WHAT IS THE PATH OF AN OXYGEN FROM LUNGS TO A BRAIN CELL?

CIRCULATORY SYSTEM TYPES

CIRCULATORY SYSTEM

- Needed material, oxygen, nutrients and waste materials, carbon dioxide and urea are carried by CIRCULATORY SYSTEM.
- A true CIRCULATORY SYSTEM has heart, blood and blood vessels.

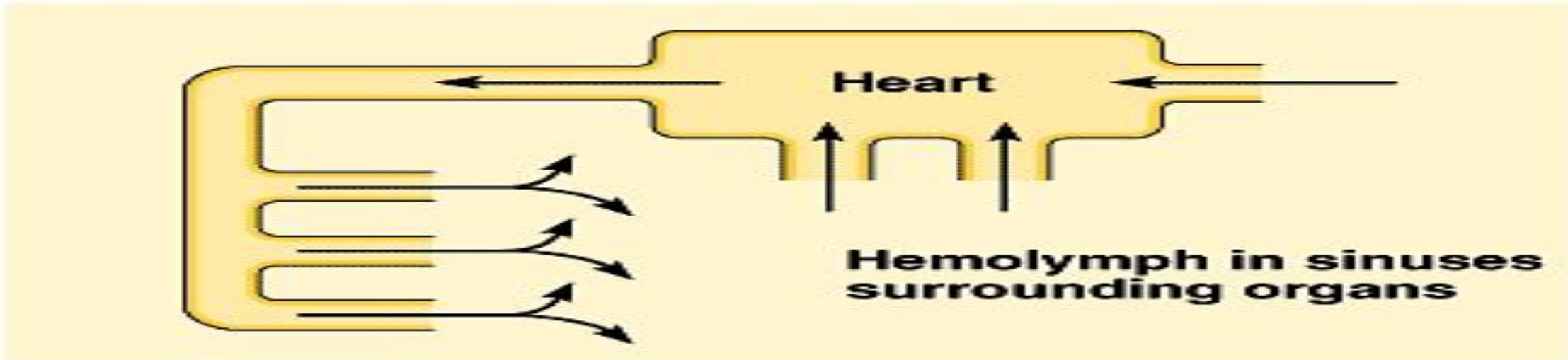
Types CIRCULATORY SYSTEM

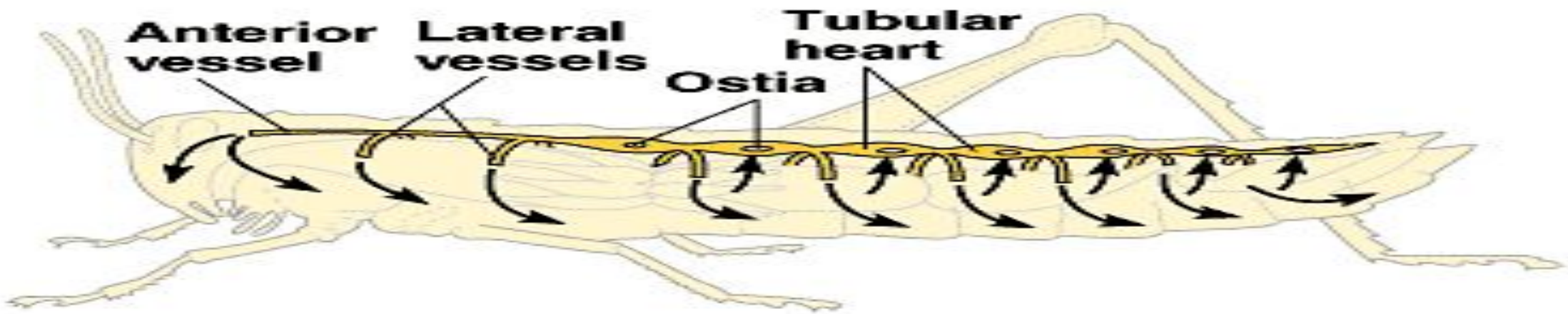
Open CIRCULATORY SYSTEM

Closed CIRCULATORY SYSTEM

OPEN CIRCULATORY SYSTEM

- Consist of HEART(PUMP), ARTERIES and VEINS.

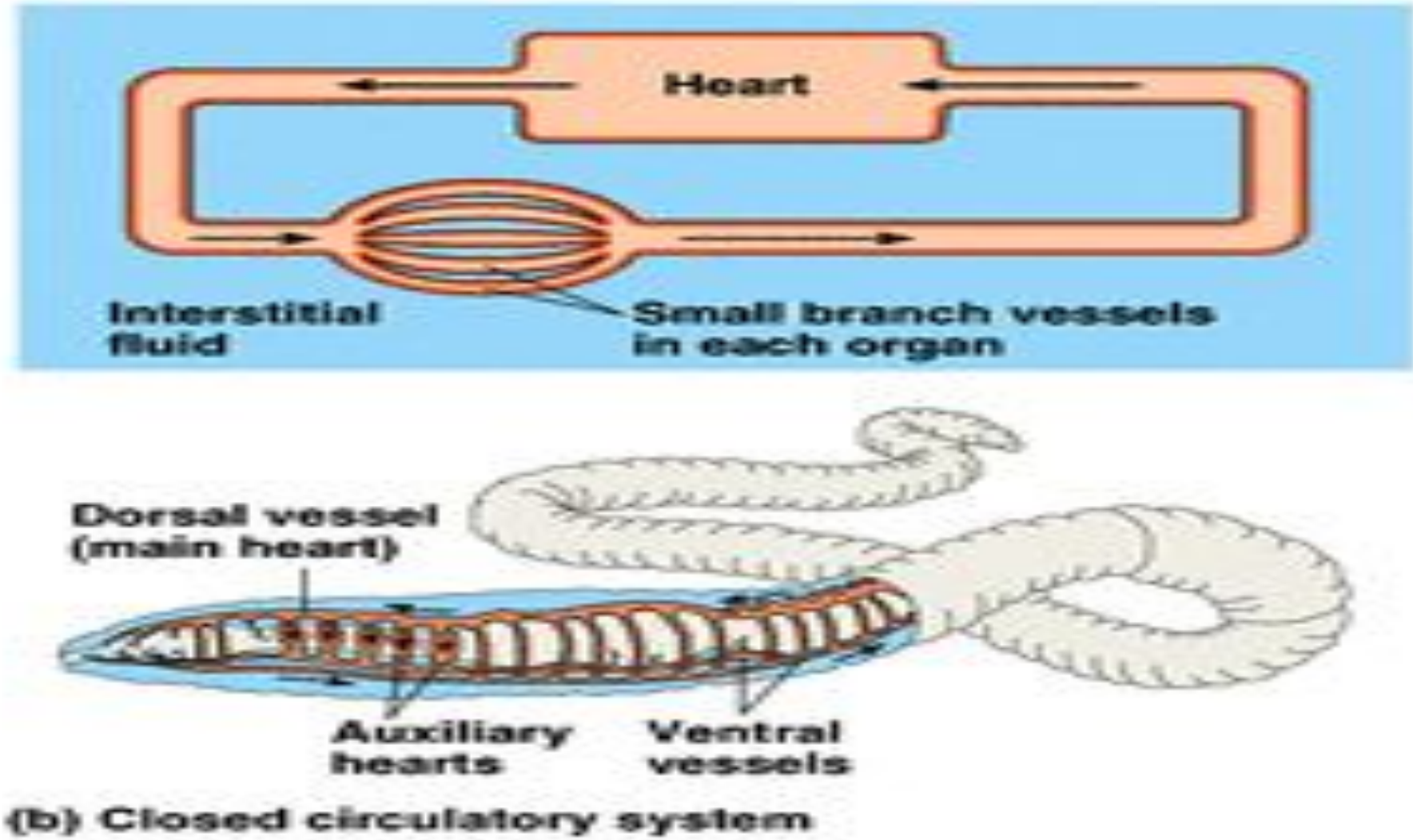




(a) Open circulatory system

Closed CIRCULATORY SYSTEM(CCS)

- In CCS there are capillaries between arteries and veins
- Capillaries are very tiny blood vessels(Material Exchange)
- Blood never leaves the BLOOD VESSELS
- Segmented Worms, cephalopods and all Vertebrates are examples



(b) Closed circulatory system

BLOOD CIRCULATION IN HUMAN

INCLUDES

PULMONARY CIRCULATION

- OCCURS BETWEEN HEART and LUNGS

HEART

RIGHT VENTRICLE

Pulmonary artery(CO_2)

LUNGS

Pulmonary VEINS (O_2)

LEFT ATRIUM

HEART

SYSTEMIC CIRCULATION

- OCCURS BETWEEN HEART and OTHER BODY ORGAN

HEART

LEFT VENTRICLE

AORTA

O_2

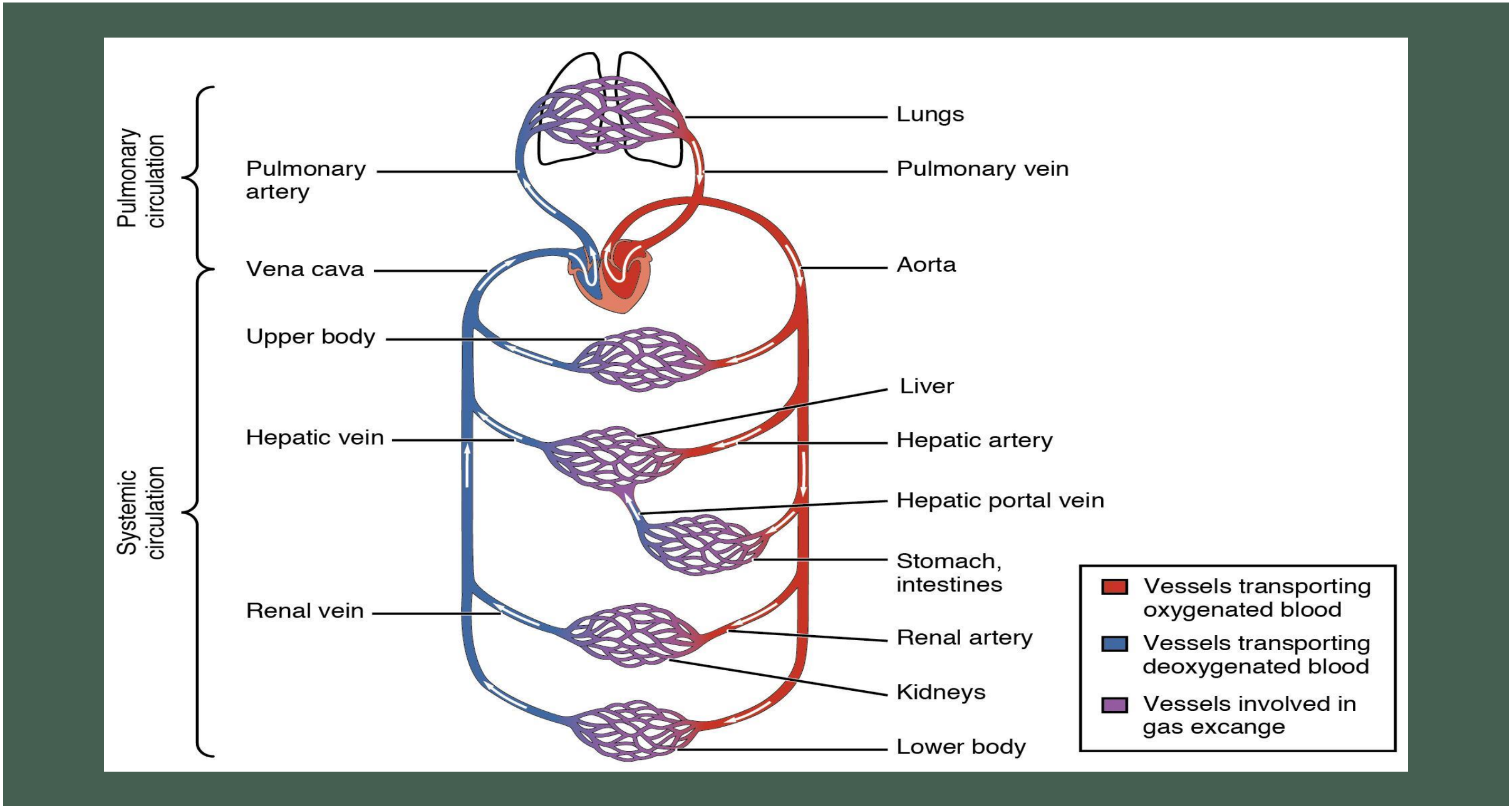
ALL PARTS OF BODY (EXCEPT LUNGS)

GAS EXCHANGE OCCURS IN CAPILLARIES

AORTA (CO_2)

HEART

RIGHT ATRIUM


Pulmonary circulation
Systemic circulation
Pulmonary artery
Vena cava
Upper body
Hepatic vein
Renal vein
Lungs
Pulmonary vein
Aorta
Liver
Hepatic artery
Hepatic portal vein
Stomach, intestines
Renal artery
Kidneys
Lower body
Vessels transporting oxygenated blood
Vessels transporting deoxygenated blood
Vessels involved in gas excange