

# [Human body](https://assignbuster.com/human-body-2/)

Research on the human body specialising in the function of the heart. Definitions: Unicellular: living organism made up from 1 cell. e. g.

protozoa and bacteria. Multicellular: living organisms comprising of many cells. e. g. plants, animals and humans.-Multicellular organisms have a device that gives the cells specific functions. This organisation allows a cell to grow as different tissue in a complex living organism.

E. g. Muscle, lung, heart and liver tissue. The cells work can be organised into levels: Cells> Tissues> organs> Systems> organismCells which make up the human body undergo reactions that can change the energy in a food into energy that the body or cell can use or store. Red blood cells carry oxygen to all parts of the bodyWhite blood cells protect the body against disease. Plasma carries food and waste around the bodyBlood platelets make up the blood clot if you cut yourself.

Arteries carry blood away from the heart to the organs, such as the lungs, kidneys and liver. As well as tissues such as skin and muscles. They have a thick elastic wall to withstand greater pressures. Capillaries are one cell thick and are close to the body cells and allow oxygen and nutrients to pass out and into the cell while waste and carbon dioxide pass back in to be carried away.

Veins transport blood to the heart. The blood is at a relatively low pressure so they have thinner walls than arteries, and non-return valves that stop blood from flowing back. Blood flows through the body as: Heart> Arteries> Capillaries> Veins> HeartSystems in the Human body: Circulatory NervousEndocrineRespiratory DigestiveSkeletalExcretoryReproductiveThe Circulatory System: The circulatory system is made up of two main organs, the heart and blood vessels/ veins, arteries and capillaries.

The main function of this system is to transport blood around the body in order to supply cells with oxygen and food and to take away carbon dioxide and other wastes. Blood is made in bones by the bone marrow in them. Blood consists of white and red blood cells, platelets and plasma. Parts of the Heart: Vena CavaAortaPulmonary arteryLeft and right atrium Pulmonary veinsSemi lunor valvesLeft and right ventricleSeptum There is a thicker muscular wall around the left side of the heart because there is more pressure forced upon the left side, therefore the more pressure expelled the thicker the muscular wall needs to be. The path of blood through the heartBlood enters the right atrium through both parts of a large vein called the vena cava.

It then passes into the right ventricle. Blood travels to the lungs through the pulmonary artery. This artery branches into two parts so that it can reach the lungs on either side of the heart. Blood comes back from the lungs through the pulmonary veins into the left atrium. It then passes into the left ventricle. Blood travels out of the left ventricle to the rest of the body through a large artery called the aorta. Types of blood vessels: ArteriesCapillariesVeins