

Write NO MORE THAN ONE WORD AND/OR A NUMBER for each answer.

## Heart

The heart pumps blood throughout the body. Carrying oxygen and nutrients to every cell. It's this \_\_\_\_\_ of blood that is vital to sustaining life. The heart is an organ made up of several tough layers of muscle. The pericardium is the thin layer that covers the \_\_\_\_\_ while the endocardium lines the inside walls. The heart is divided into four chambers: two upper and two lower. The upper chambers known as the atrium receive blood coming into the heart. The lower chambers are the ventricles that pump blood out. Between each chamber are \_\_\_\_\_ that open and close and help keep the blood moving. They are the tricuspid, mitral, pulmonary, and aortic valves. A \_\_\_\_\_ cycle starts when oxygen depleted blood returns to the heart after circulating throughout the body. The blood enters through the right atrium before flowing to the right ventricle. It's then pumped to the lungs via the pulmonary arteries. There blood is \_\_\_\_\_ by air that's breathed in. The oxygen-rich blood returns to the heart through the left atrium where it goes to the left ventricle. Then by way of the aorta artery the fresh blood is pumped throughout the body before the process repeats itself. That process happens with every heartbeat. And it's \_\_\_\_\_. The heart beats 100,000 times a day. 40 million times a year and up to three billion times over an average lifespan. But there are conditions that can disrupt a heartbeat and that \_\_\_\_\_. They can range from myocardial infarction or heart attack to heart disease and hypertension. In contrast, exercise and emotional \_\_\_\_\_ can also have an impact on a person's heartbeat. The various blood \_\_\_\_\_ that comprise the circulatory system are a network of veins, arteries, and capillaries that span over \_\_\_\_\_ throughout the body. And the heart is the pump at the center of it.