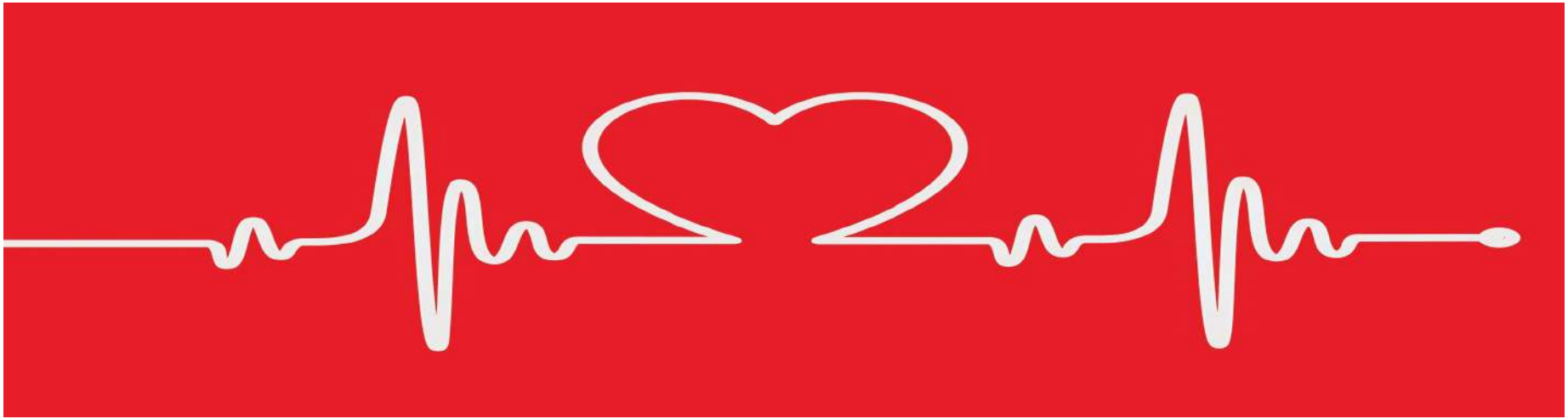
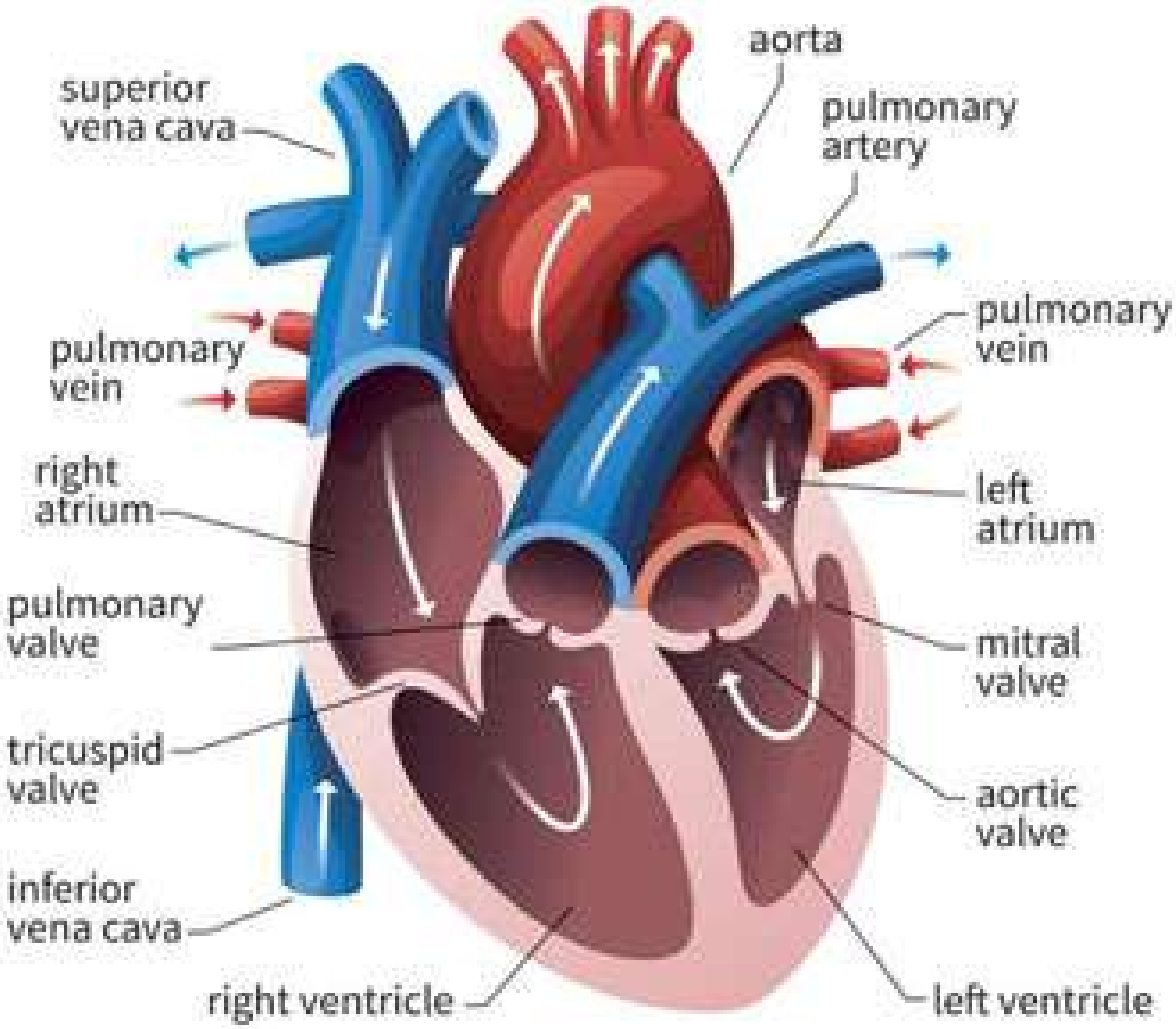


CIRCULATORY SYSTEM

Warm-up: create a tree map over the anatomy of the heart
*quizlet turn in/practice

intro video


aorta
superior vena cava
pulmonary artery
pulmonary vein
pulmonary vein
right atrium
left atrium
pulmonary valve
mitral valve
tricuspid valve
aortic valve
inferior vena cava
right ventricle
left ventricle

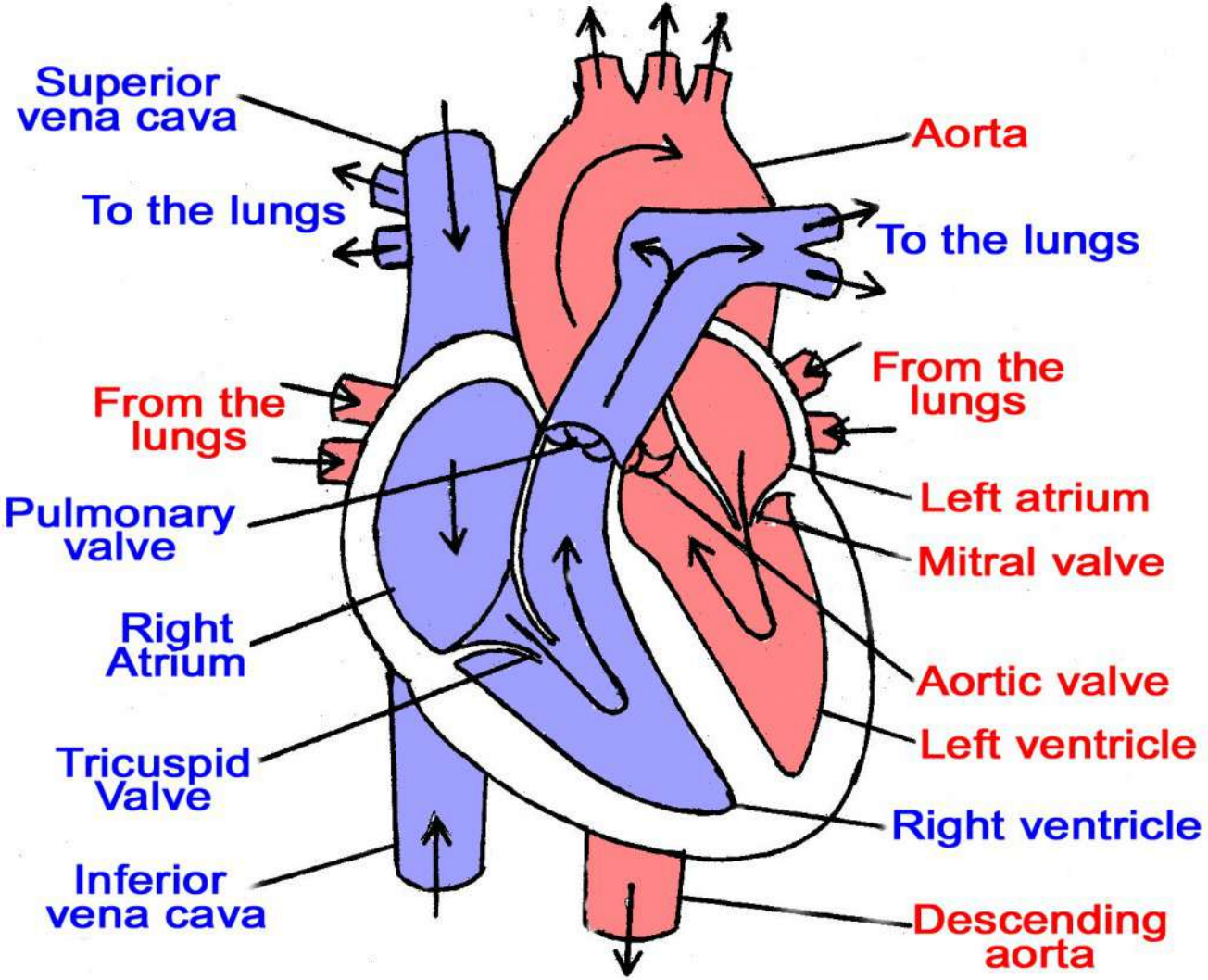
De-oxygenated

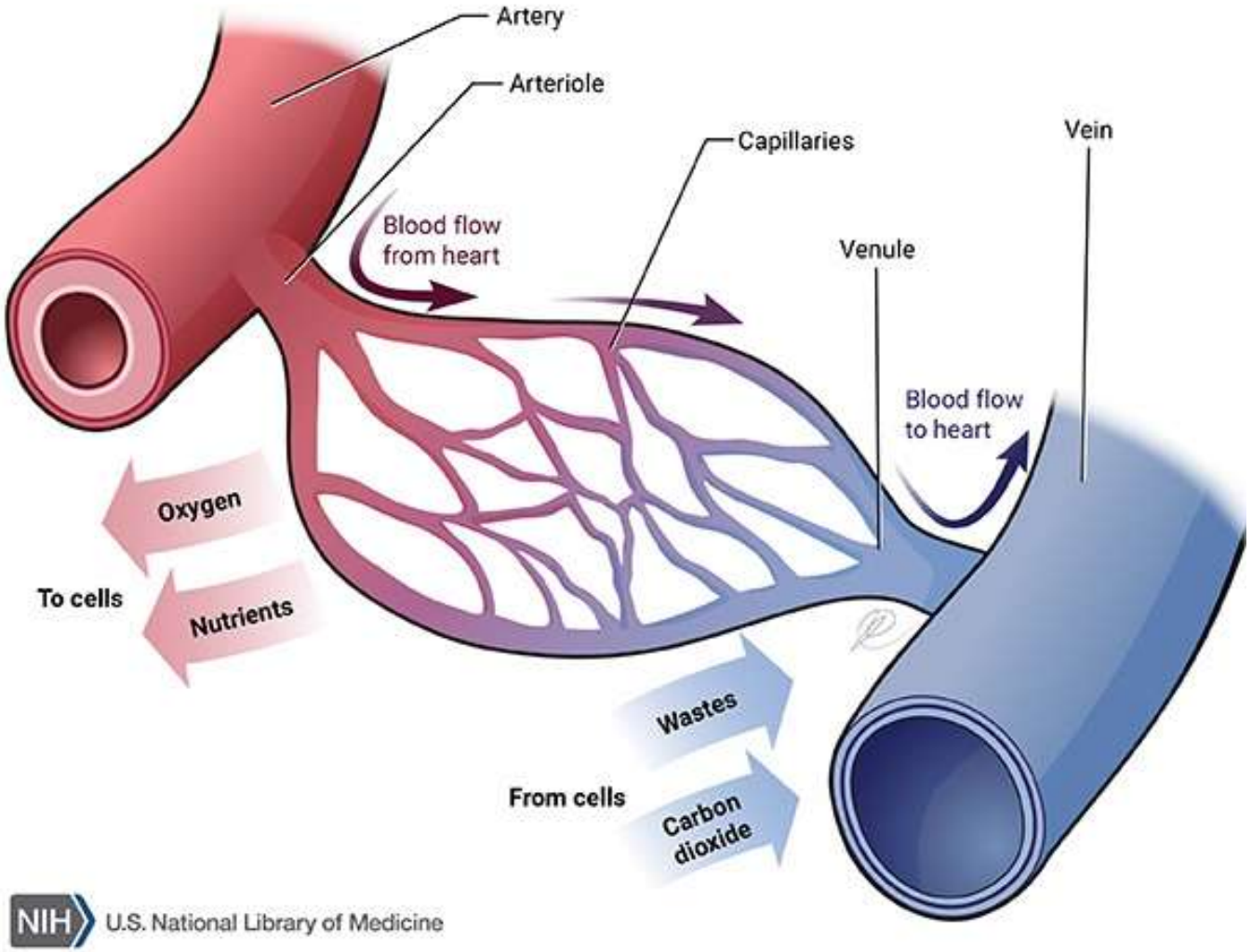
- Inferior/Superior Vena Cava
- Right atrium
- Tricuspid valve
- Right Ventricle
- Pulmonic Valve
- Pulmonary trunk
- Pulmonary arteries

*****LUNGS*******

Oxygenated

- Pulmonary veins
- Left atrium
- Bicuspid/Mitral valve
- Left Ventricle
- Aortic Valve
- Aortic arch
- Descending aorta


Superior vena cava
To the lungs
From the lungs
Pulmonary valve
Right Atrium
Tricuspid Valve
Inferior vena cava
Aorta
To the lungs
From the lungs
Left atrium
Mitral valve
Aortic valve
Left ventricle
Right ventricle
Descending aorta


Artery
Arteriole
Capillaries
Vein
Blood flow
from heart
Venule
Blood flow
to heart
Oxygen
To cells
Nutrients
Wastes
From cells
Carbon
dioxide
NIH
U.S. National Library of Medicine

Conduction

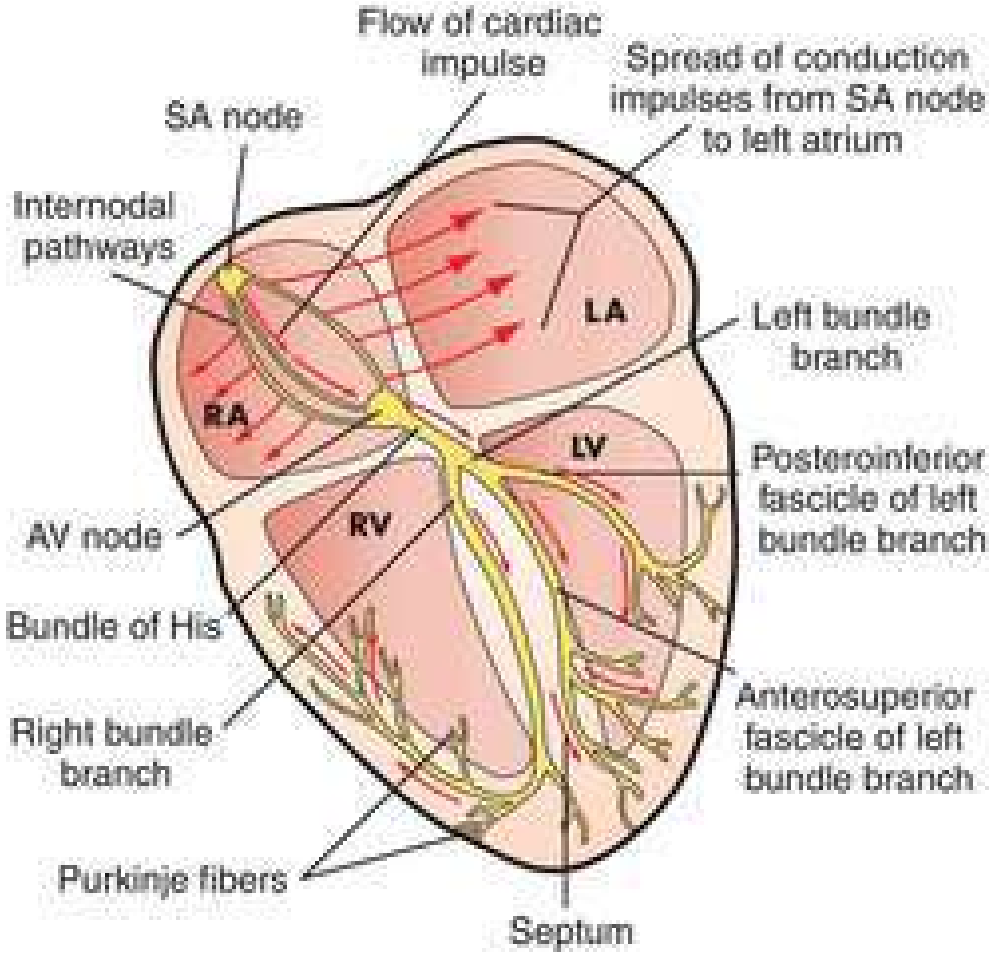
SA NODE

AV NODE

BUNDLE of HIS

Purkinje Fibers

[Conduction video]



VITALS Norms: Blood Pressure

Blood pressure ranges

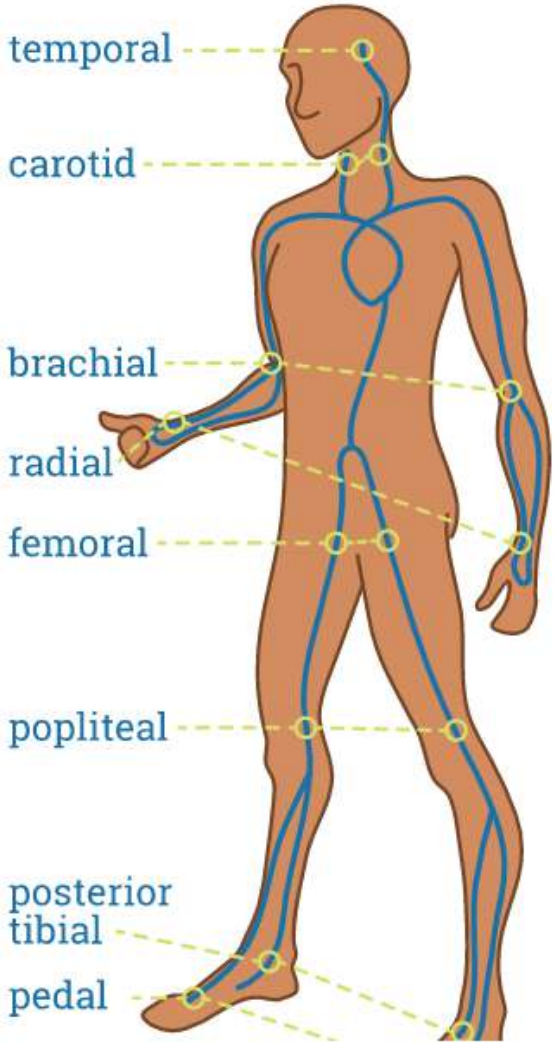
Category	Systolic (mm Hg)	Diastolic (mm Hg)
Expected reference range	Less than 120	Less than 80
Elevated	120 to 129	Less than 80
High blood pressure (stage 1)	130 to 139	80 to 89
High blood pressure (stage 2)	140 or greater	90 or greater
Hypertensive crisis	180 or greater	120 or greater

VITALS Norms: Heart Rate

Average heart rate by age

Age	Heart rate (beats per minute)
Newborn (birth to 1 month)	120 to 160
Infant (1 to 12 months)	80 to 140
Toddler (1 to 3 years)	80 to 130
Preschool-age (3 to 5 years)	80 to 120
School-age (6 to 15 years)	70 to 100
Adult (older than 15 years)	60 to 100

Pulse sites


temporal
carotid
brachial
radial
femoral
popliteal
posterior tibial
pedal

Respirations

Rate, Rhythm, Depth

Newborn 30-50/min Adult: 12-20/min

Sounds: wheezing, rales, ronchi

Define: hypoxia, tachypnea, bradypnea

Temperature

Define: Oral, tympanic, temporal

98.6 degrees F (37 degrees C)

Greater than 99.5 is considered febrile

Pulse Oximetry

Peripheral capillary O2 saturation (SpO2)

Finger-tip or earlobe

95% or higher = normal

If less than 95% assess patient

Cold hands, nail polish, acrylic nails, edema, carbon monoxide poisoning can hinder results