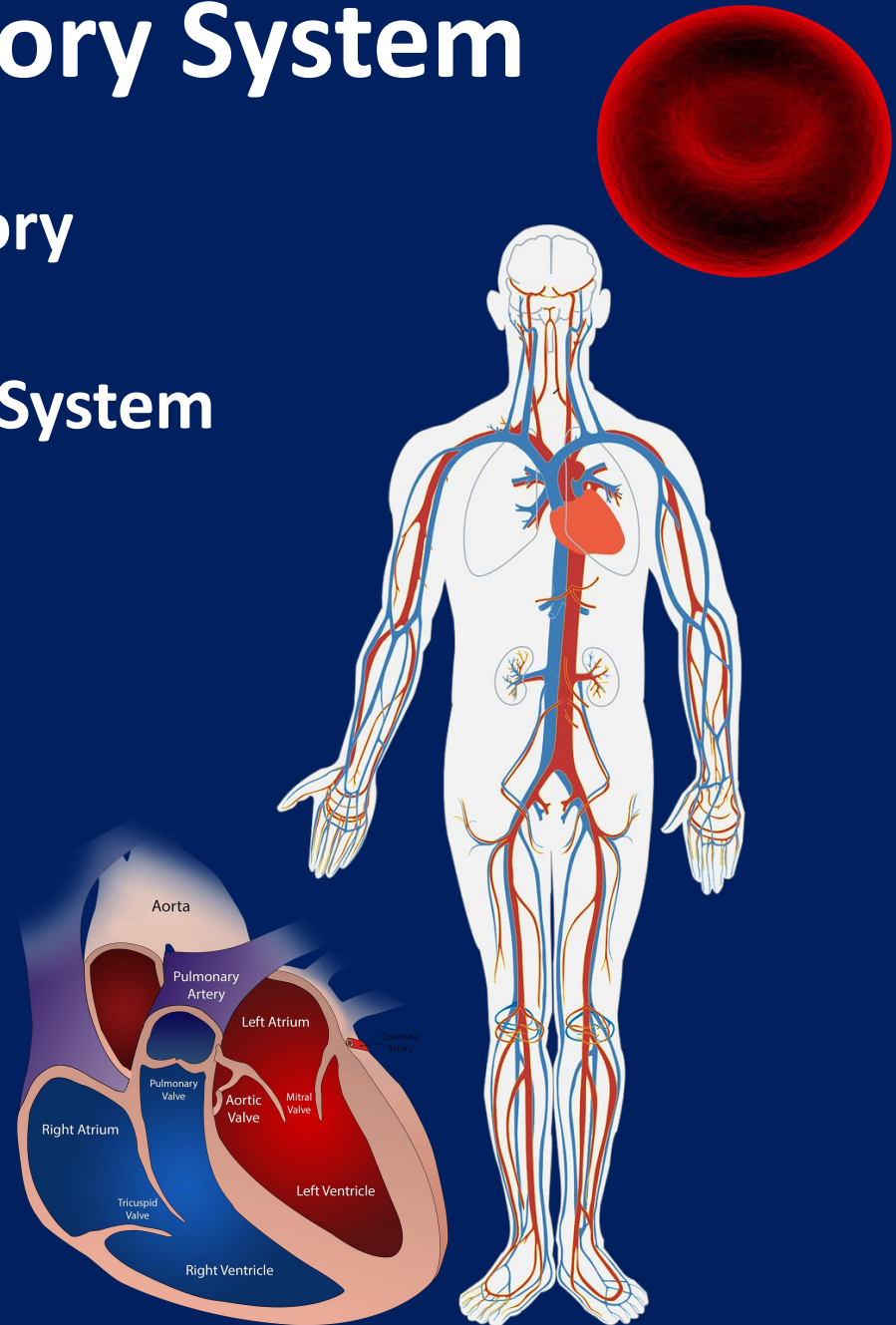


The Circulatory System

- Components of the Circulatory System
- Overview of the Circulatory System
- Arteries and Veins
- Components of Blood
 - Red Blood Cells
 - White Blood Cells
 - Platelets
- The Heart
- Heart Rate
- Disorders
- Staying Healthy



TeachWithFergy

Preview File

Please enjoy this preview of your Student Version of the lesson. I've created this PDF for ease of viewing and to decrease the file size but of course, your lesson will be in PowerPoint format.

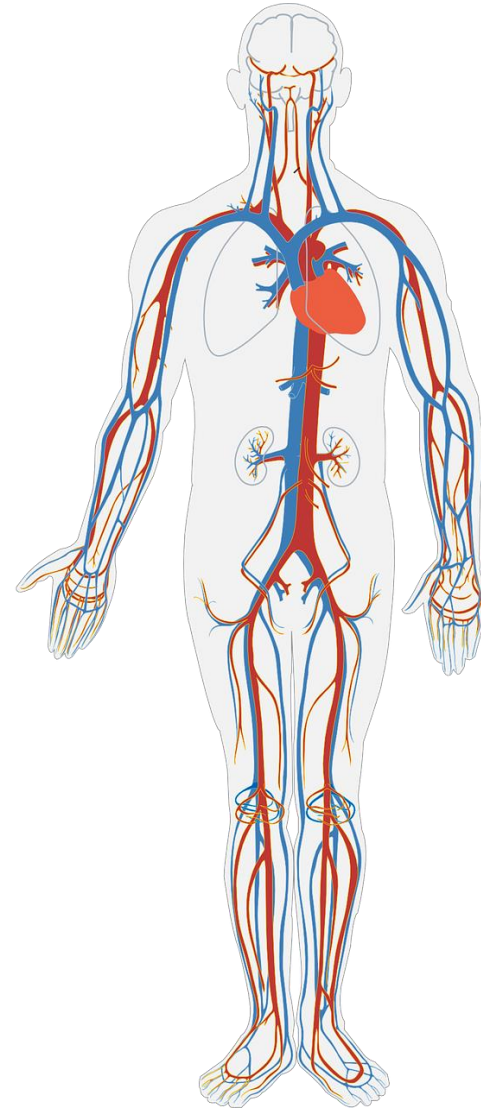
- Some slides appear blank because they have been removed.
- Student versions have portions of the text removed which is given in the teacher version and appear as _____
- Other slides may have on them, this represents writing that has been removed.

Circulatory System Consists of...

- _____

- _____

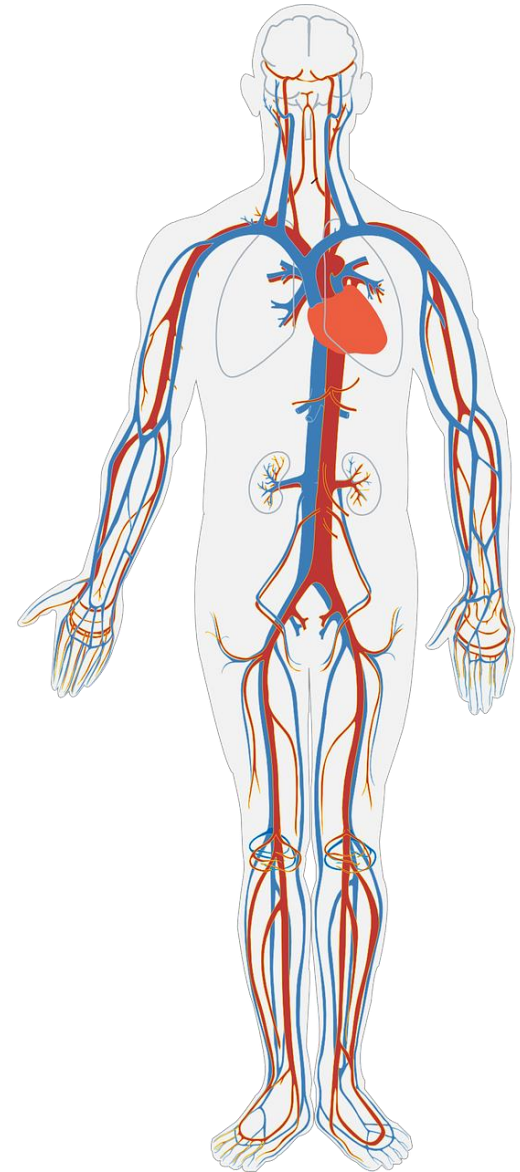
- _____



Overview

-
.....
- _____

- The lungs are not part of the circulatory system



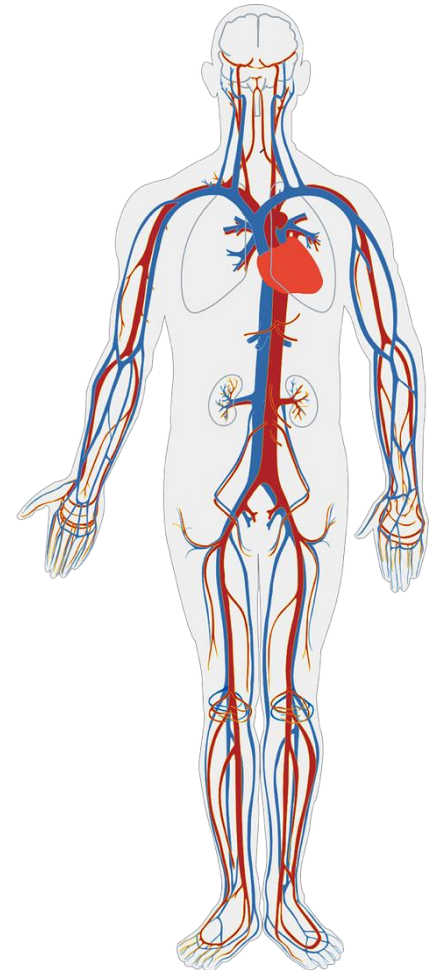
Blood Vessels

Arteries and Veins

Arteries and Veins

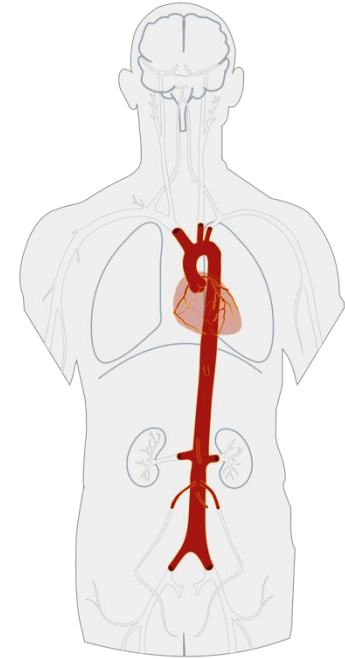
-

- Shown in red
- Usually has oxygen
-
-



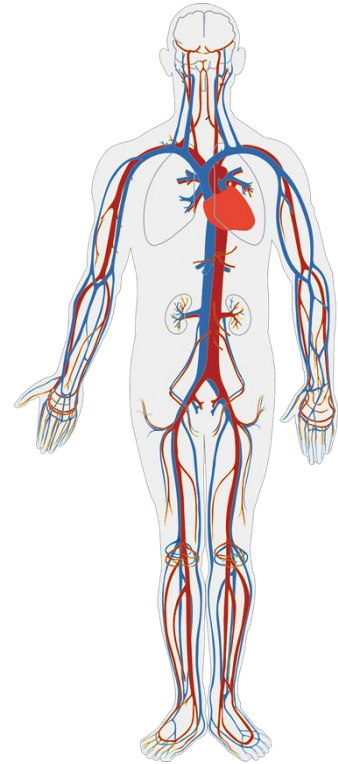
The Aorta – The Largest Blood Vessel

-
- Has a diameter of about 1 inch (2.5 cm)
- _____

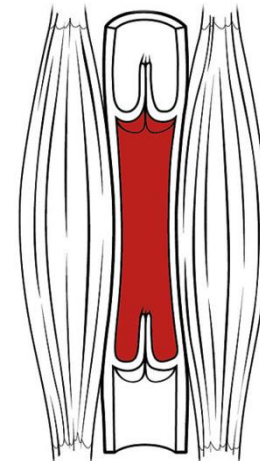


Arteries and Veins

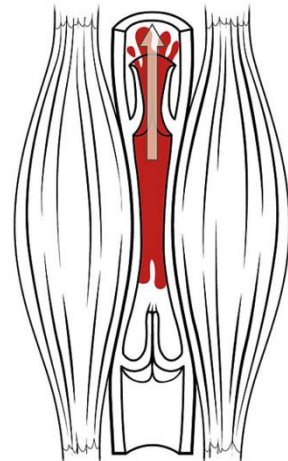
- Veins –
 - Shown in blue
 - Usually doesn't have oxygen
 - _____



Muscles relaxed,
valves closed



Muscles contracted,
valve above muscle opens



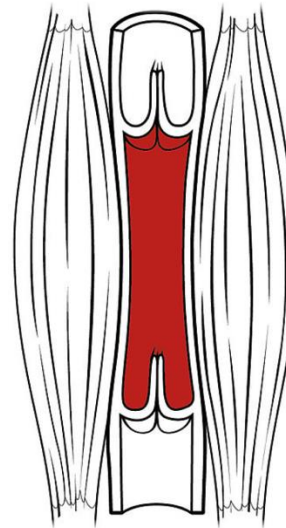
Veins and Valves

- Inside the veins are small valves

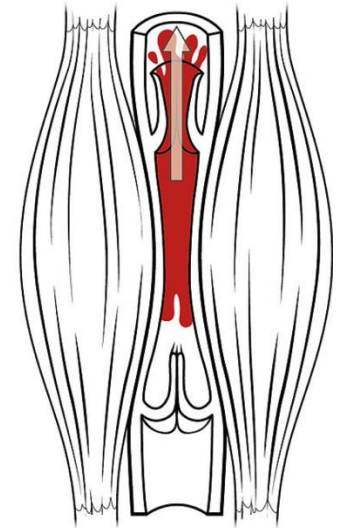
- _____

-

Muscles relaxed,
valves closed



Muscles contracted,
valve above muscle opens



This slide has been removed

Red Blood and Blue Blood

- Blood is never blue
-
- Veins appear blue because of the way light reflects off the blood vessel
-
- We draw them blue to distinguish them on diagrams and simplify things

The blood vessels in your hand



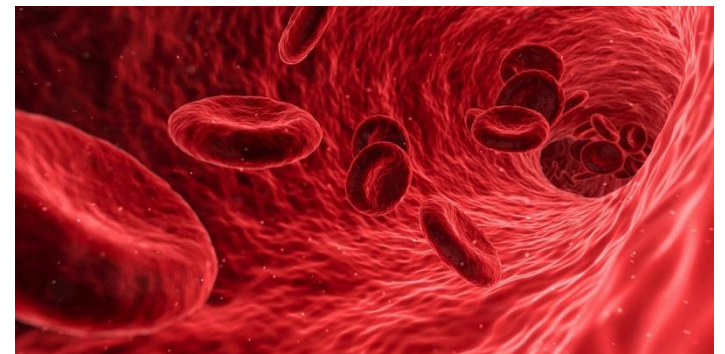
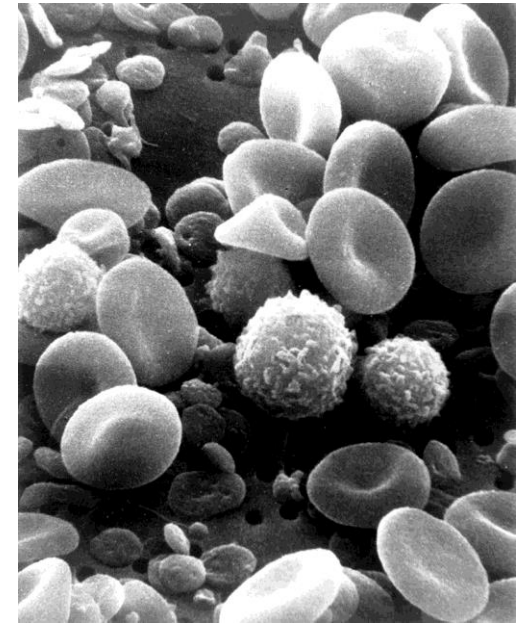
These are all the blood vessels in your hand.

Circulatory System

BLOOD

The Blood

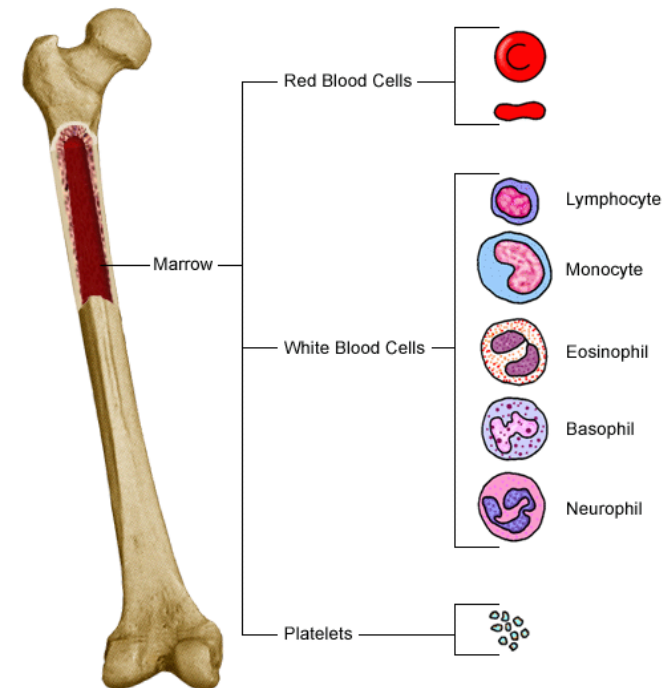
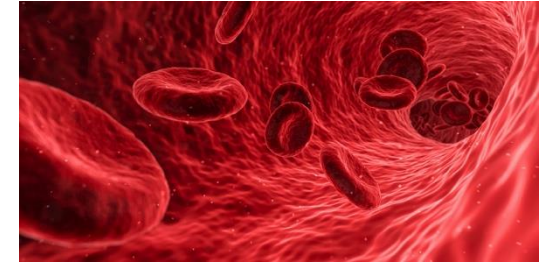
-
- Consists of
 - _____
 - _____
 - _____
 - White blood cells and platelets



Your Blood: Fluid Transport

Liquid Portion Carries

- _____
 - RBC -
 - WBC -
- Platelets —
- Nutrients -
- Gases -



Red Blood Cells

- Transports

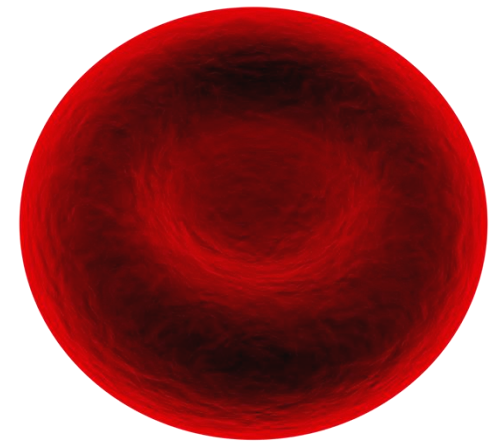
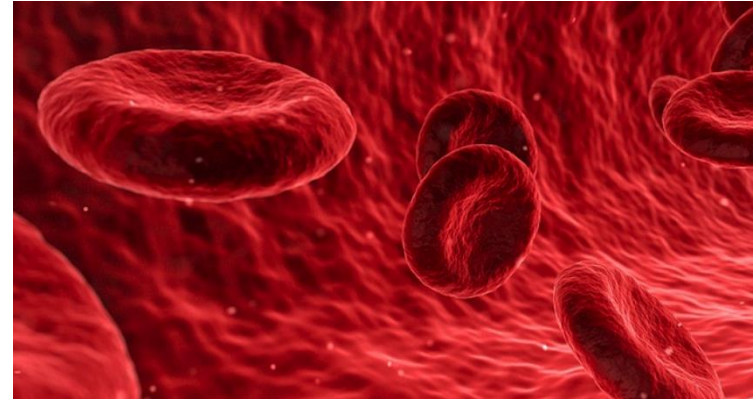
—

—

-

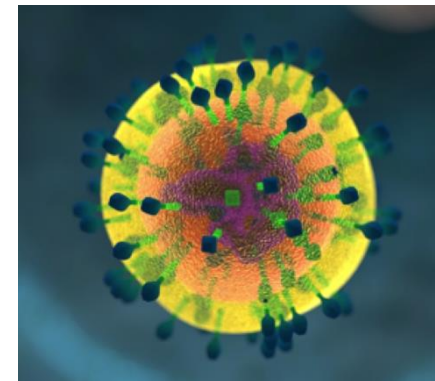
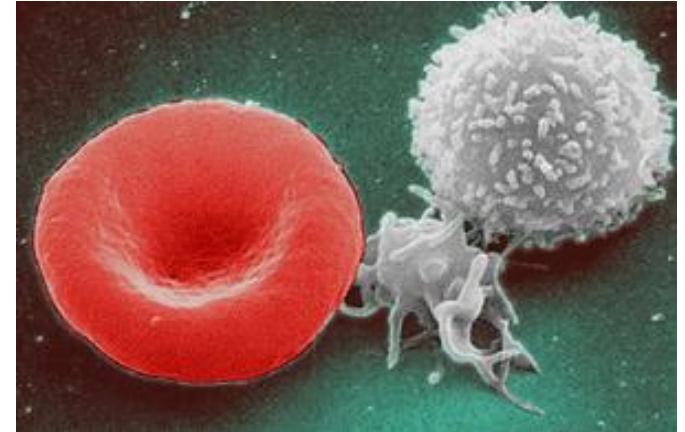
- Lives for ~120 days

- _____



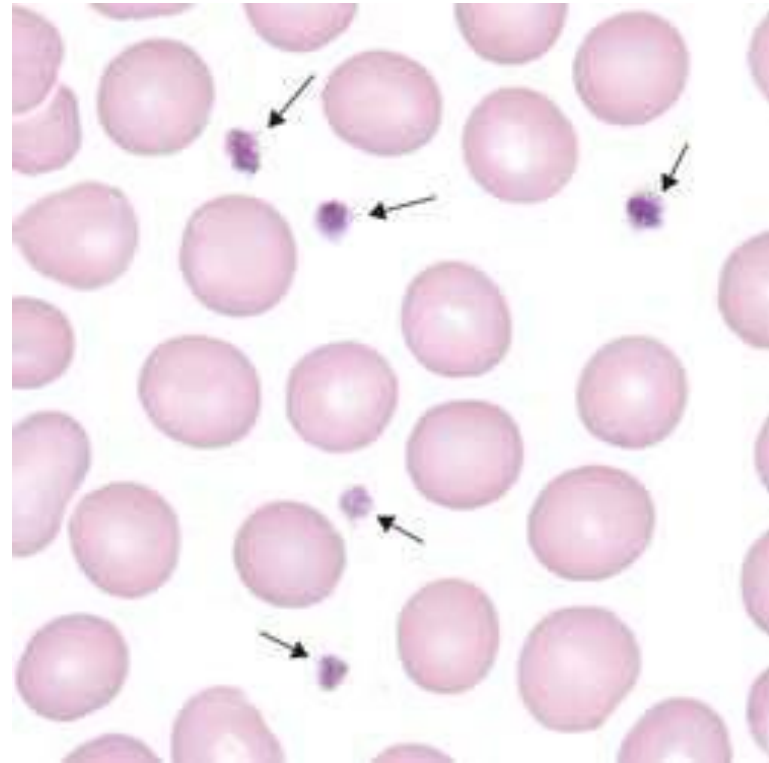
White Blood Cells

- Fights infections –
.....
- →
vaccines
- _____
- Some live for months
 - Most just a few
days



Platelets

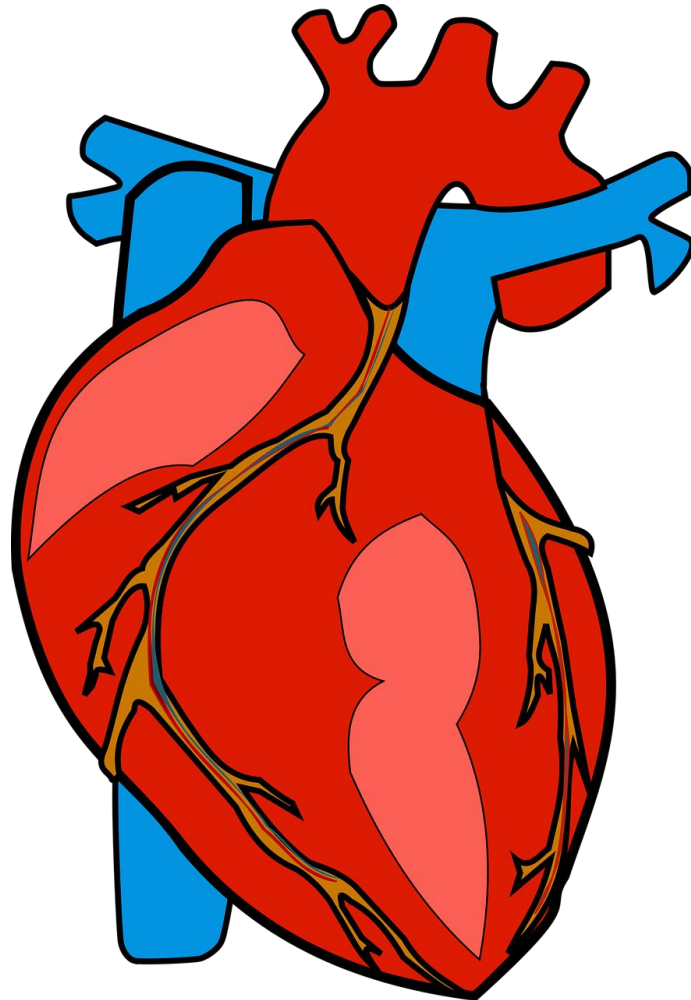
-
 - Stops your cut from bleeding
-
- Short life span (1 week)
- _____



This slide has been removed

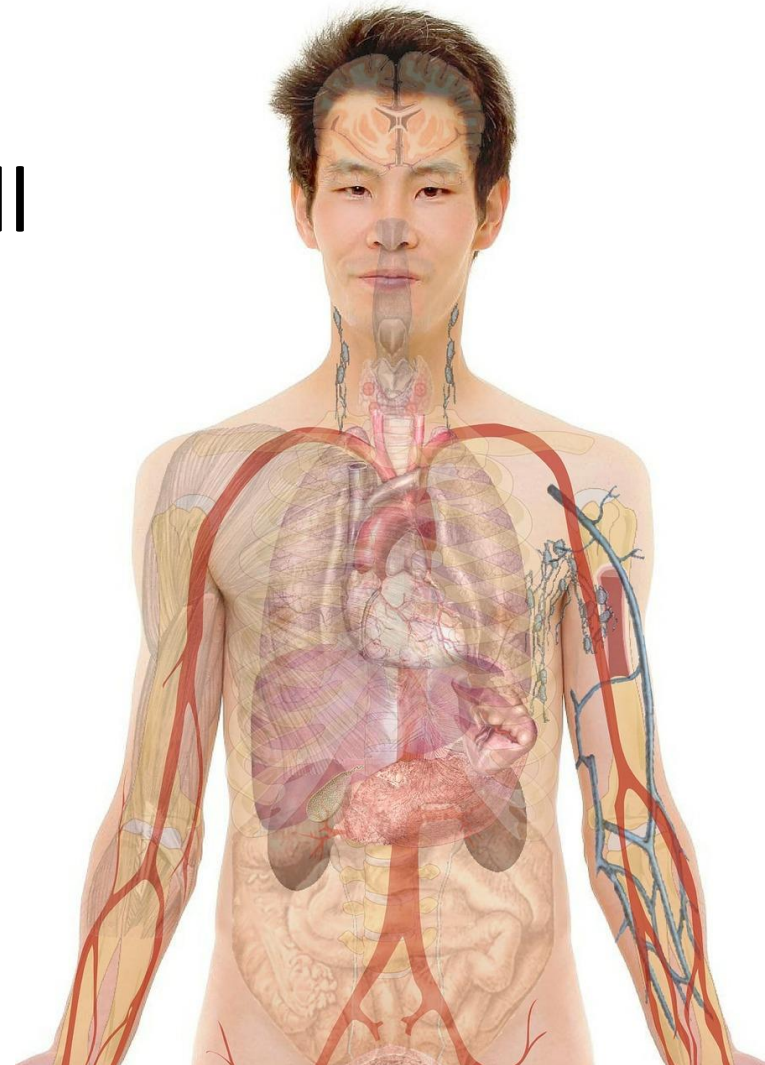
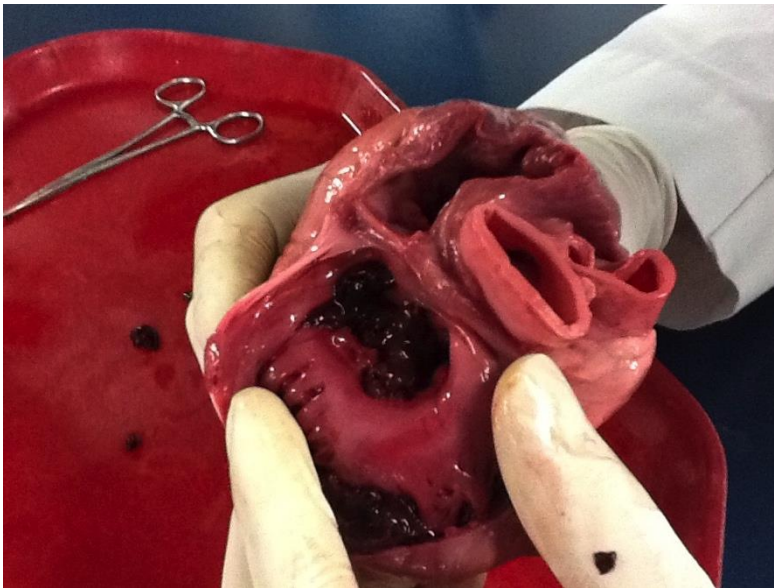
Circulatory System

HEART



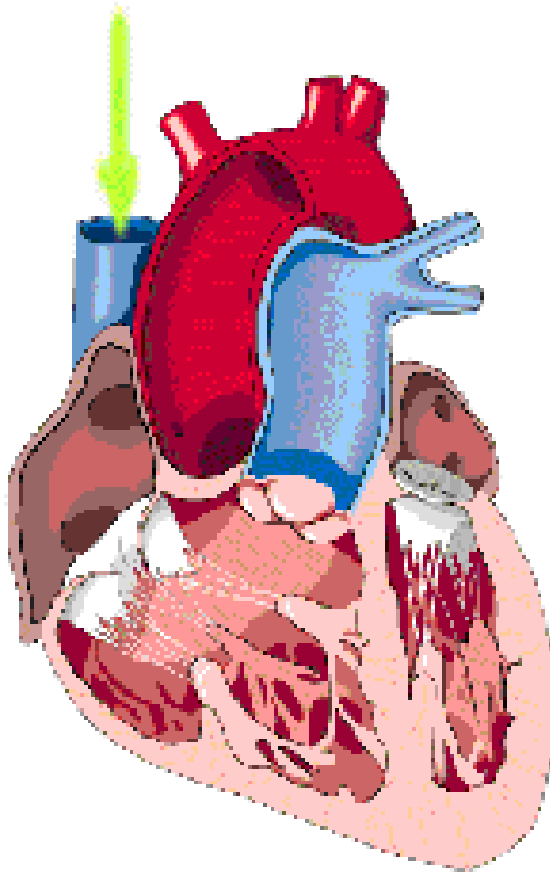
Your Heart

-
- If your heart stops you will die



This slide has been removed

Blood Flow Through the Heart

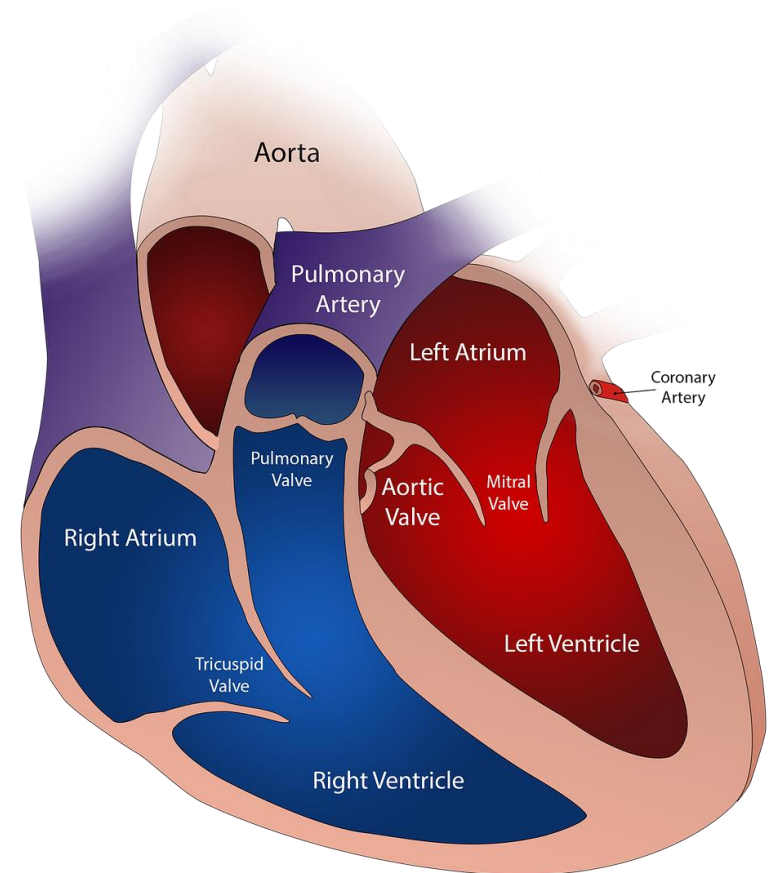


- Right Atrium
- Tricuspid Valve
- Right Ventricle
- Pulmonic Valve
- Pulmonary Arteries
- Pulmonic Veins
- Left Atrium
- Mitral Valve
- Left Ventricle
- Aortic Valve
- Aorta

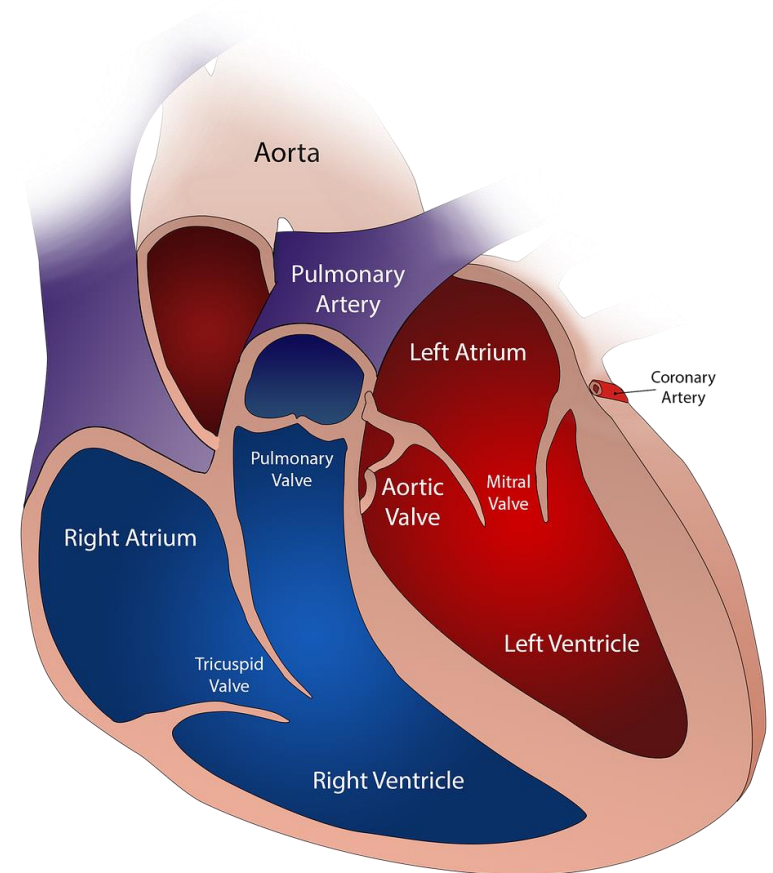
Blood's Path Through the Heart

•

• _____



Blood's Path Through the Heart

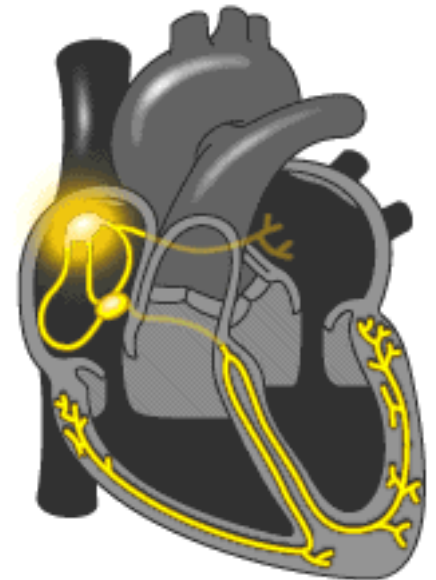
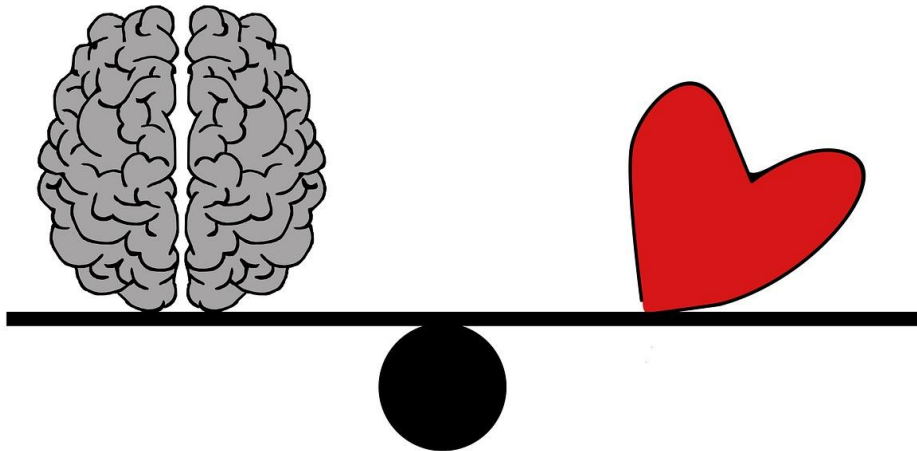


Circulatory System

CONTROL AND DISORDERS

Control of the Heart

-
 - The brain will speed up the heart rate during times of exercise or stress
 - _____

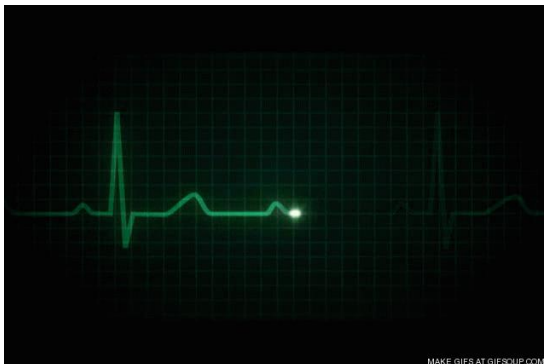


Heart Rate

- _____

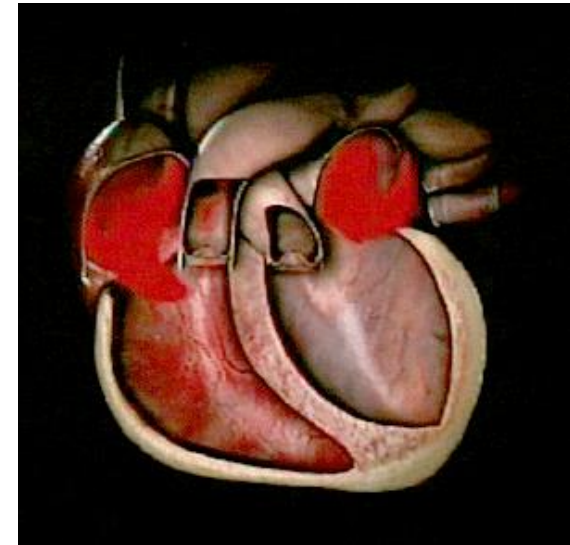
-

- They DO NOT WORK if your heart is not beating



Your Heart: The Vital Pump

- At REST, the heart beats about _____
- During EXTREME EXERTION (exercise), it can beat _____



Disorders – Heart Attack

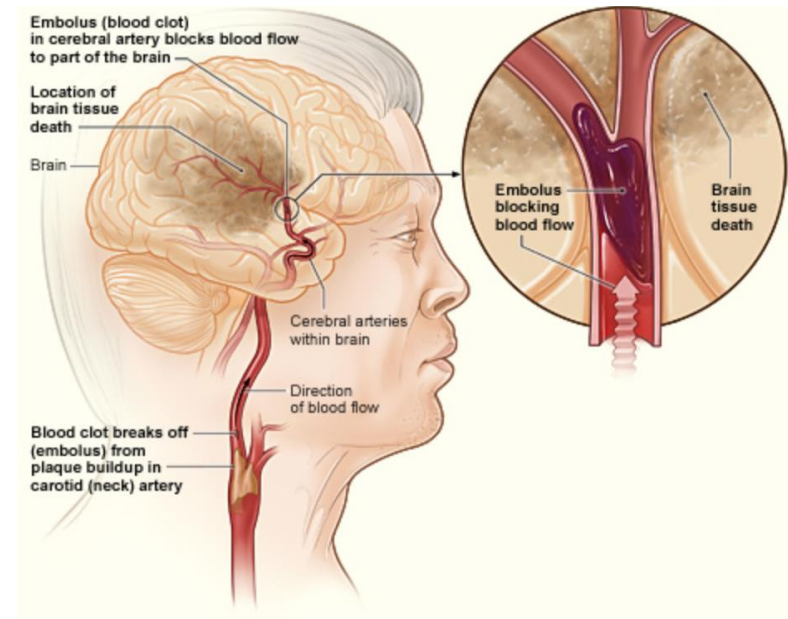
-
- Is supplied with oxygen by coronary arteries
-(fat and cholesterol mainly)
 - Caused by lifestyle choices and genetics
- _____

Disorders – Heart Attack

- _____
-
- Symptoms
 - Nausea, shortness of breath, severe chest pain, sweating, dizziness, fatigue

Heart Attack vs. Stroke

-
 - _____
- Brain cells die due to lack of oxygen
- Can lead to
 - paralysis
 - loss of ability to speak
 - death



Current PREVENTION Recommendations

- _____
- _____
- _____
- _____

