

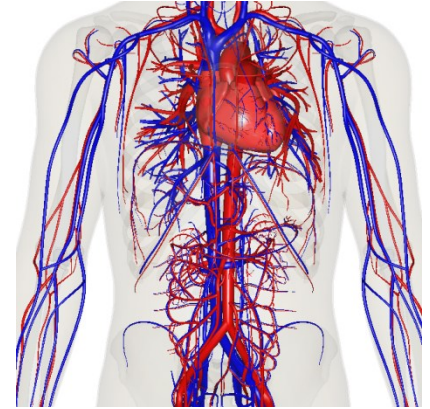
Circulatory System

Heart & Blood

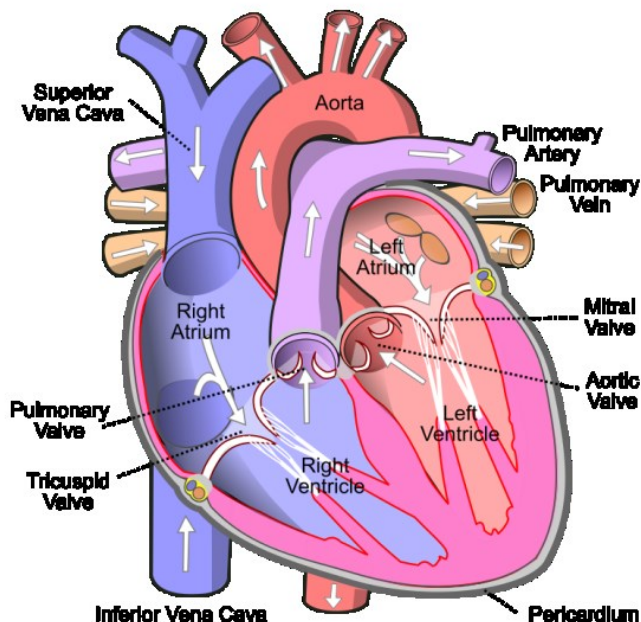
Circulatory System

The heart is the major organ in the circulatory system. It is a pump that sends blood throughout the body carrying oxygen, nutrients, and hormones to every cell. The blood also collects wastes from the cells, like carbon dioxide gas. Blood returns to the heart where it is sent to the lungs to drop off carbon dioxide and pick up more oxygen. Arteries carry blood away from the heart and veins carry blood back to the heart; blood flows in one direction.

Think of the system as a circle or circuit, where needed materials are constantly dropped off and picked up – like a freeway. Without fresh oxygen, cells soon die, so it is vital the blood flows quickly and uninterrupted.



Circulatory System



Heart Facts

- It takes less than 60 seconds to pump blood to every cell in the body.
- The heart beats about 3 billion times in a lifetime.
- The sound of a heart beat is caused by opening and closing of heart valves.
- Adult blood vessels could be stretched out over 60,000 miles.

Assignment

Make a comparison between the circulatory system and a freeway. Imagine your country is the body and the nation's capital is the brain. The freeways and roads will be the circulatory system. Answer the following questions using complete sentences:

1. What are four types of vehicles and describe their function on the circulatory roads.
2. When blood slows or stops flowing, it is a serious problem (heart disease, heart attack). What are two causes that stop traffic flow? How is the problem fixed?
3. If your house is a cell, what does it need to function? Describe three things that would use the circulatory road.



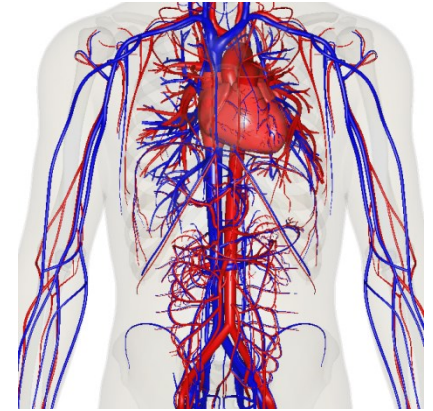
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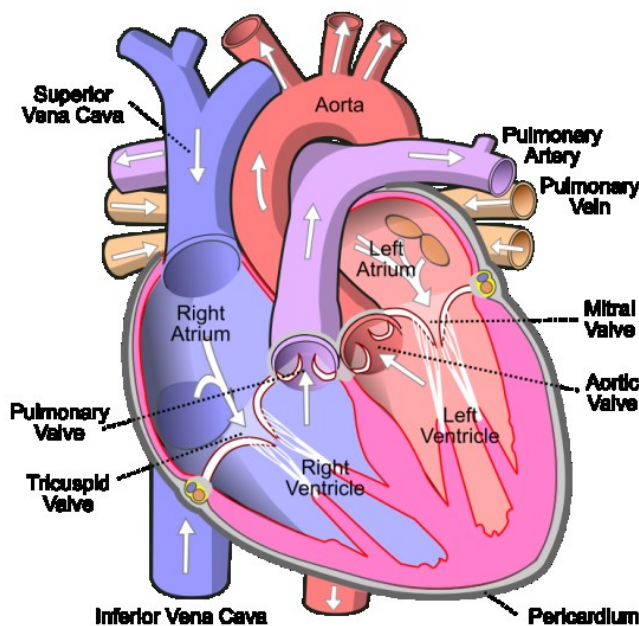
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following questions using complete sentences:



1. What are four types of vehicles and describe their function on the circulatory roads. **Postal - messages; Delivery - supplies; Police - safety; Bus - moves people and workers.**
2. When blood slows or stops flowing, it is a serious problem (heart disease, heart attack). What are two causes that stop traffic flow? How is the problem fixed? **Accidents, flooding, road work - specialized workers, detours, teamwork.**
3. If your house is a cell, what does it need to function? Describe three things that would use the circulatory road. **Moving vans - furniture; Utility trucks - electricity; Garbage truck - cleanliness.**