considered the largest blood vessel. There are no valves in arteries. In the lungs, carbon dioxide diffuses from the blood into the alveoli, which are tiny air sacs where gas exchange occurs. They are smaller than red blood cells. ExplanationRed blood cells transport oxygen. This temporary seal is commonly known as a scab. MeSH Heading Cardiovascular System Tree Number(s) A07 Unique IDD002319 RDF Unique Identifier Annotationgeneral or unspecified; prefer specifics; /abnorm equals CARDIOVASCULAR ABNORMALITIES but consider also specific artery or vein with /abnorm Scope NoteThe HEART and the BLOOD VESSELS by which BLOOD is pumped and circulated through the body. Nucleus ExplanationWhite blood cells contain a nucleus, while red blood cells do not. Your body is running out of blood. The transportation of oxygen is primarily carried out by red blood cells, which contain hemoglobin and are specifically designed for this purpose. The fist comparison allows us to visualize its size relative to the rest of the body. Red blood cells ExplanationRed blood cells are the most common type of blood cells in the human body. Normal body temperature is around 37 oC 32 oC 42 oC 28 oC Where do cells in the human body get their food from? Which one of the following is the correct gas exchange? Which one of the following is NOT part of the human circulatory system? They make up about 40-45% of the total blood volume and are easily identifiable due to their red color, which is caused by the presence of a protein called hemoglobin. Heart Lung Kidney Blood vessel The pale yellow liquid in blood is called plasma platelets glucose lumen Which one of the following carries blood away from the heart? Therefore, the correct answer is 4. Which of the following is a correct explanation as to why mammals have a double circulatory system?To reduce the pressure of blood returning from the lungs, in order to supply cells of the body most efficiently with the reactants for respiration.To increase the pressure of blood sent to the lungs, in order to supply cells of the body most efficiently with the products for respiration.To increase the pressure of blood returning from the lungs, in order to supply cells of the body most efficiently with the reactants for respiration.To reduce pressure of blood sent to the lungs, in order to supply the cells most efficiently with the products for respiration.Page 2Diet & DeficienciesSelect a download format for DietMultiple Choice QuestionsScroll for moreRespiration in CellsSelect a download format for RespirationMultiple Choice QuestionsAlternative to Practical QuestionsScroll for moreAntibioticsSelect a download format for AntibioticsMultiple Choice QuestionsScroll for moreHomeostasisVariationSelect a download format for VariationMultiple Choice QuestionsScroll for moreDNA Structure, Genes & Protein Production61. > Physiology > Cardiovascular System The body's circulatory system includes the cardiovascular and lymphatic systems; the quizzes below focus on the cardiovascular system. Blood Oxygen Carbon dioxide Other cells How much blood does the average adult have? Images and pdf's - Just in case you get tired of looking at the screen we've provided images and pdf files that you can print out and use for 'off-line' practice.