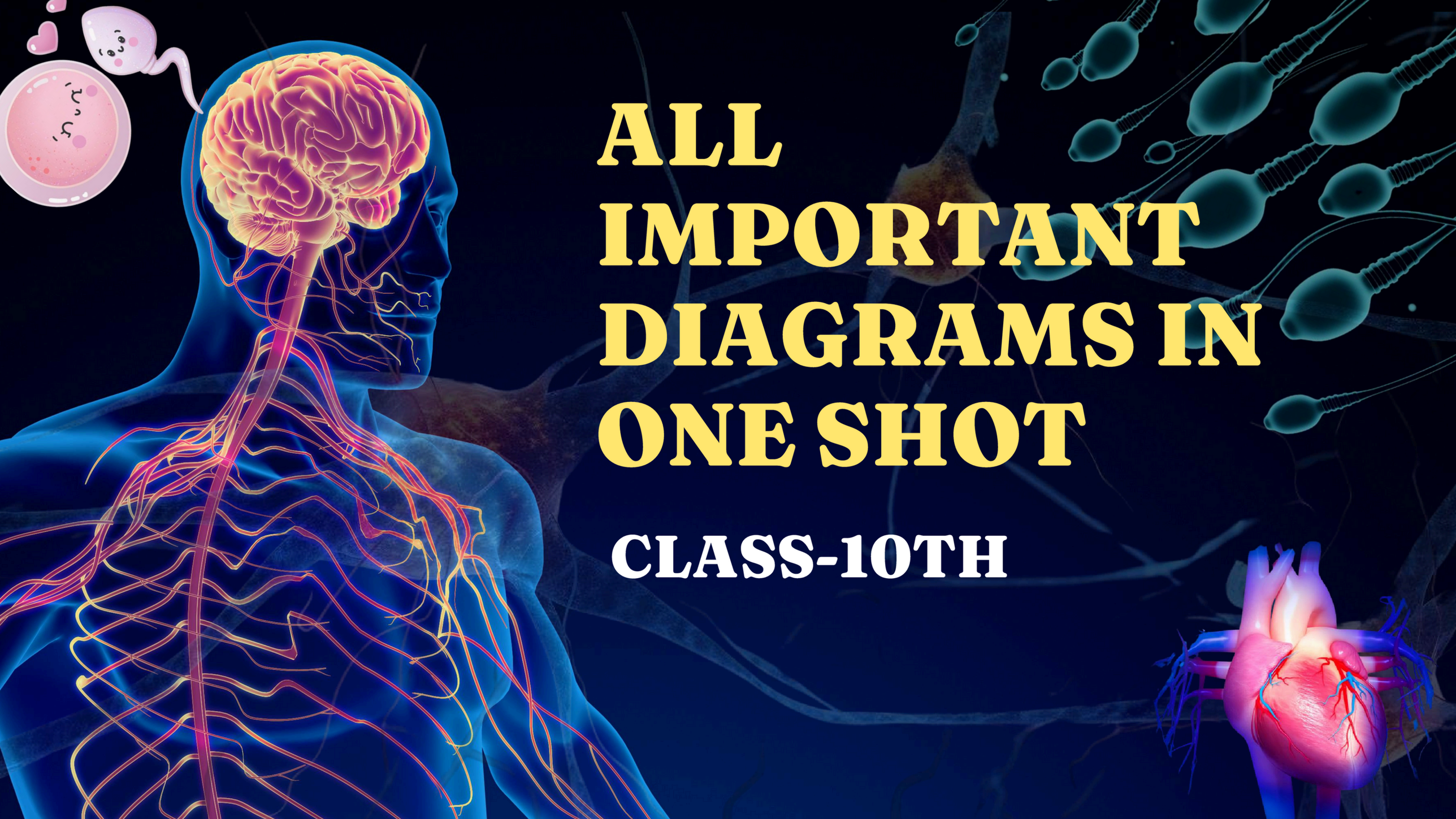
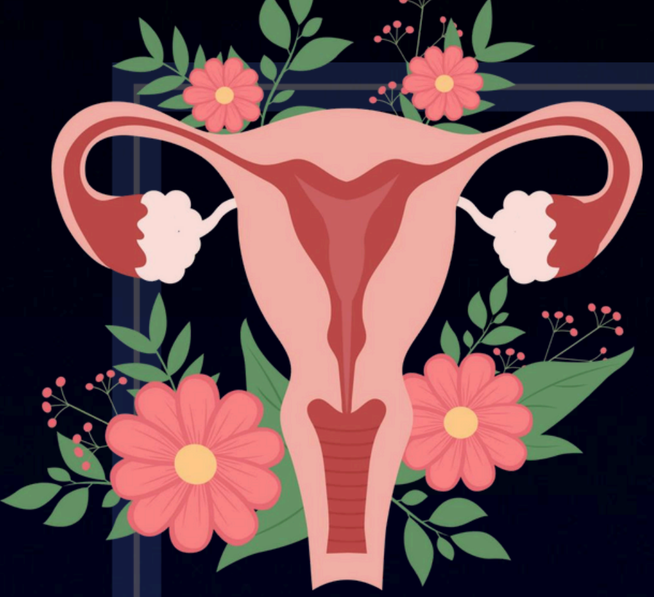

ALL
IMPORTANT
DIAGRAMS IN
ONE SHOT
CLASS-10TH

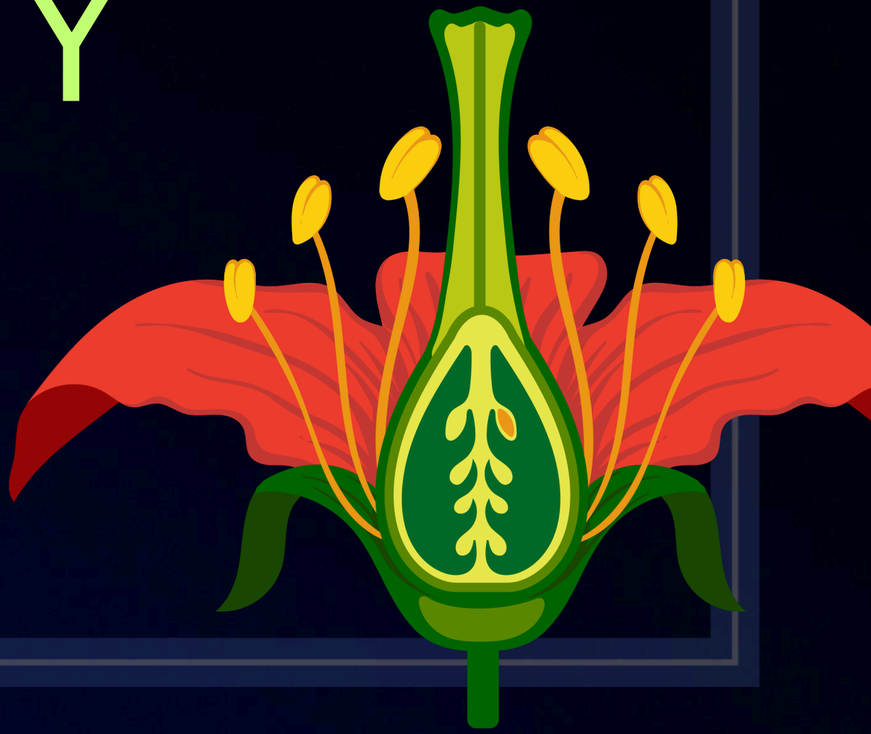

CREATE
YOUR
destiny


DREAM
BIG

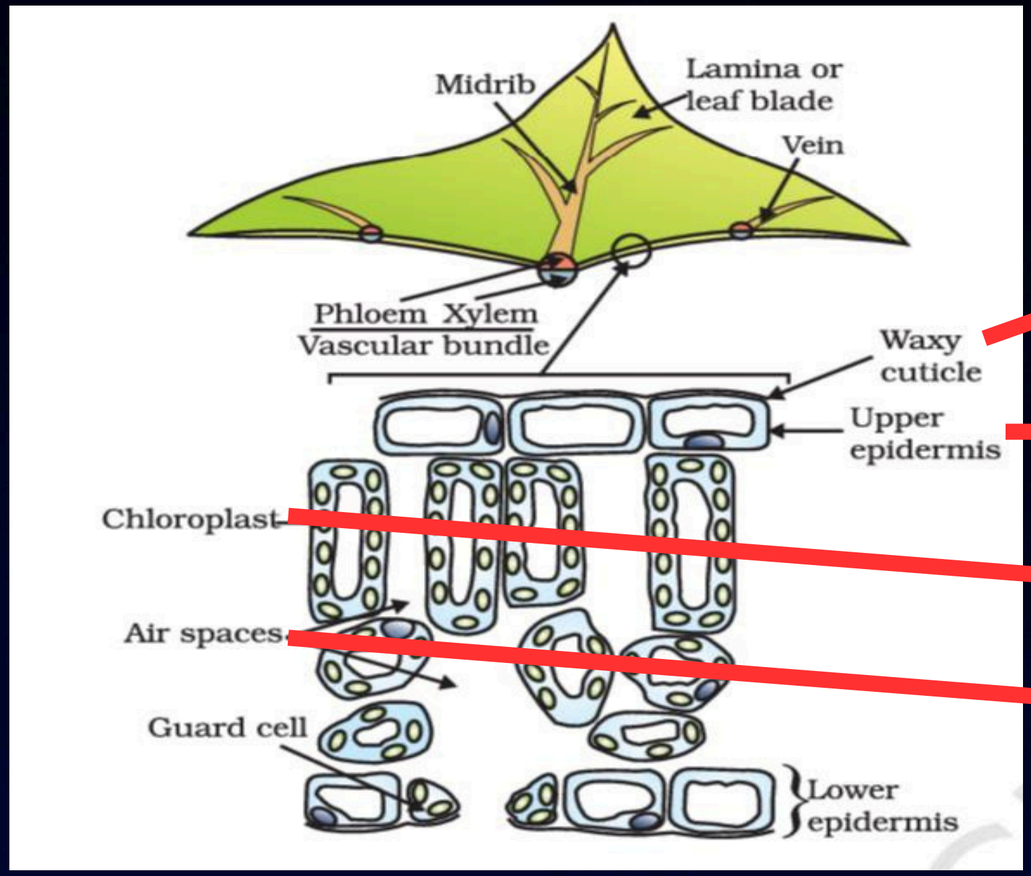

DO
YOUR BEST



BIOLOGY



Cross-section of a leaf



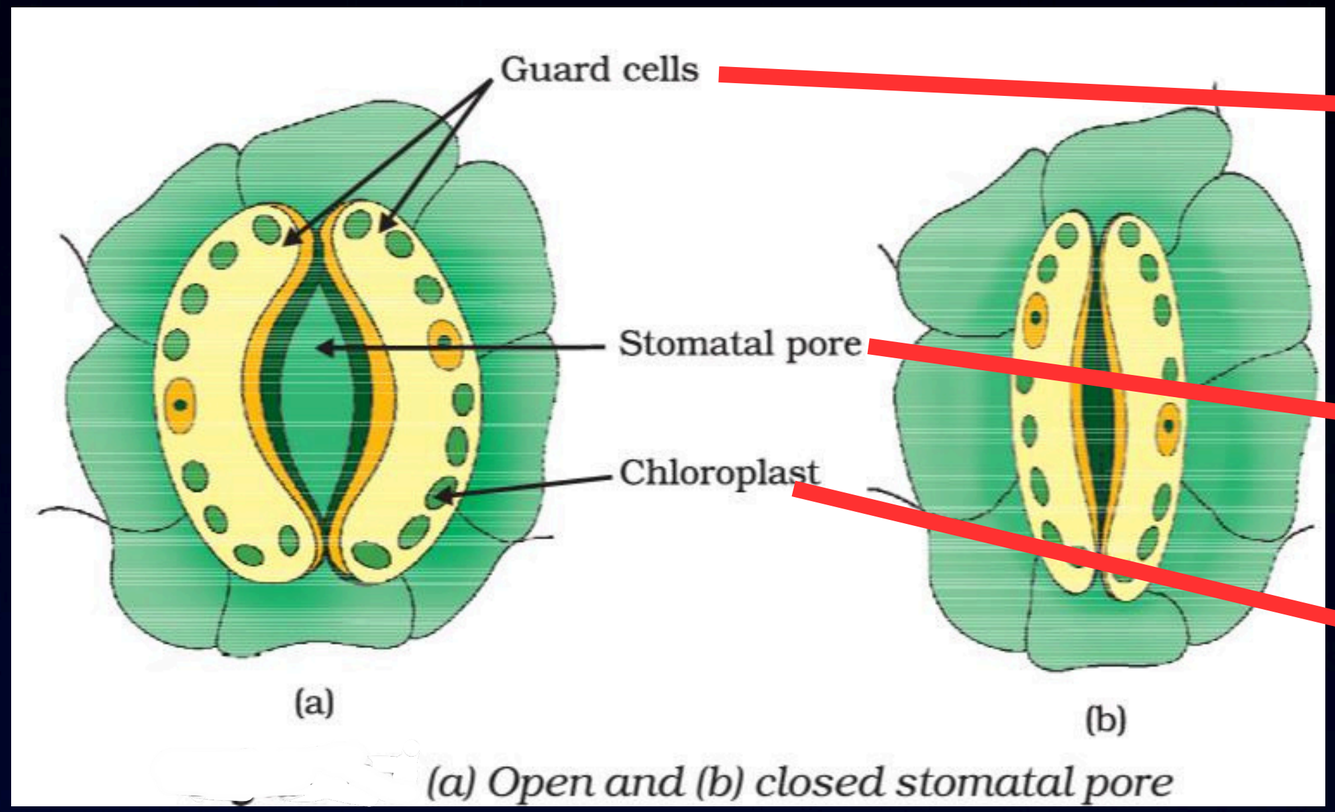
Prevents water loss

Protective layer of cells

Absorption of light

Allows diffusion of gases

Q. Identify and label the following structures in the stomata diagram: guard cells, stomatal pore



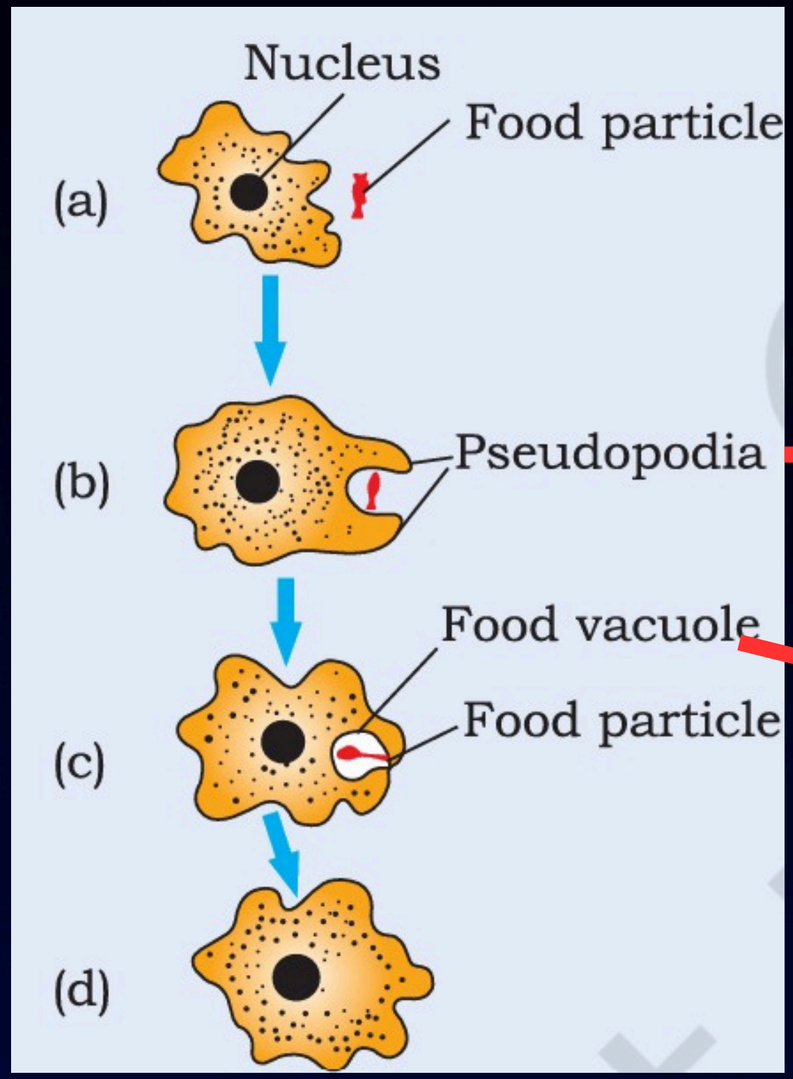
(a) Open and (b) closed stomatal pore

Regulates the closing and opening of Stomata (amount of water)

Controls Gaseous Exchange

Traps light energy and converts it into usable chemical energy

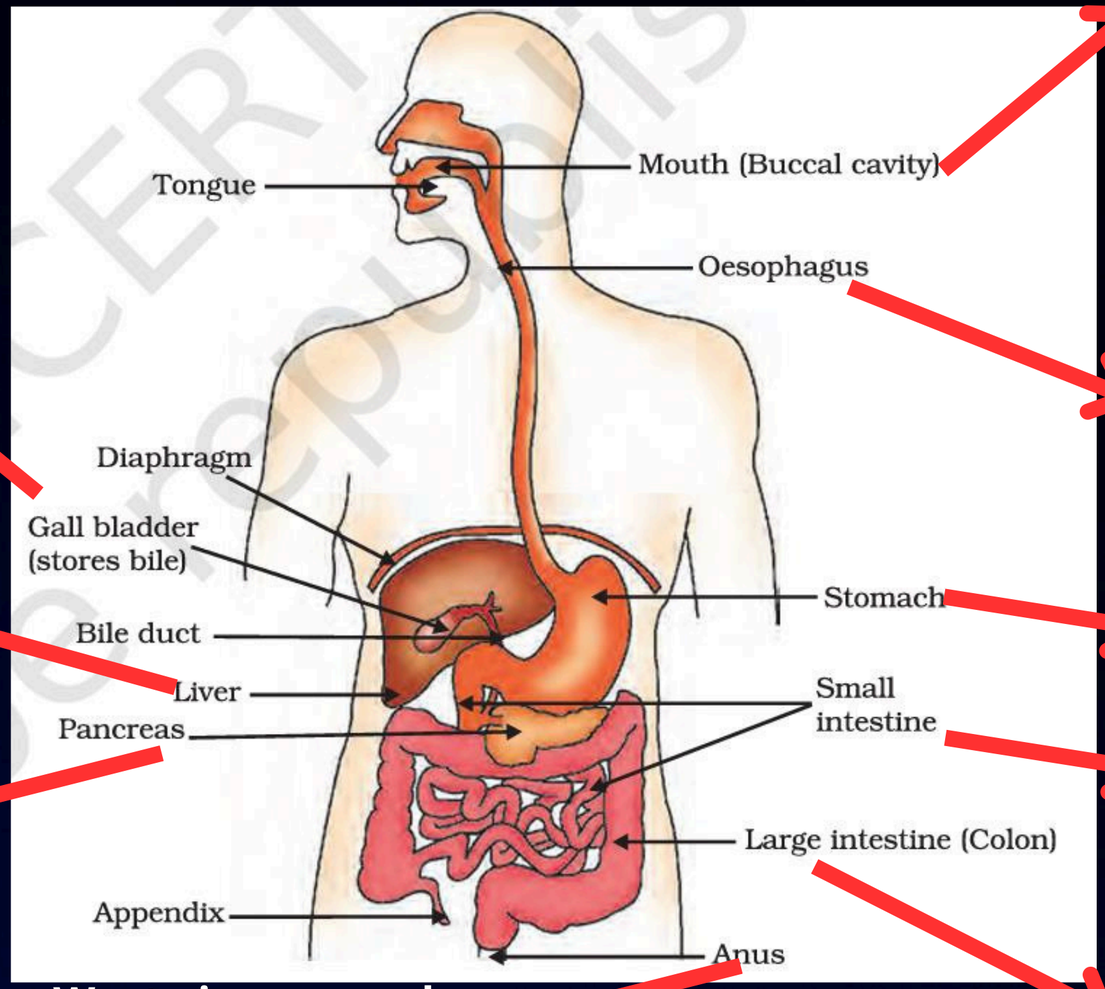
Nutrition in Amoeba



Engulfs Food Particles

Helps in Digesting the ingested food

Human alimentary canal



Digestion begins here as salivary glands release saliva which converts Starch into Maltose by salivary amylase.

Peristaltic movement of the muscles in the digestive tract that

move food through it.

Increase the thickness of Bile

Secretes Bile

↓

Bile emulsify fat globules

Secretes HCl that kills bacteria & converts pepsinogen to pepsin

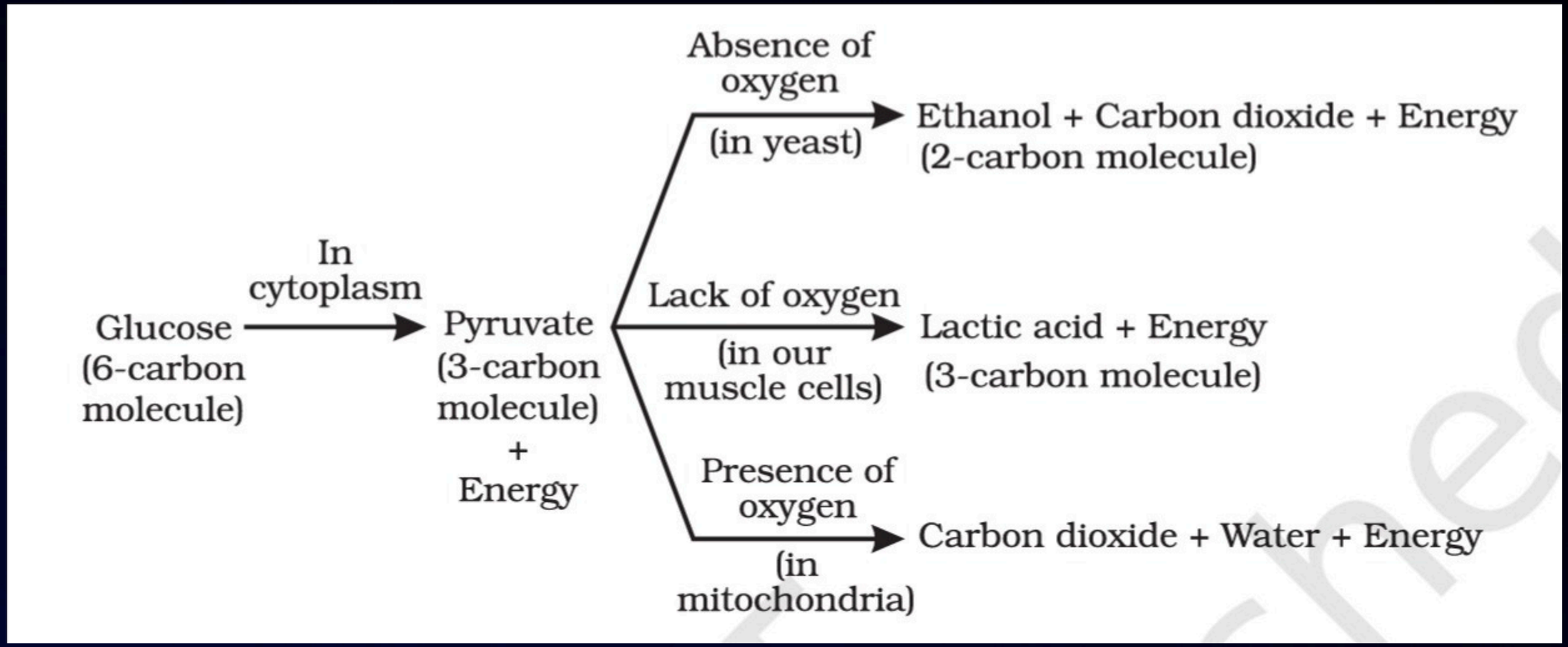
Secretes :
Trypsin for Proteins
Lipase for Fats
Also secretes Insulin

Digestion completes here by villi and intestinal enzymes breakdown:
PROTEINS - Amino acids
CARBOHYDRATES - Glucose
FATS - Fatty acids & Glycerol

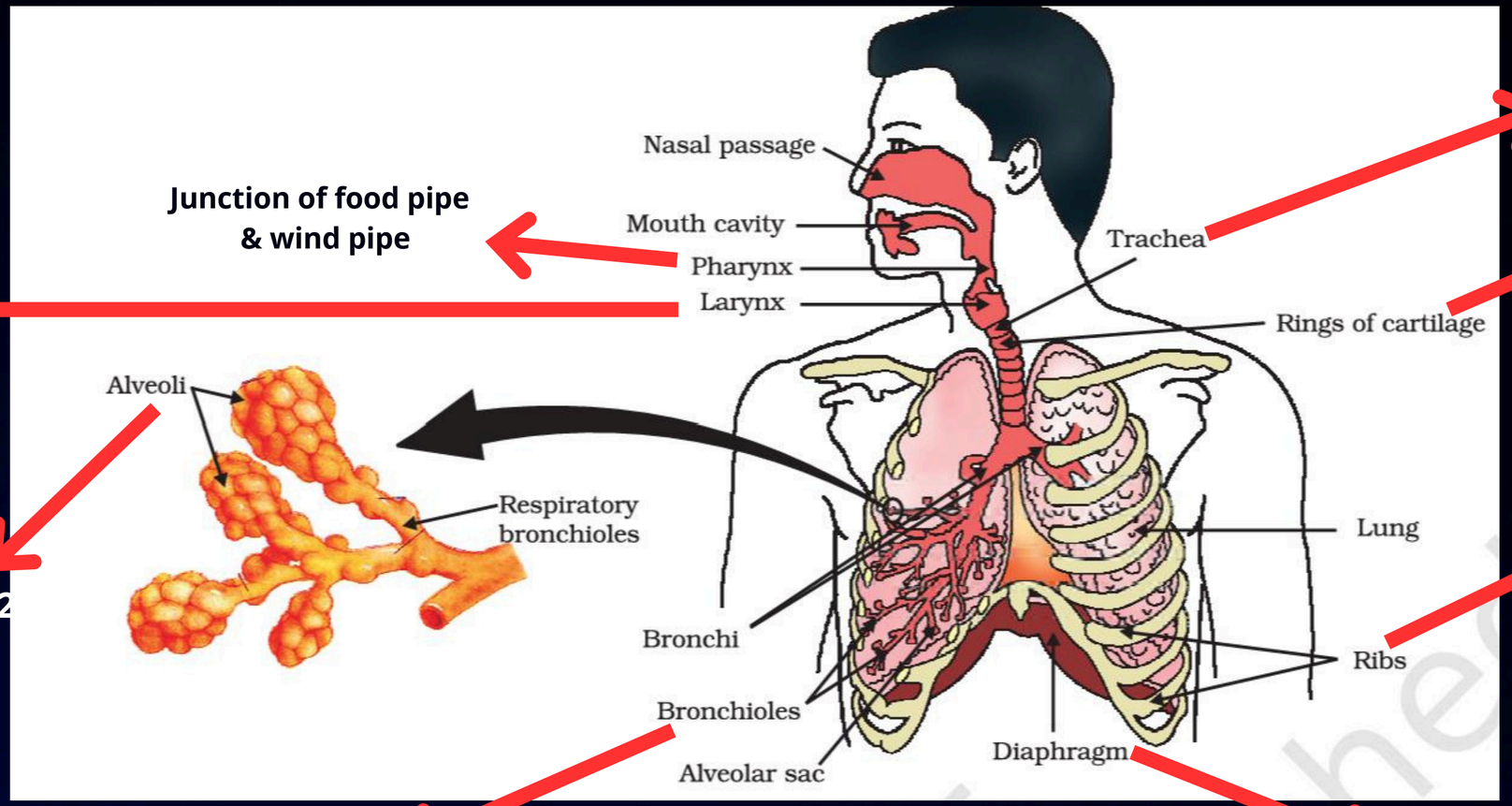
Absorbs more water

Waste is removed from the body

Break-down of glucose by various pathways



Human respiratory system



Junction of food pipe & wind pipe

Voice box

Exchange of O2 & CO2 in the bloodstream

Carry air from bronchi to alveoli

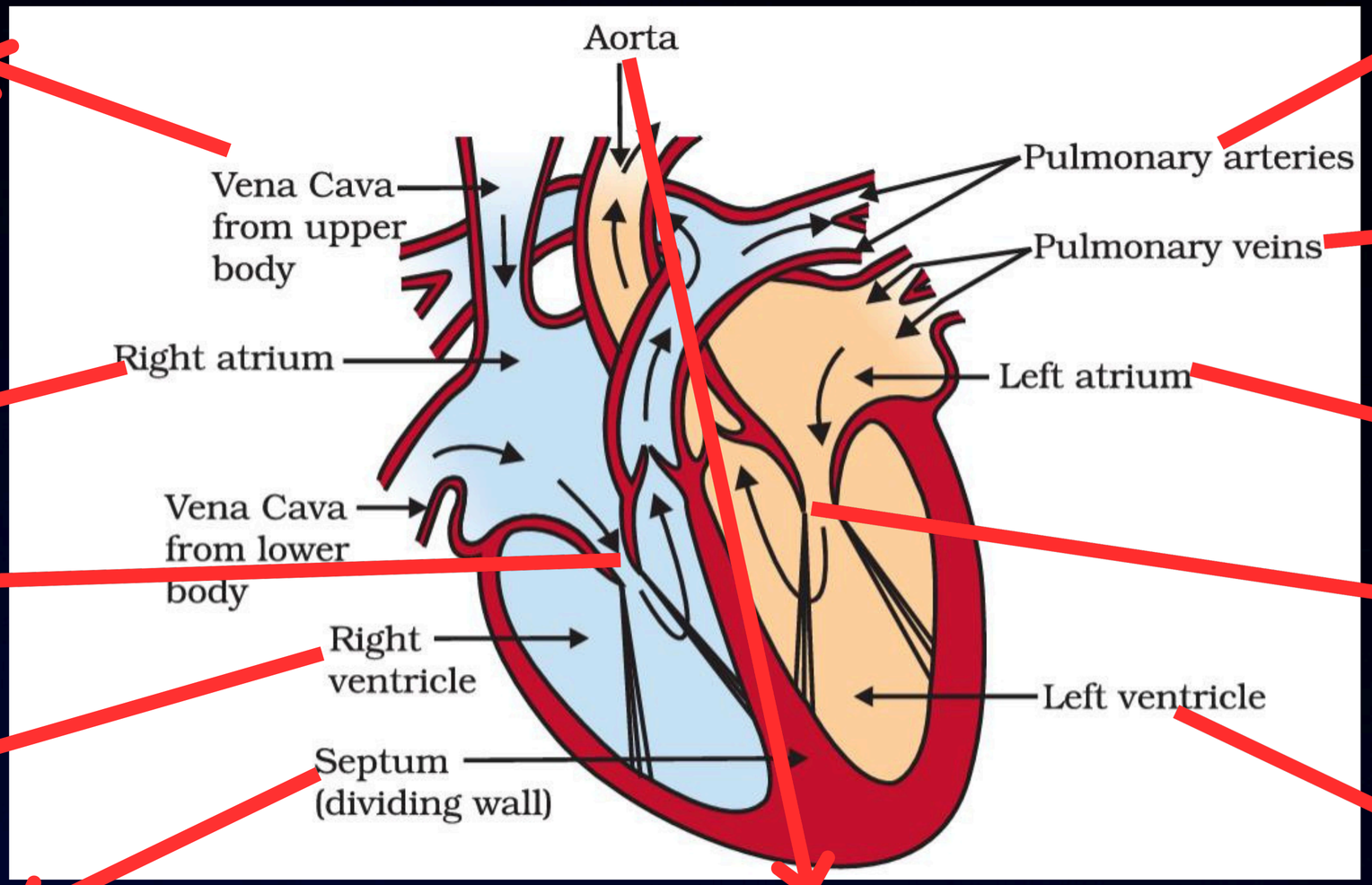
Also called as windpipe + produces mucus

Prevents the walls of Trachea from collapsing

Protect your lungs and chest cavity

Changes it shape to help thoracic cavity expand (inhale) and contract (exhale)

Schematic sectional view of the human heart



Carries deoxygenated blood from body to heart

Carries deoxygenated blood from body to lungs

Carries Oxygenated blood from lungs to heart

Receives deoxygenated blood from body

Receives Oxygenated blood from lungs

Triscuspid Valve

Bicuspid Valve

Receives deoxygenated blood from atrium

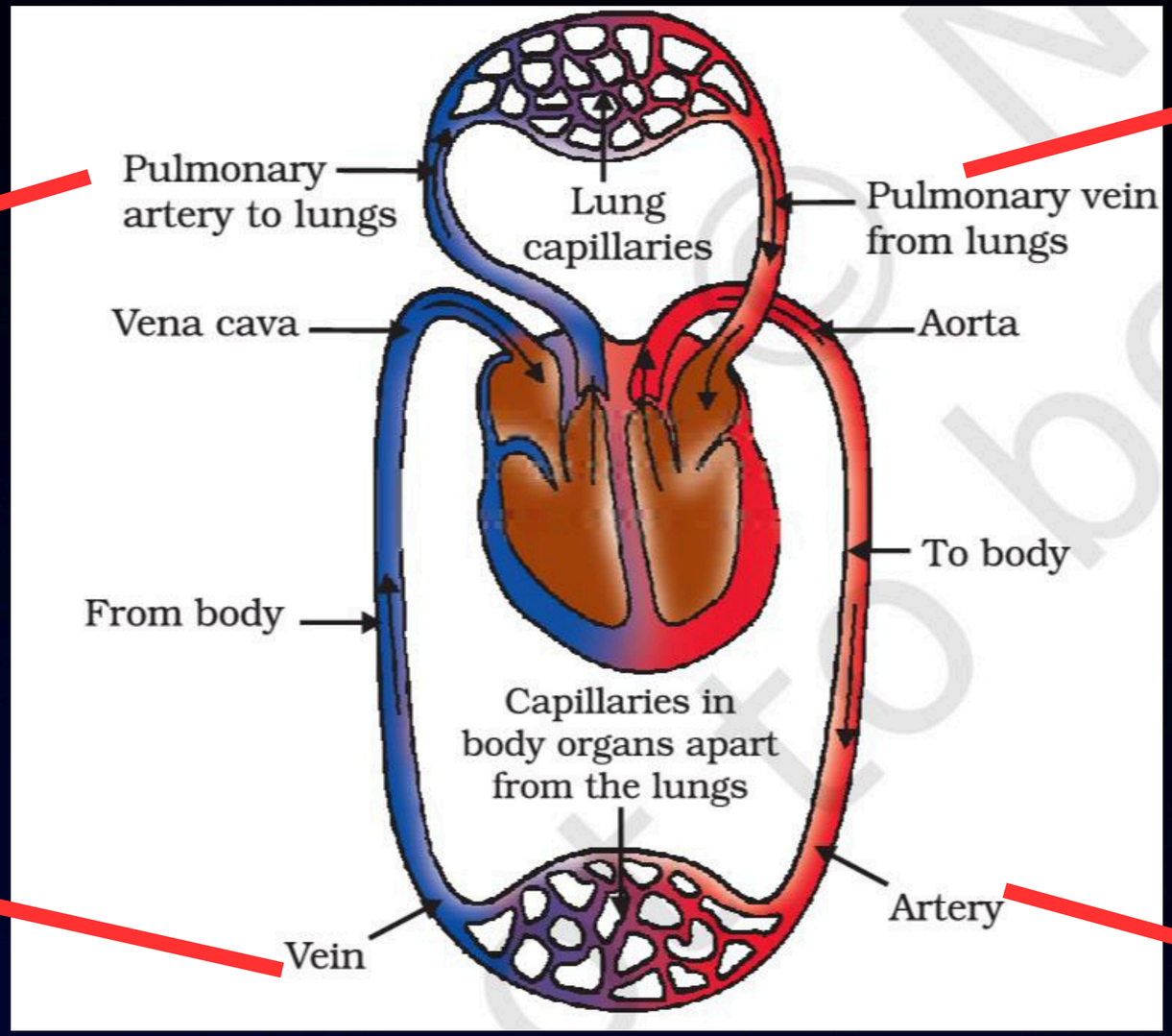
Sends oxygenated blood to Aorta

Separates oxy. & deoxy. blood

Carries oxygenated blood from heart to all body parts

Sends deoxygenated blood

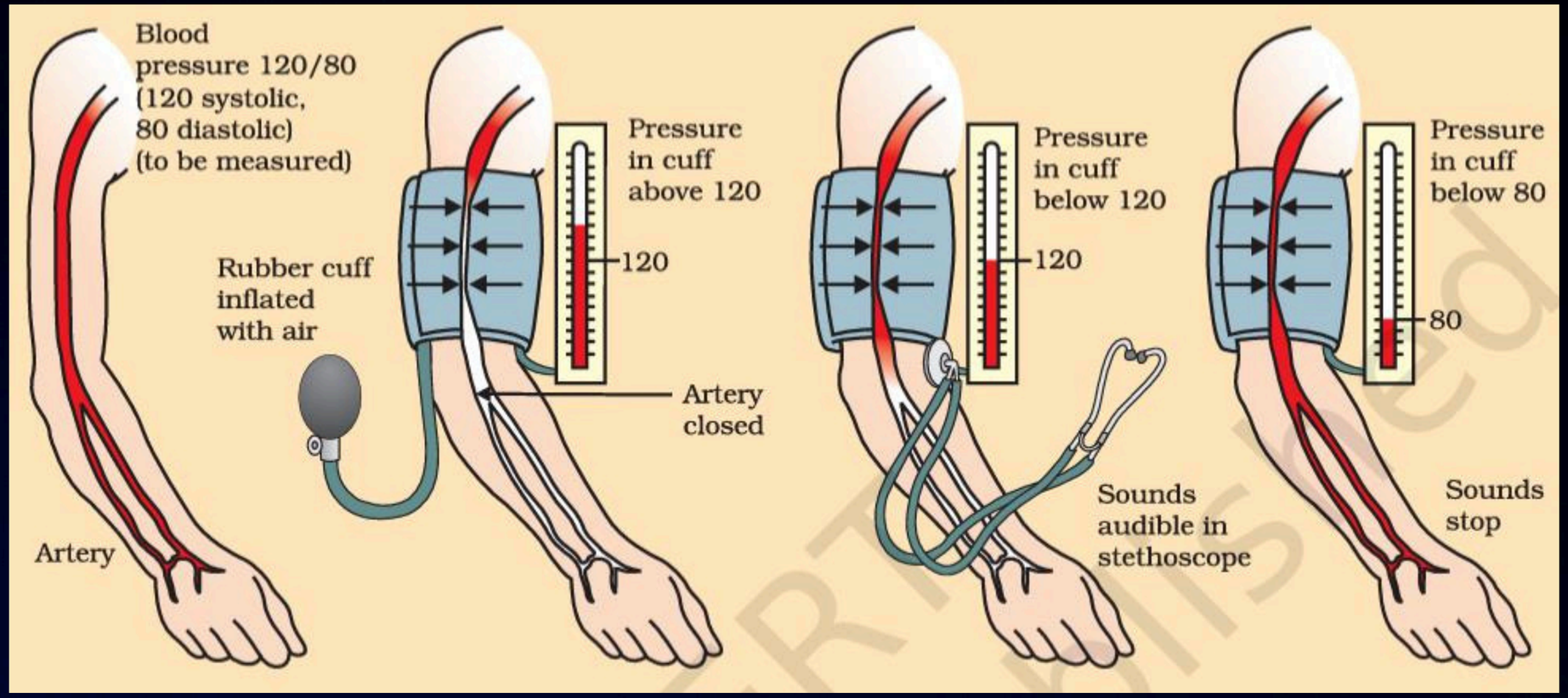
Receives oxygenated blood



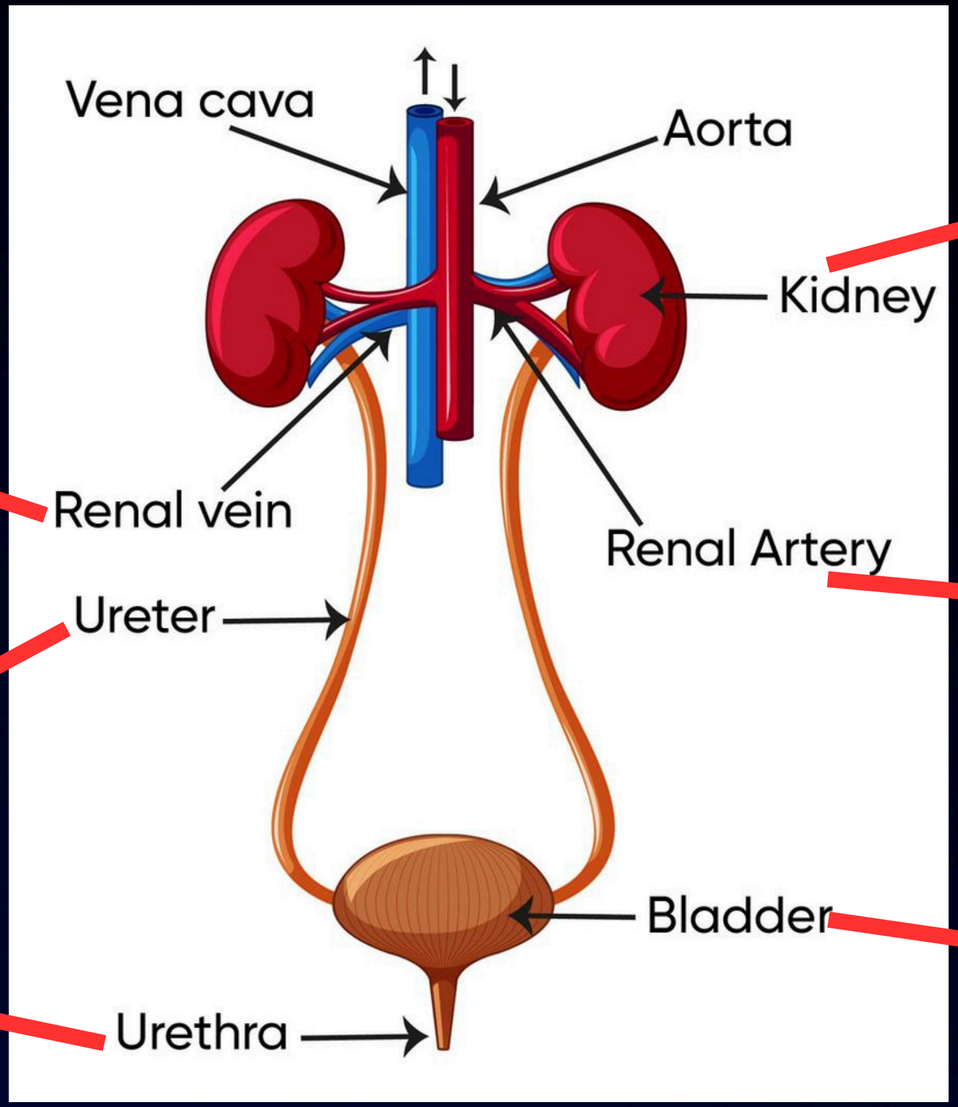
Carries deoxygenated blood

Carries oxygenated blood

Sphygmomanometer



Excretory System



Contains millions of nephron to filter blood

Returns useful nutrient back into the bloodstream after filtering unwanted materials in kidney

Constantly transport blood to each kidney

Carry urine from kidney to the bladder

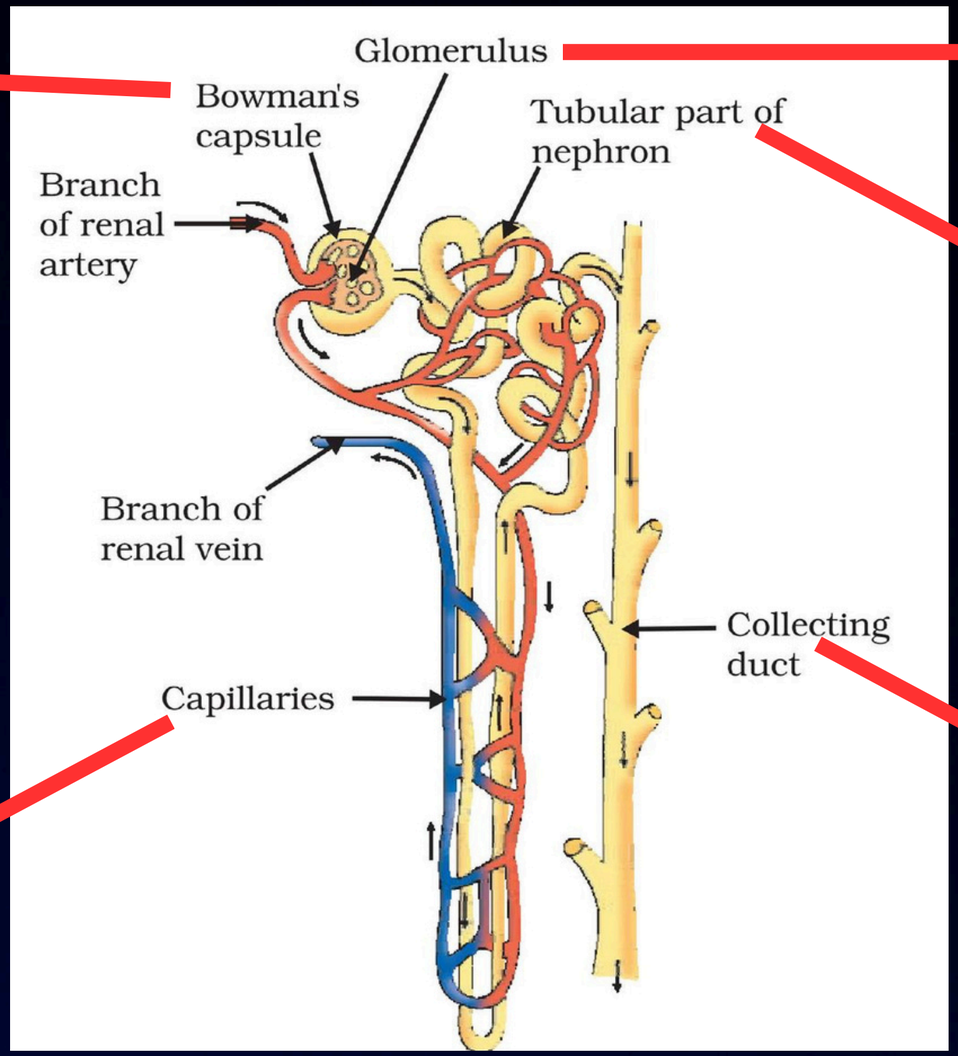
Urine is stored until it is thrown out

Carry urine from the bladder to outside of the body

Structure of a Nephron

Collects the Blood to filter

Network of capiilaries which filters the blood

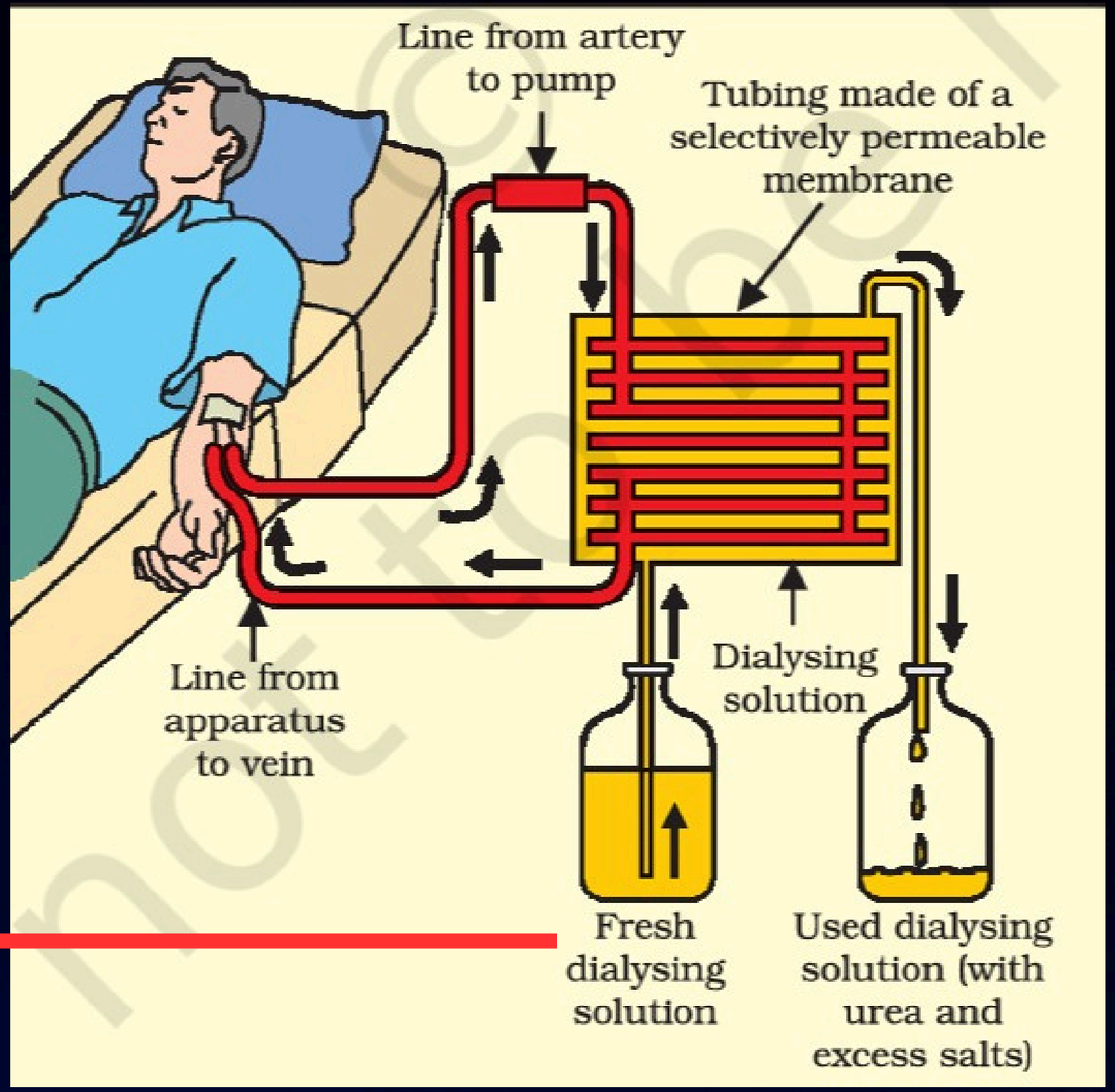


Helps in reabsorption of essential nutrients from filterate passing through it

Filtering waste from blood, creating urine, and reabsorbing nutrients

Osmoregulation (Water Retention)

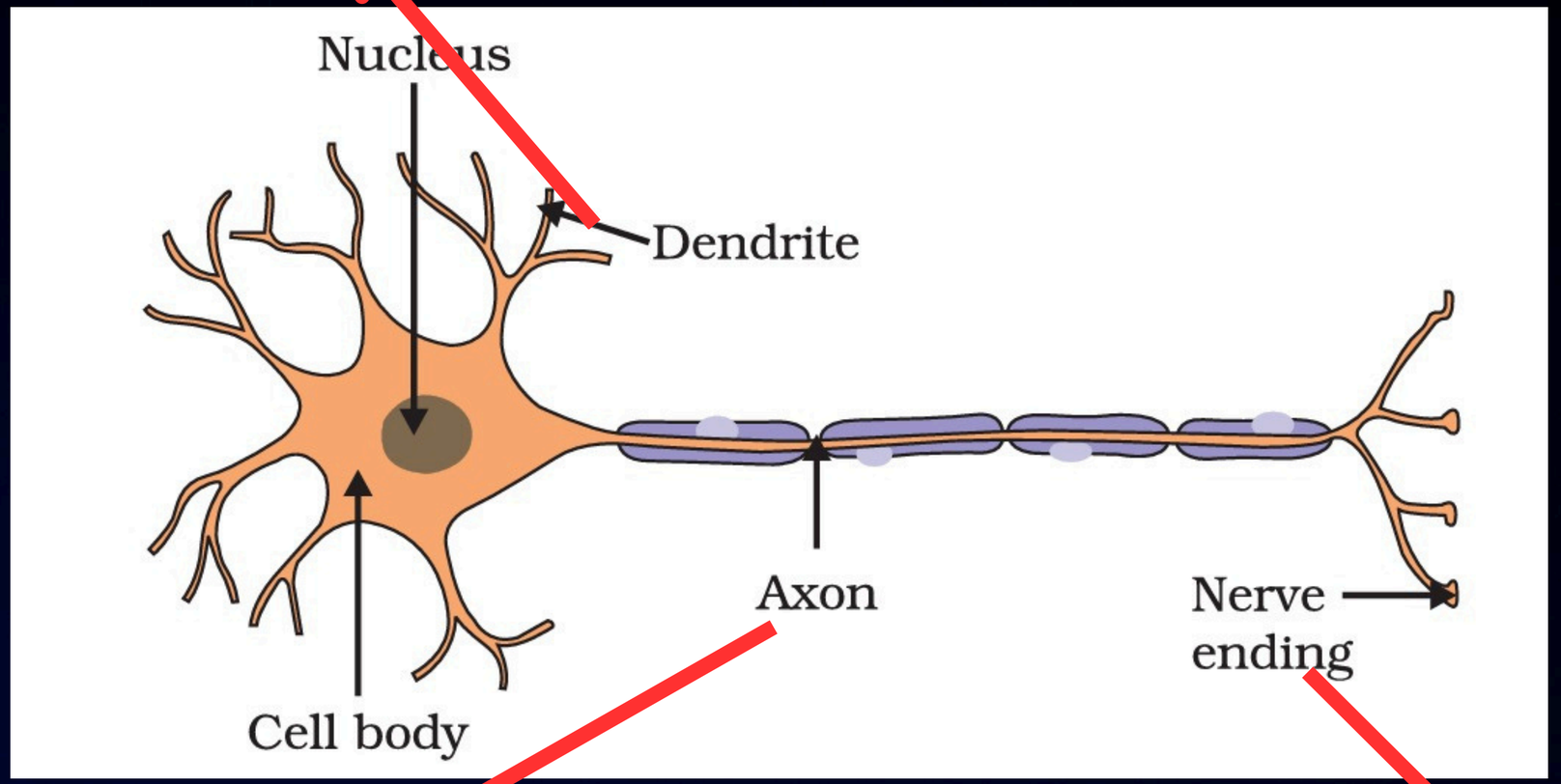
Artificial kidney (Hemodialysis)



Same osmotic pressure as blood

NEURON

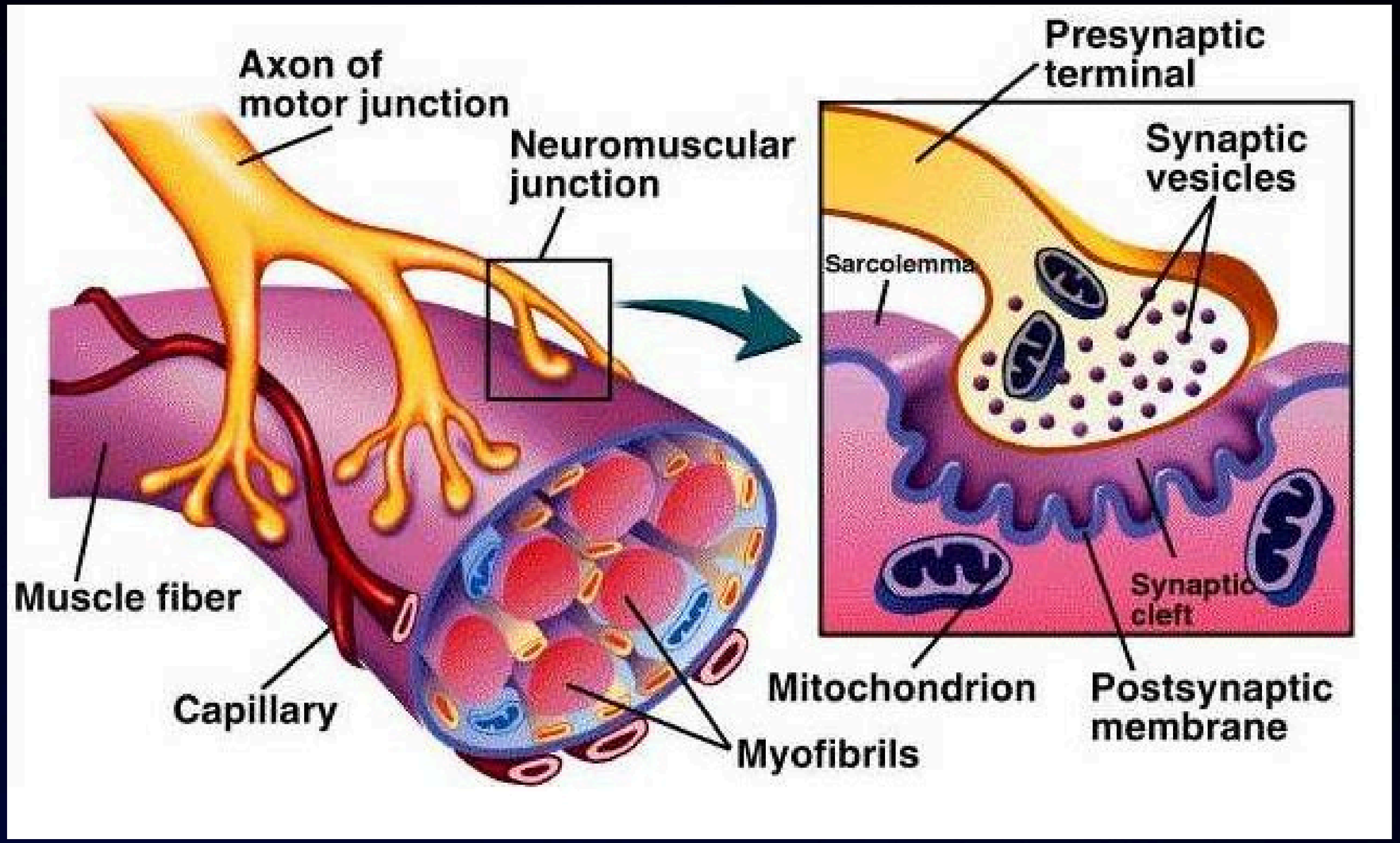
Shortest Fibres which Acquires information



Longest Fibre in which information travels as an electric impulse

Impulse converted into a chemical signal

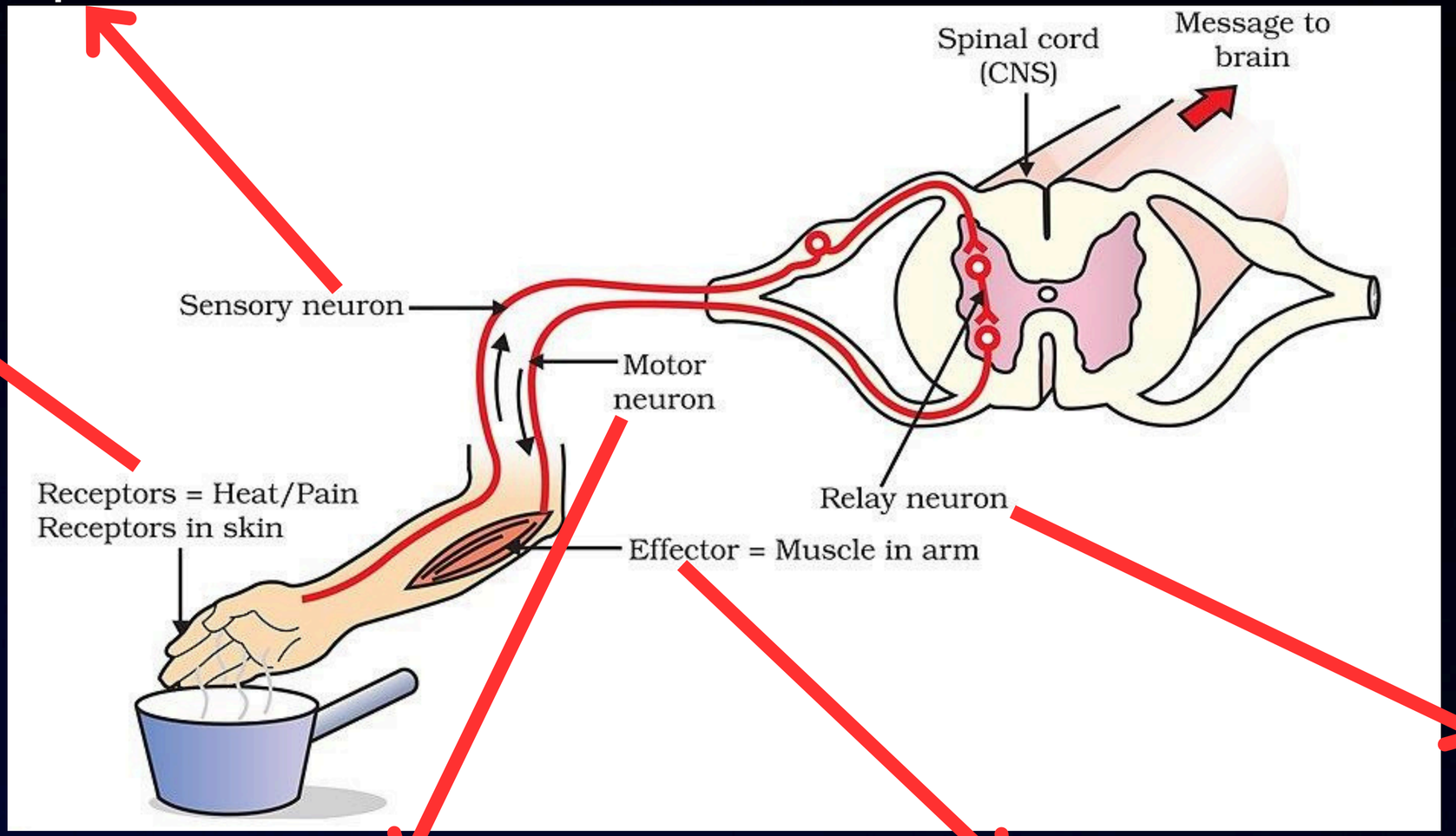
Neuromuscular junction



Reflex Arc

Carry signal to the brain from receptors

Receives stimuli

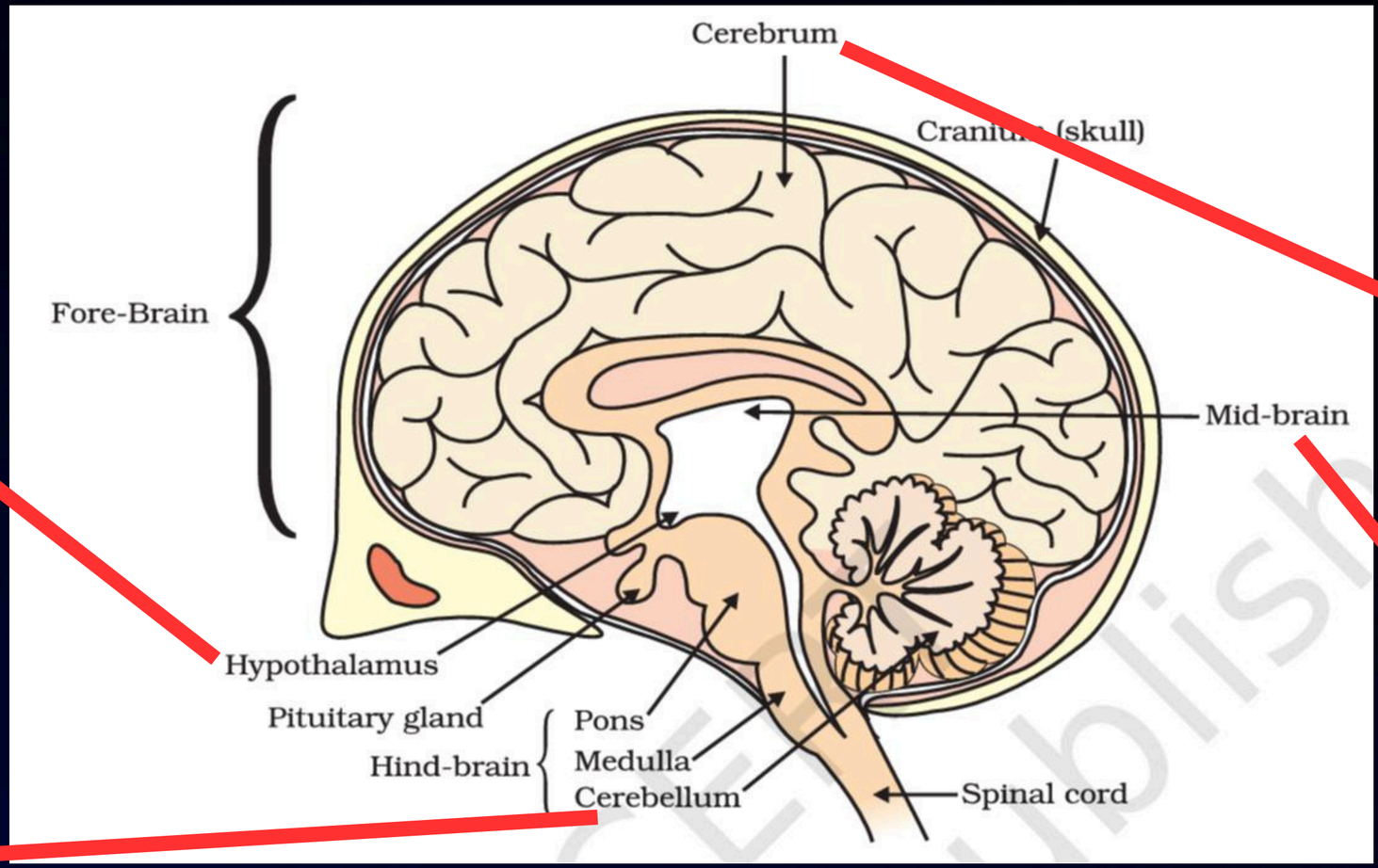


Allows sensory & motor nerves to communicate

Carry order from brain to effector body parts

Responds stimuli

Human Brain



Largest part of brain that controls body movements

Controls sleep cycle & body temperature

Maintaining the posture and balance of the body

Controlled Voluntary actions and some reflex actions

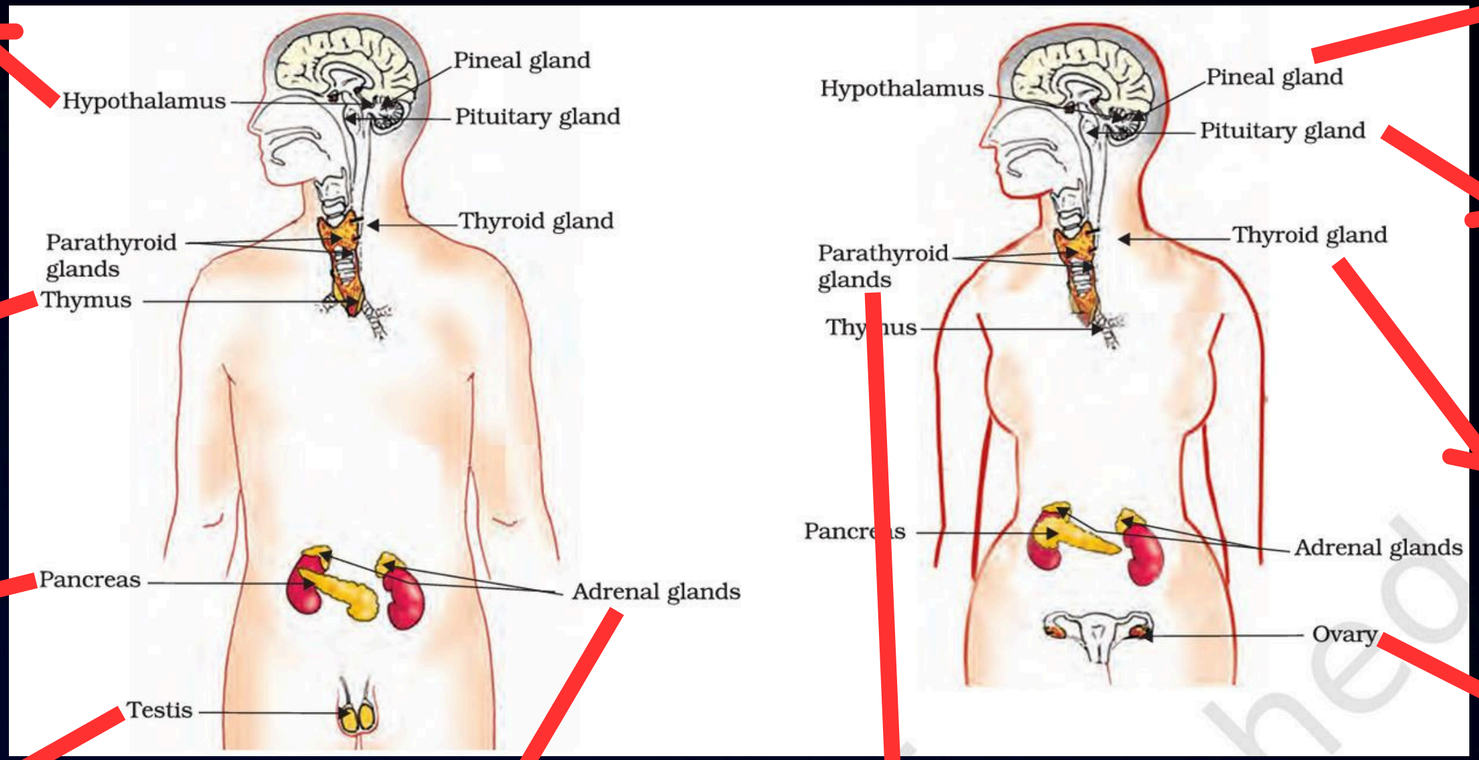
Endocrine Glands

Regulates the secretion of hormones from pituitary gland

Helps in the development of immune system

Releases Insulin Hormone to regulate blood sugar level

Releases Testosterone Hormone



Releases Adrenaline Hormone

Secretes the Parathormone to increase the calcium and phosphate level in blood

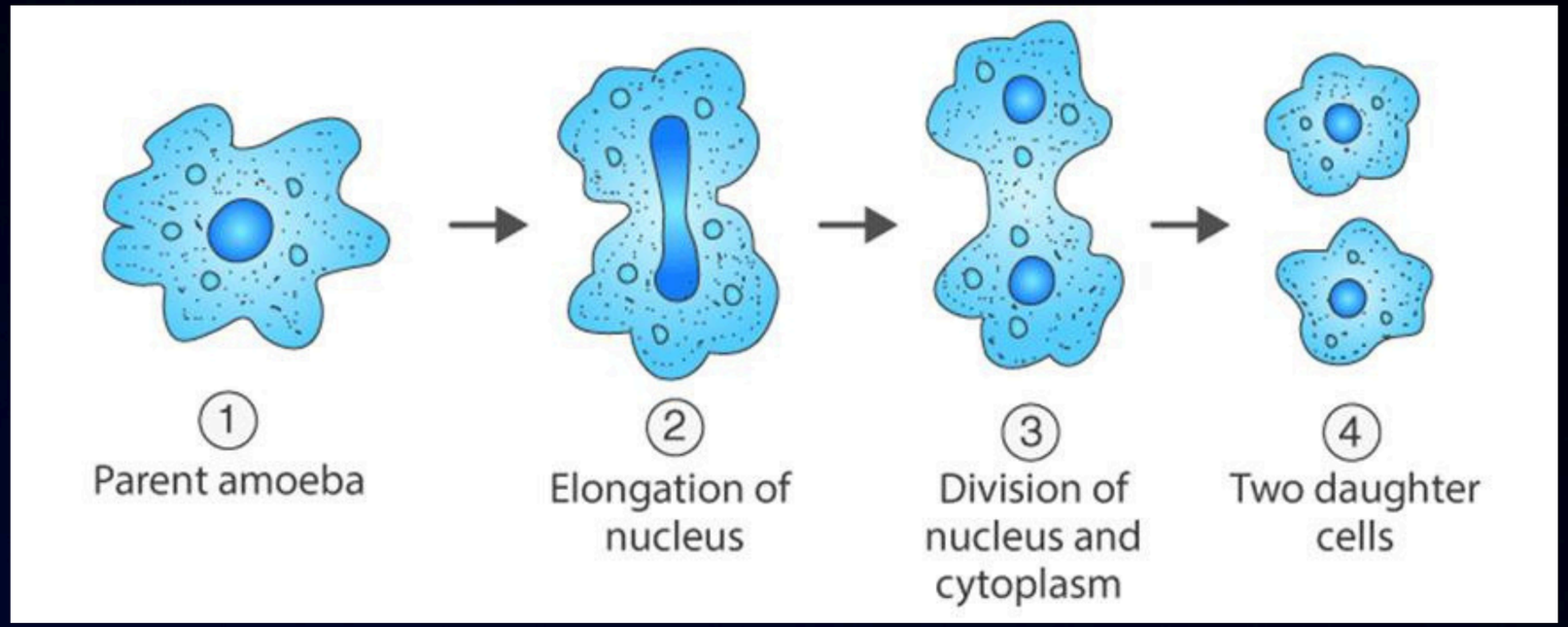
Regulates circadian rythms by releasing Melatonin hormone

Master Gland and Releases Growth hormone

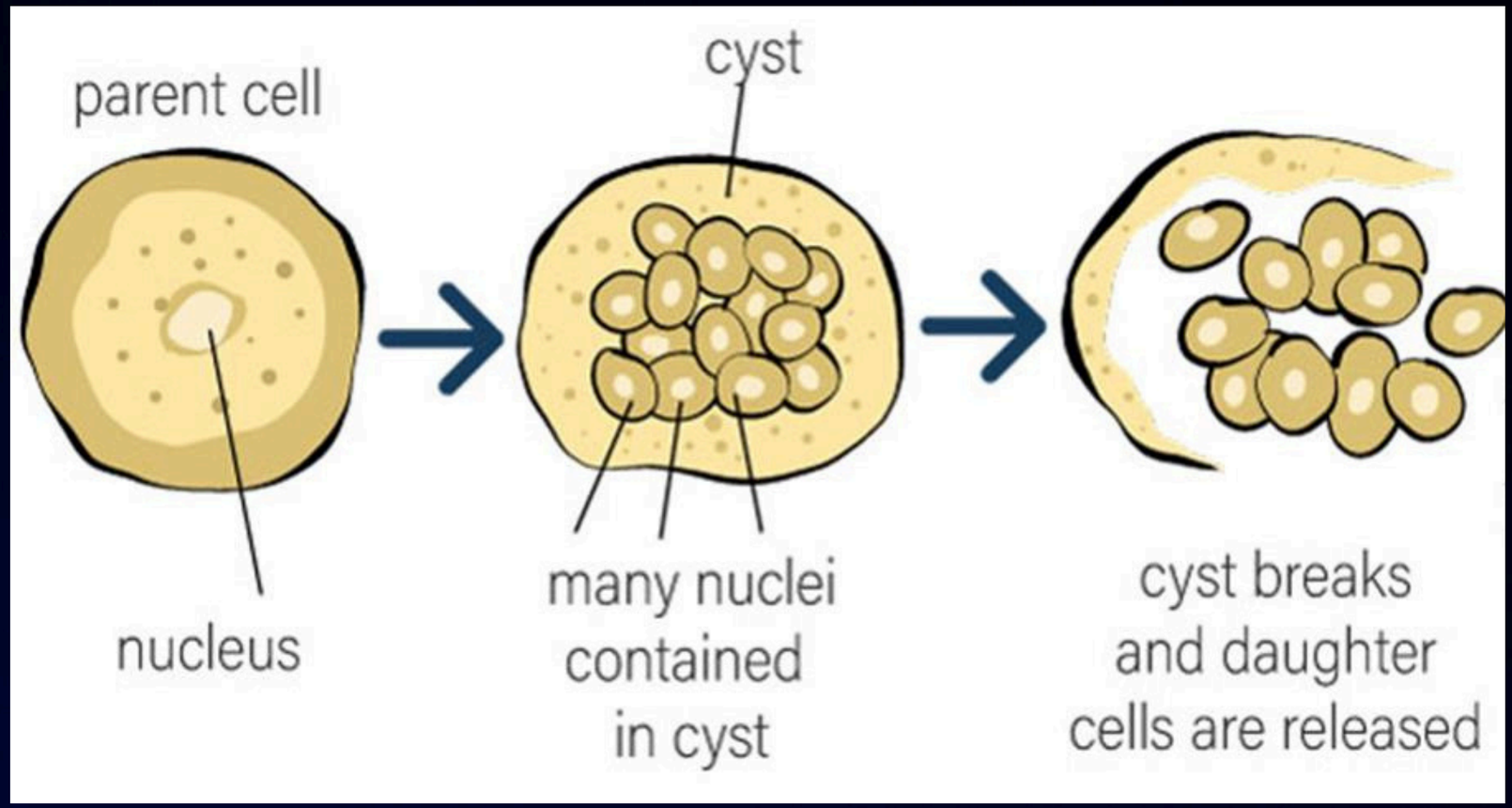
Regulates metabolism for body growth by the synthesis of thyroxin hormone

Development of female sex organs, regulates menstrual cycle, etc.

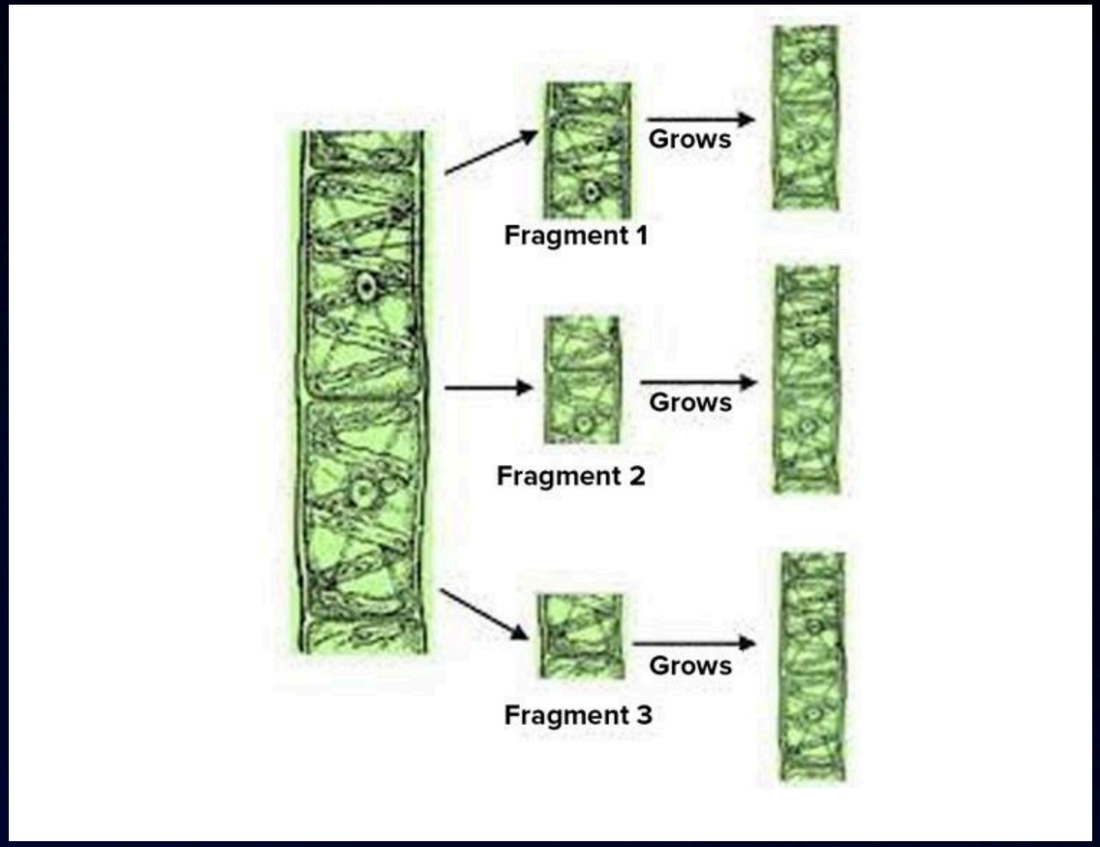
Binary fission in Ameoba



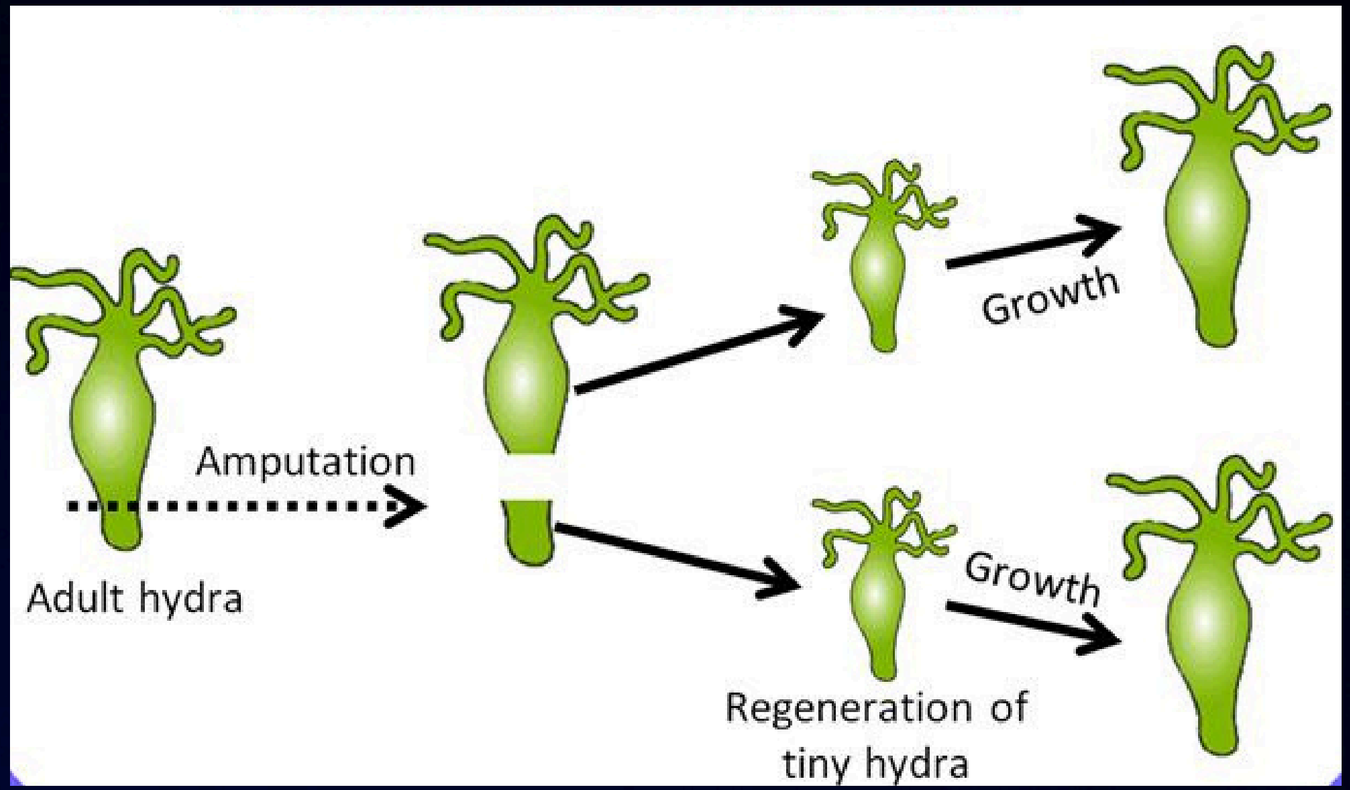
Multiple fission in Plasmodium



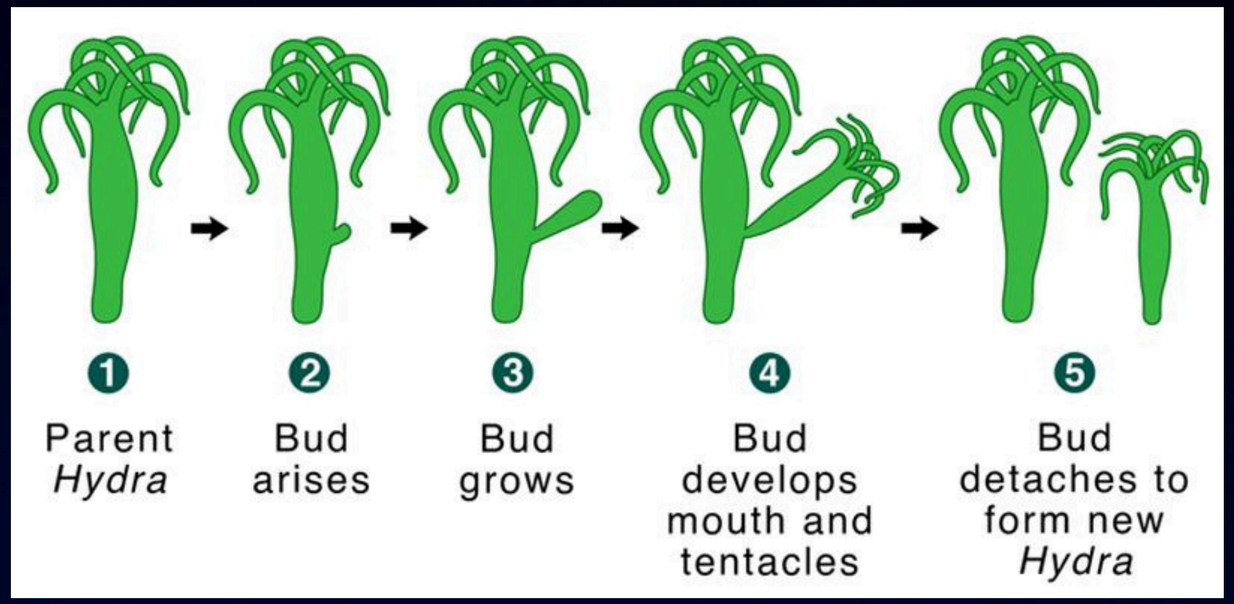
Fragmentation in Spirogyra



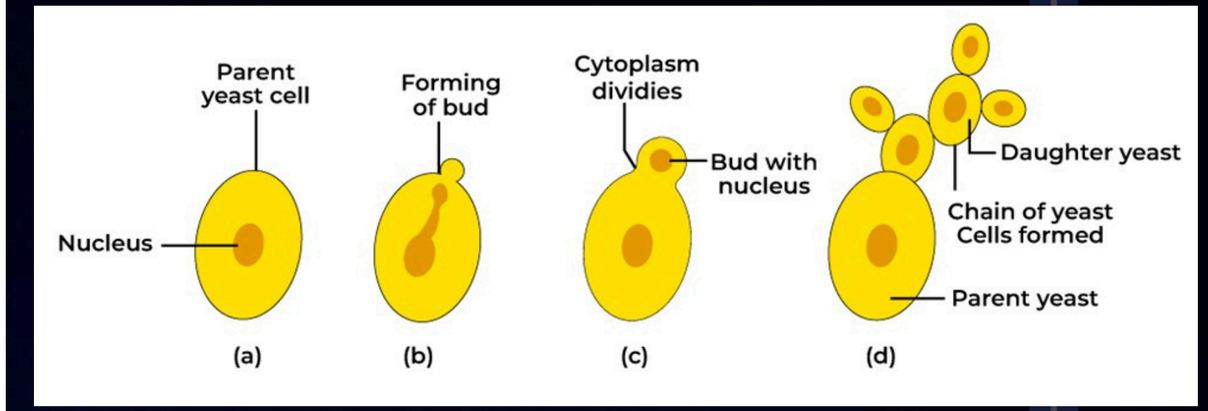
Regeneration in Hydra



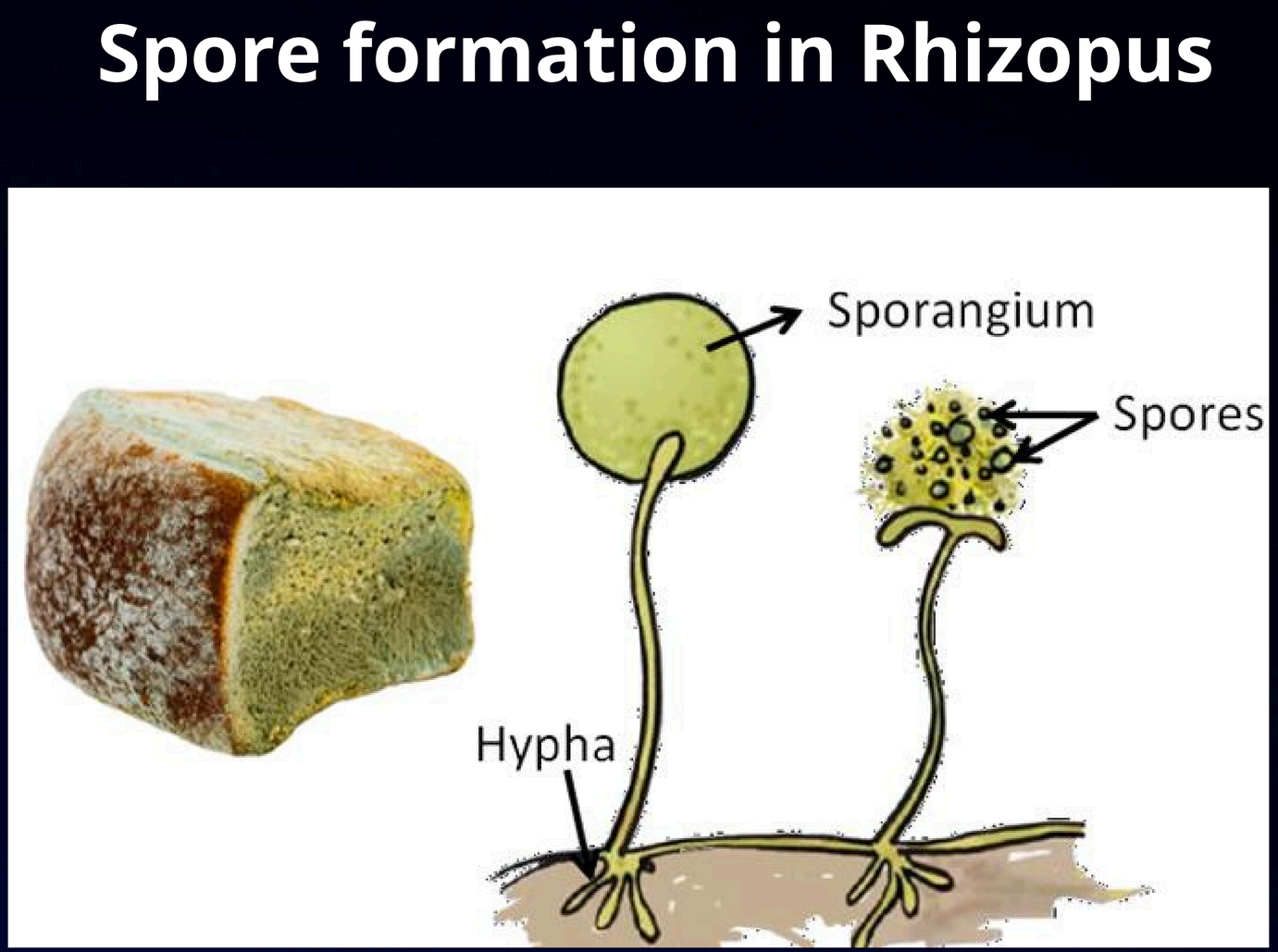
Budding in Hydra



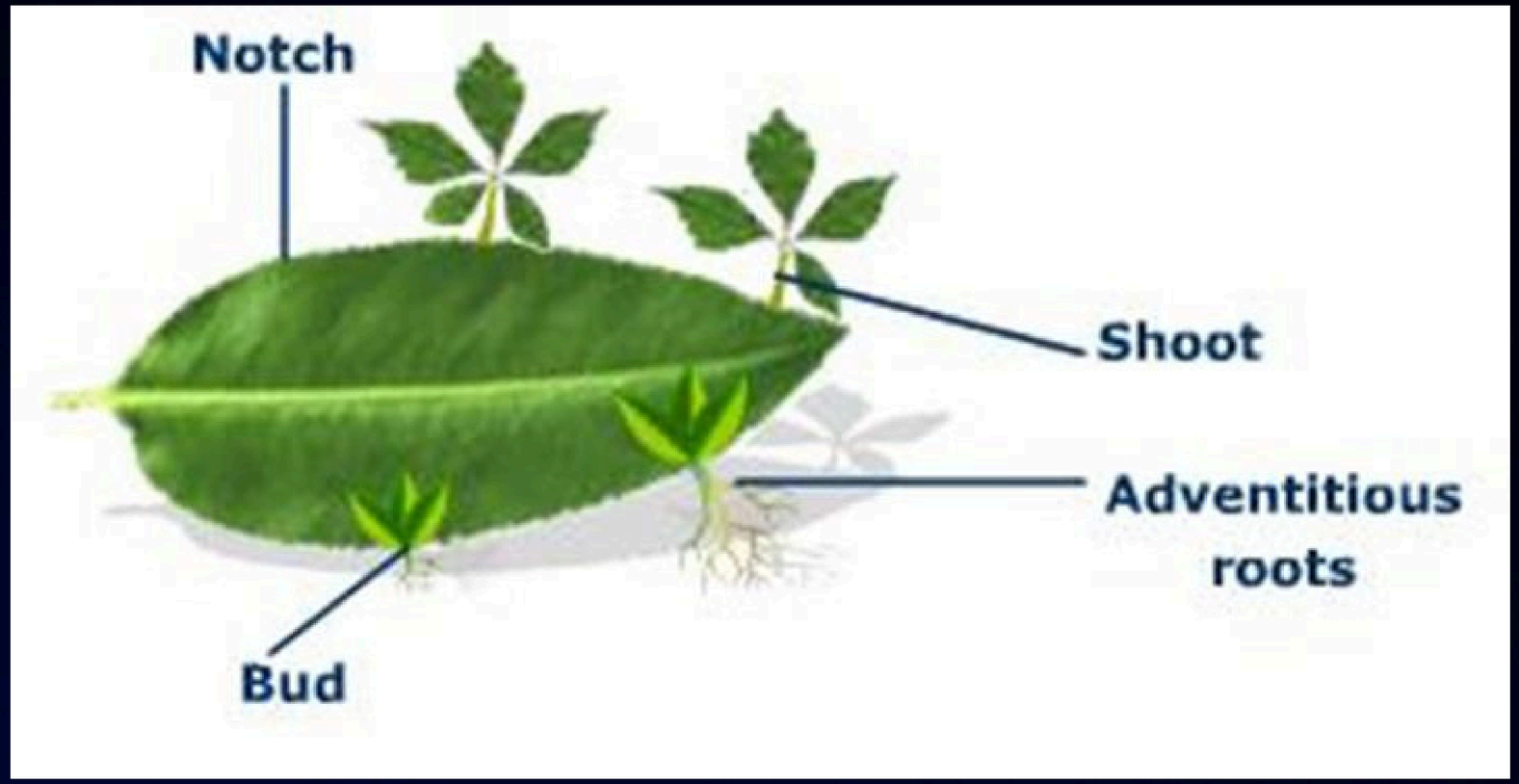
Budding in Yeast



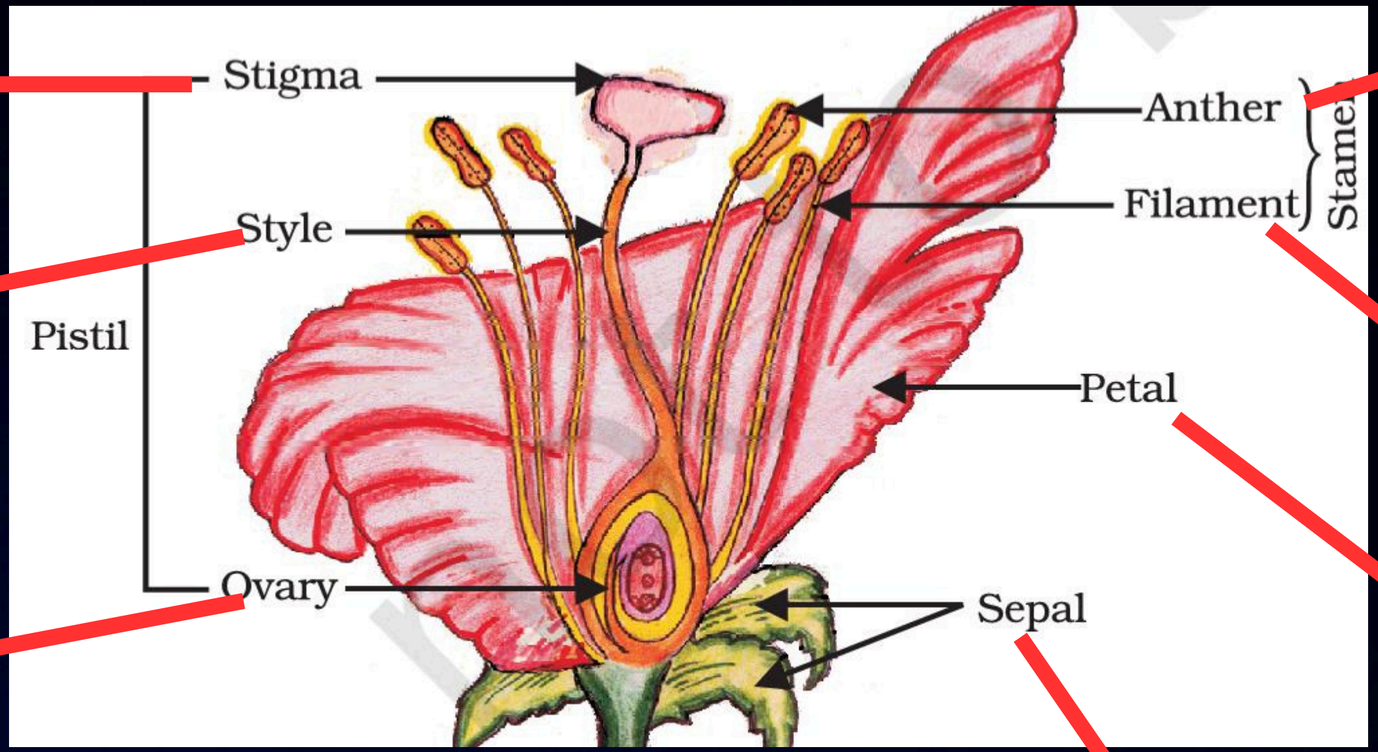
Spore formation in Rhizopus



Vegetative propagation in Bryophyllum



Longitudinal section of flower



Sticky part which is terminal

Middle elongated part

Swollen bottom part

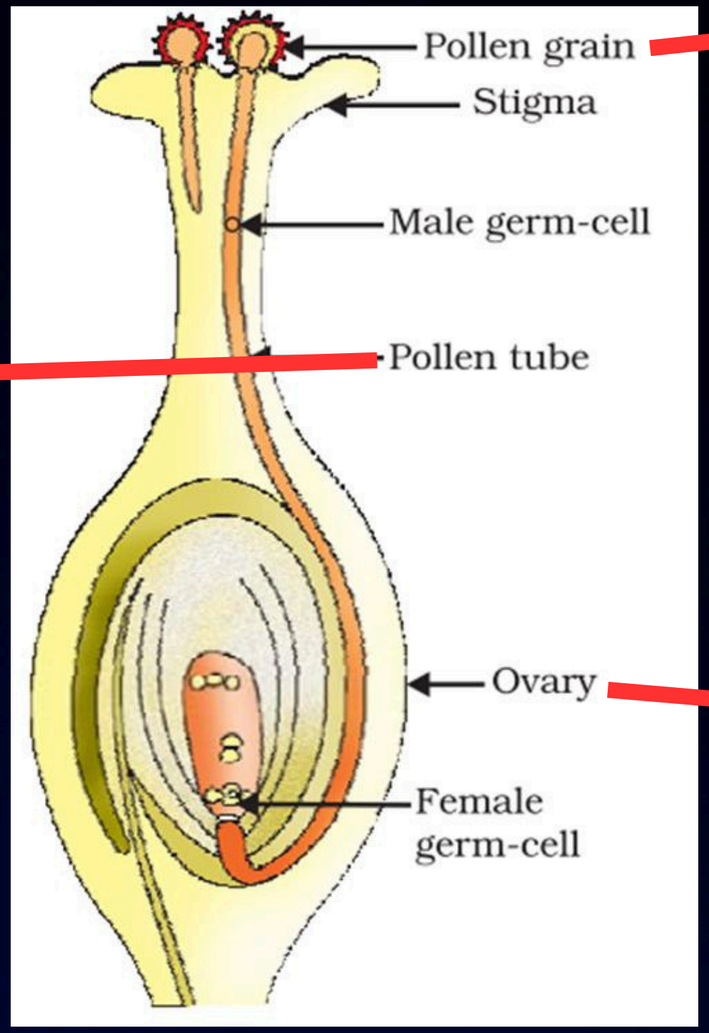
Produces pollen grains

Long, slender Stalk. It supports the anther

Colourful parts of a flower

Green, leaf like parts in the outermost circle of a flower

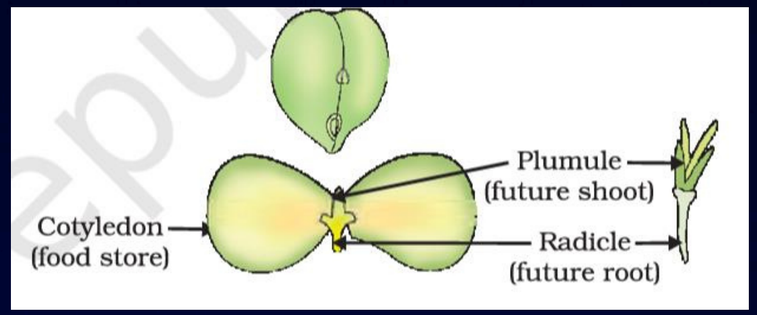
Germination of pollen on stigma



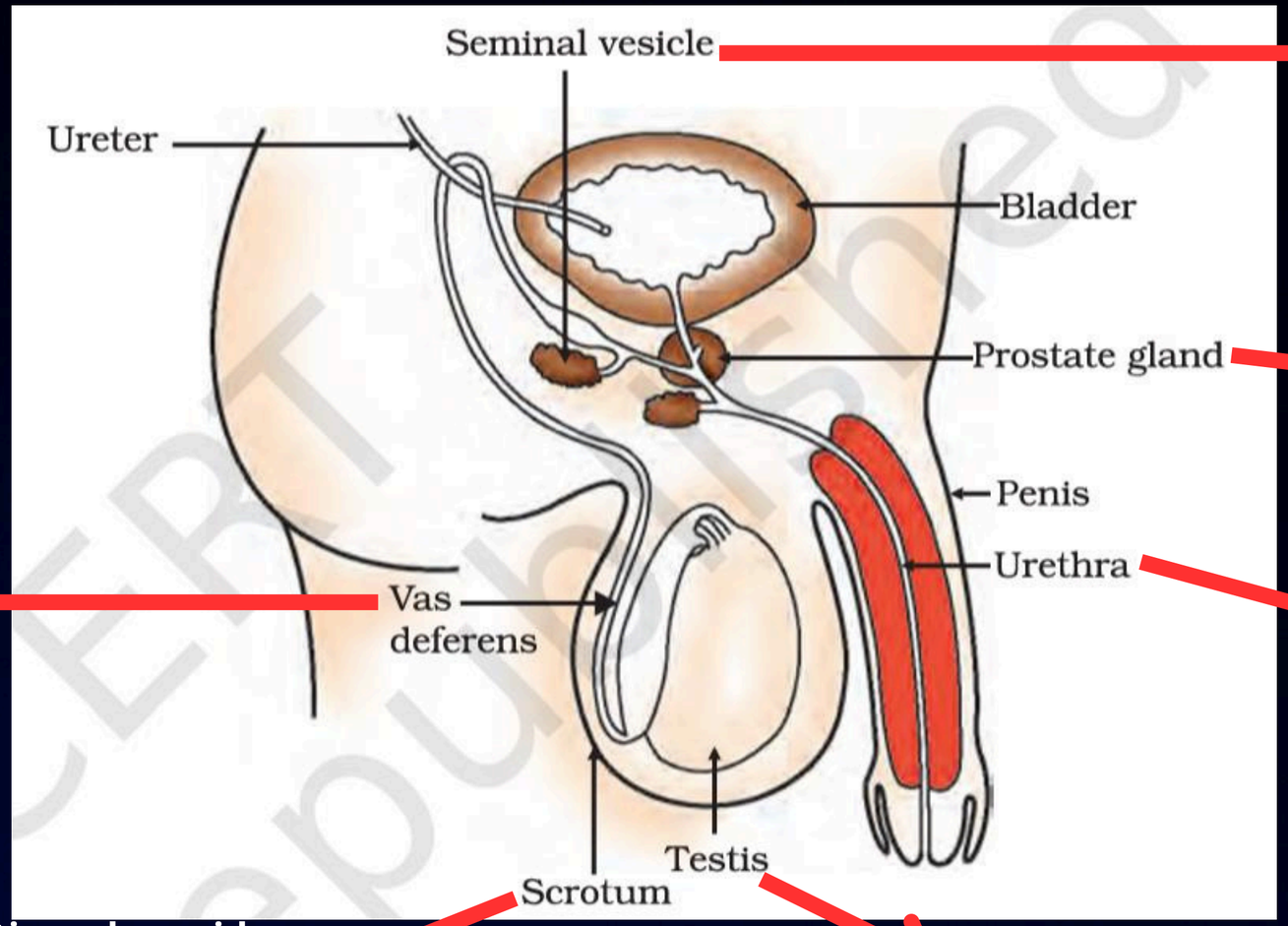
Produce male germ cell

Allows the passage of pollens from female reproductive part

Prepare ovules & protect the developing zygote i.e. the fusion of male and female gametes



Male reproductive system



Provides energy to the sperm

Nourish the sperm

Common passage for both sperms and urine

Produce male germ cell and release testosterone hormone

Contains Testis and provides normal temp. for the development of sperm

Sperm passes from it

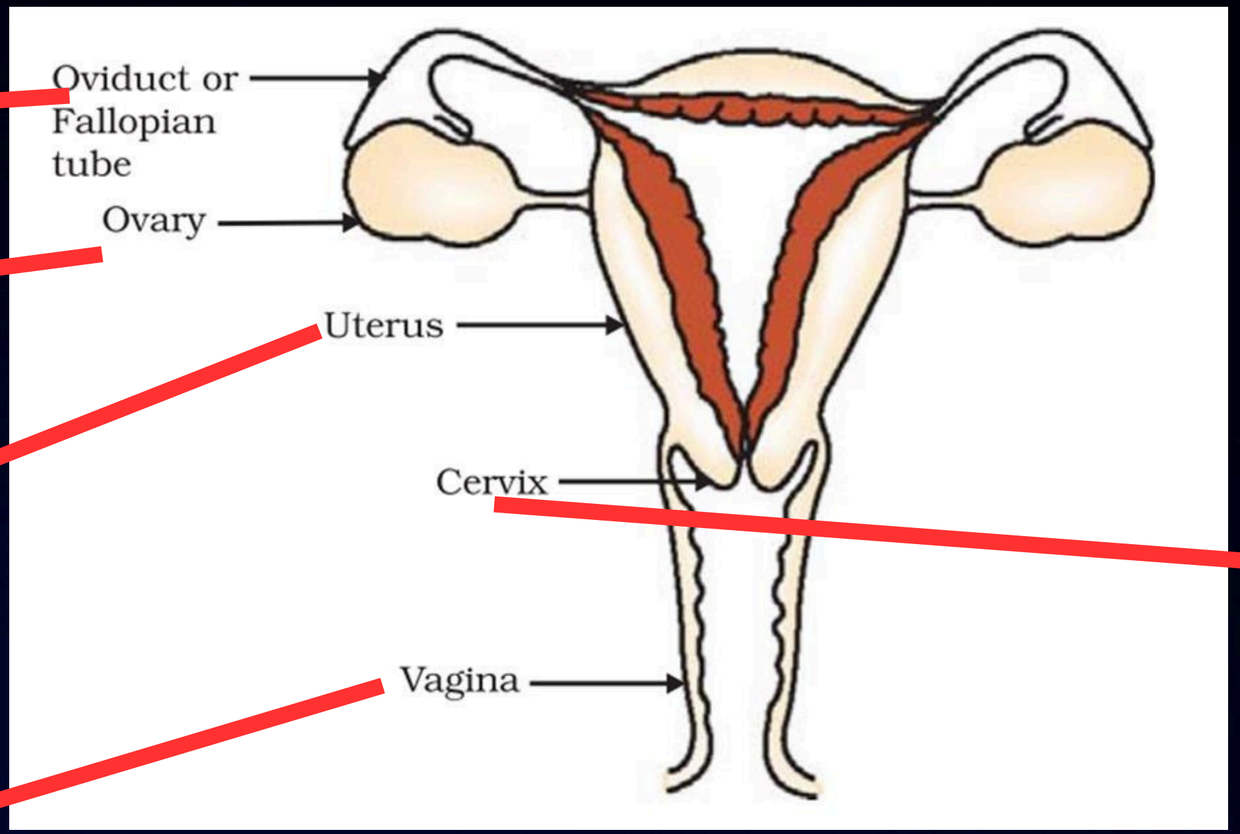
Female reproductive system

Fusion of gametes takes place

Eggs are produced here

Development of foetus takes place

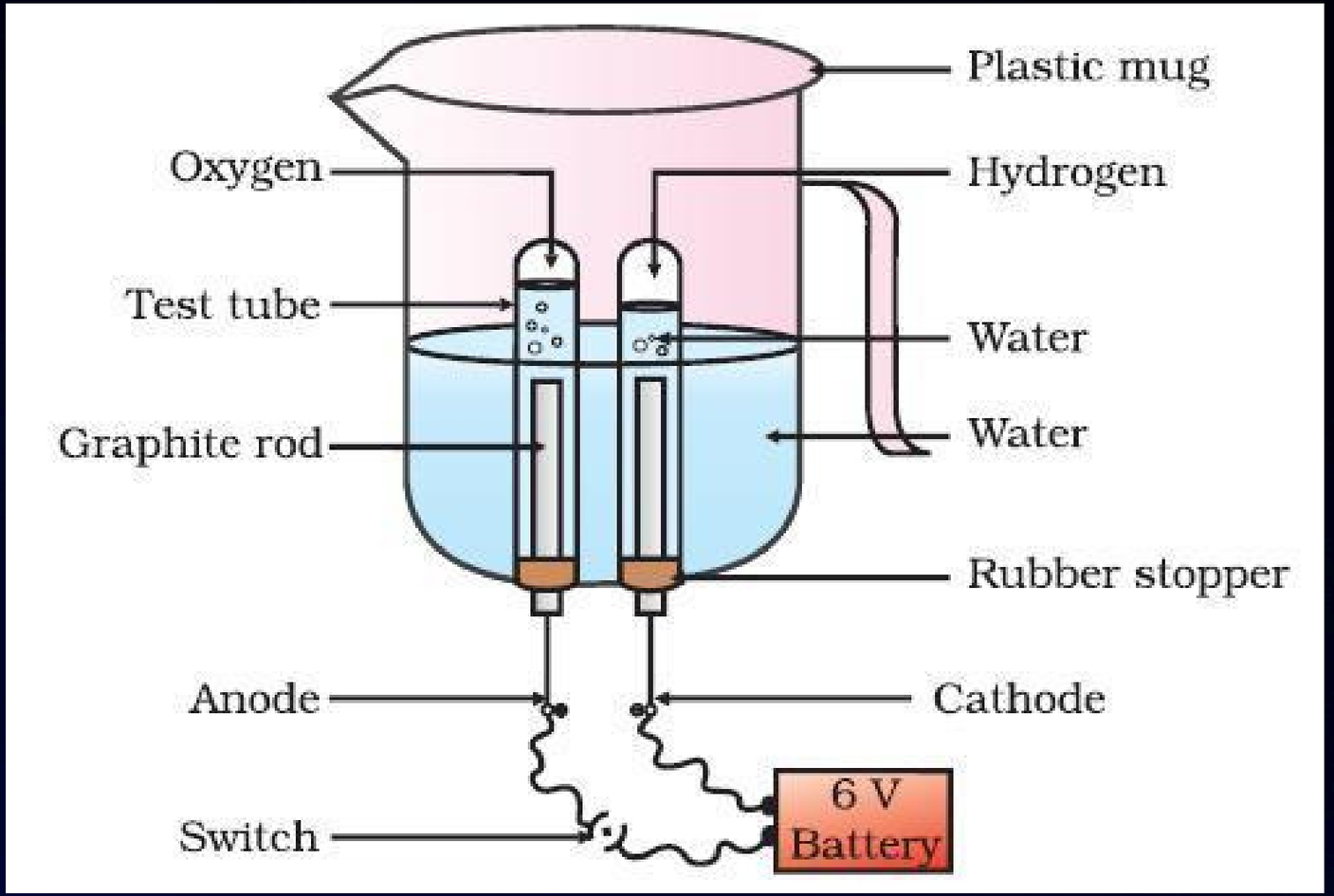
Receives sperm from male partner



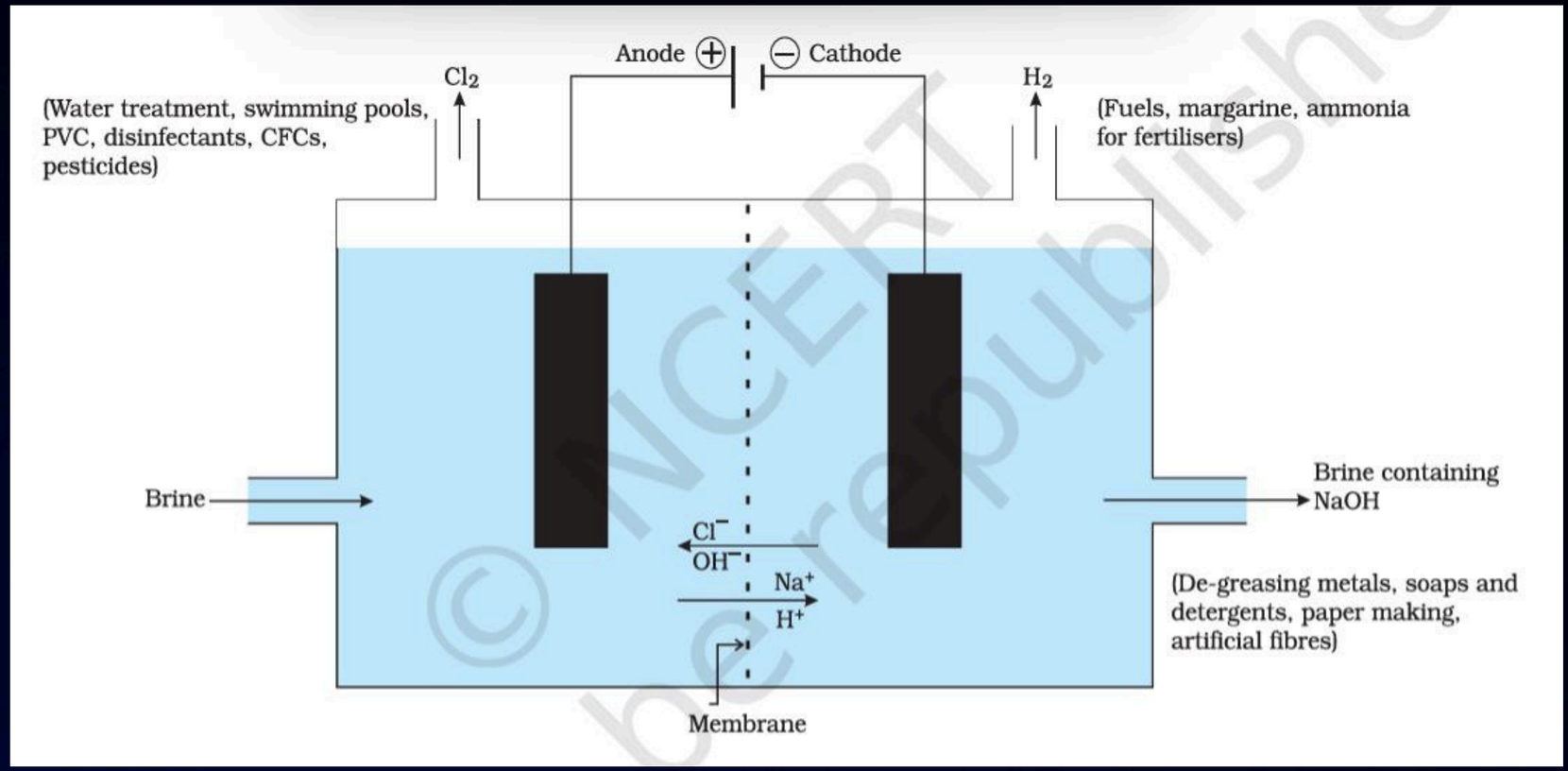
Protects the upper reproductive tract from bacteria and viruses, and helps with fertilization.

CHEMISTRY

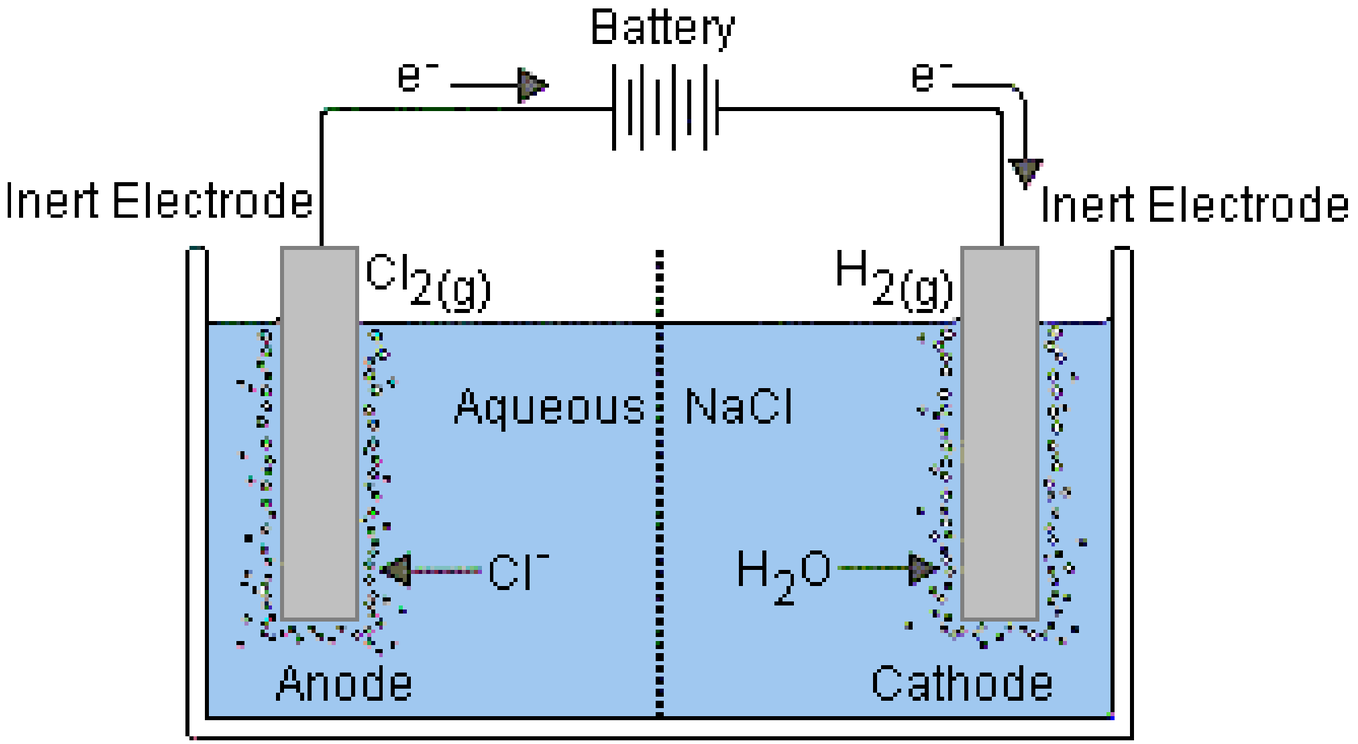
Hydrolysis of Water



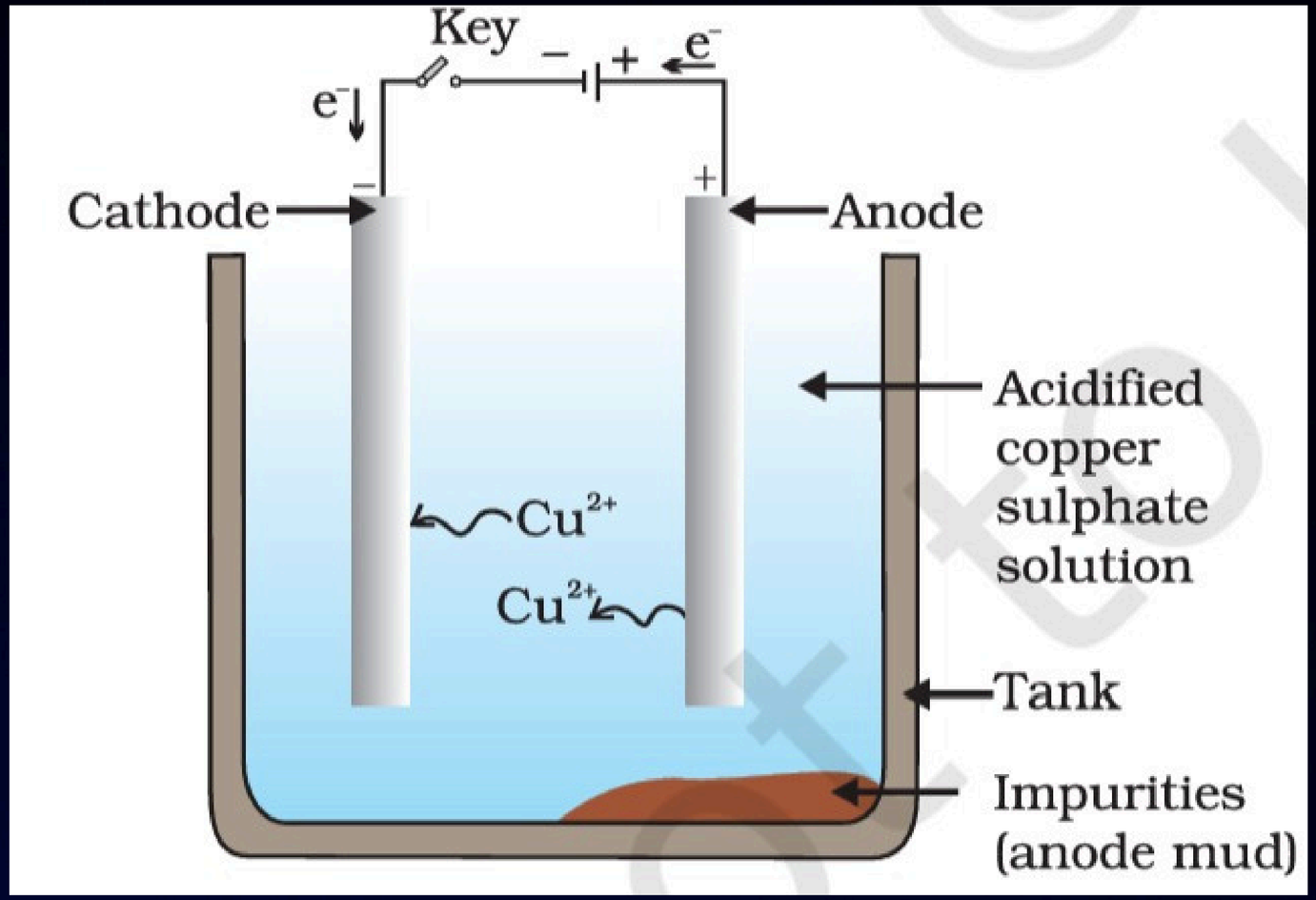
Chlor Alkali Process



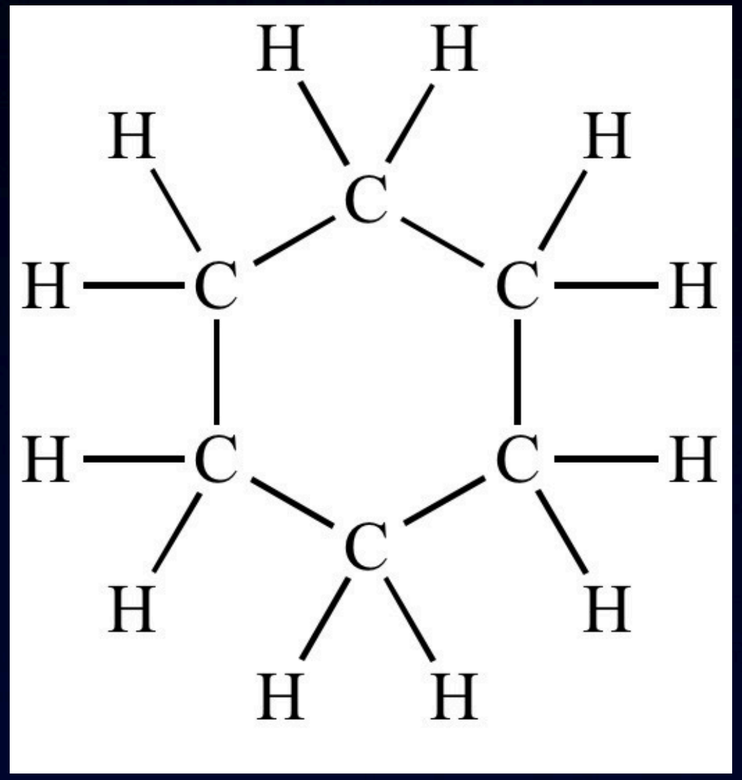
Electrolytic Reduction of NaCl(Molten)



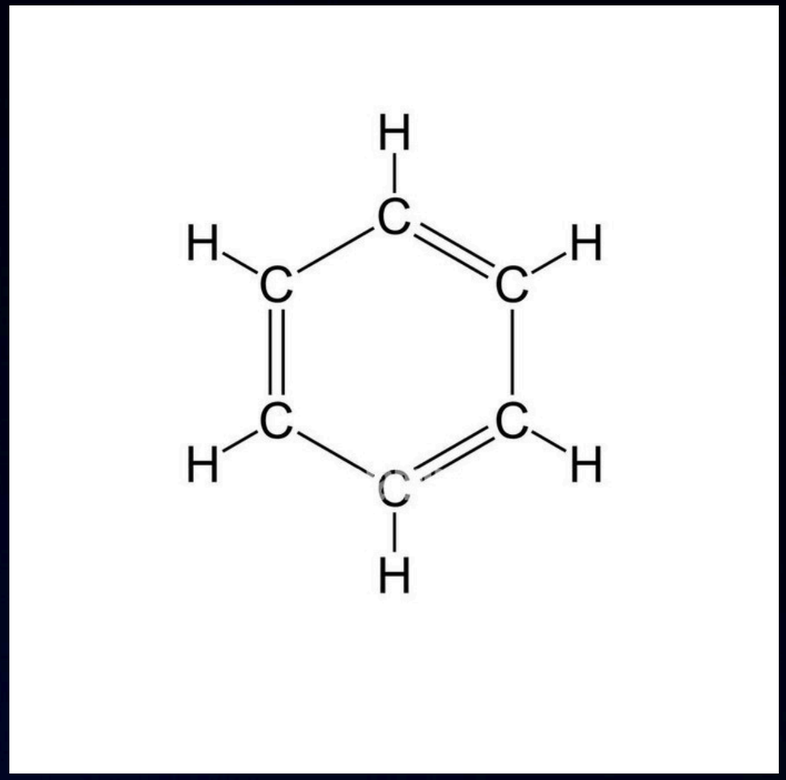
Electrolytic Refining of Copper



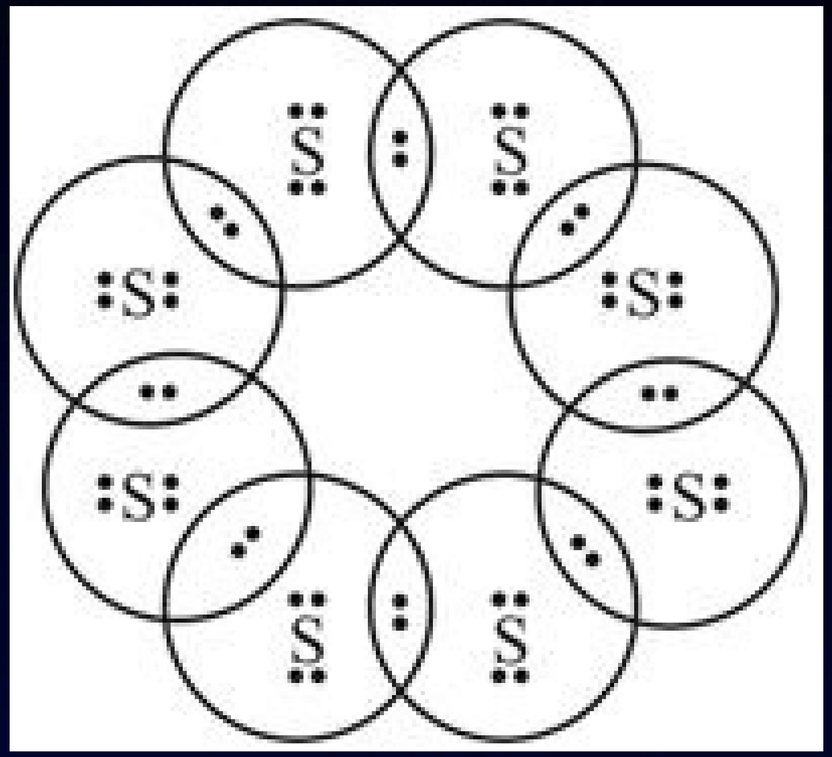
Cyclohexane

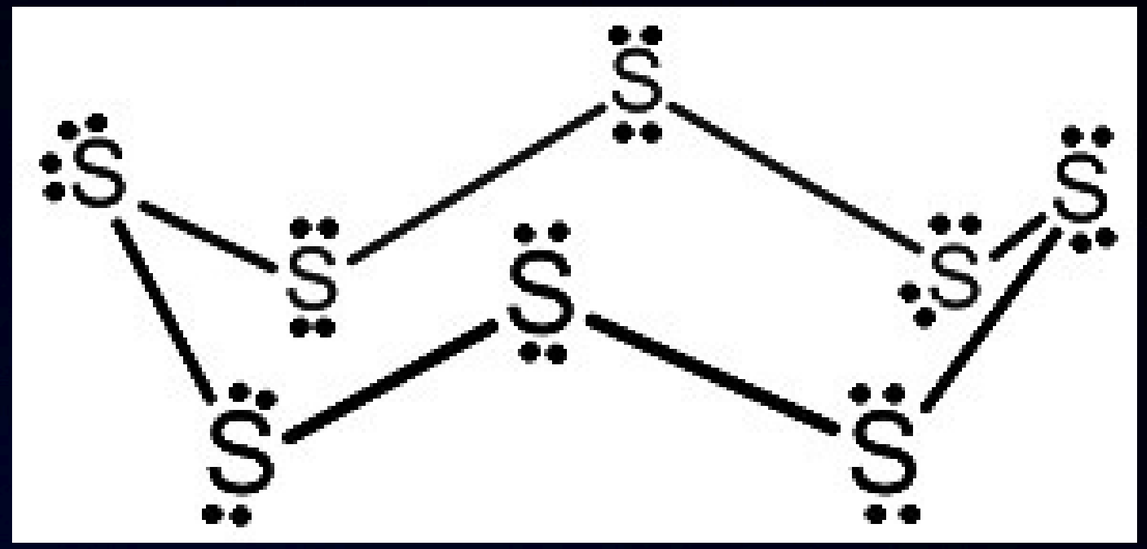


Benzene

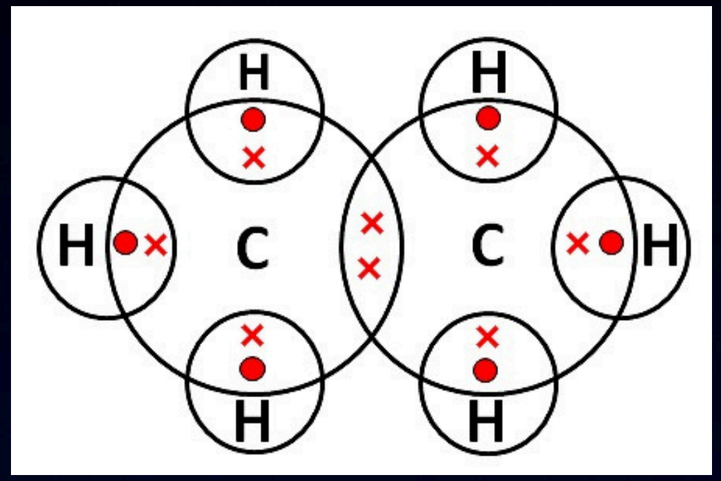


S8 molecule Structure

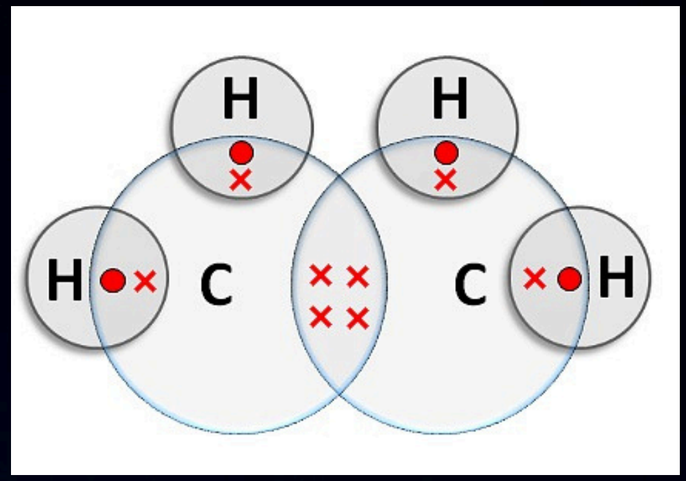




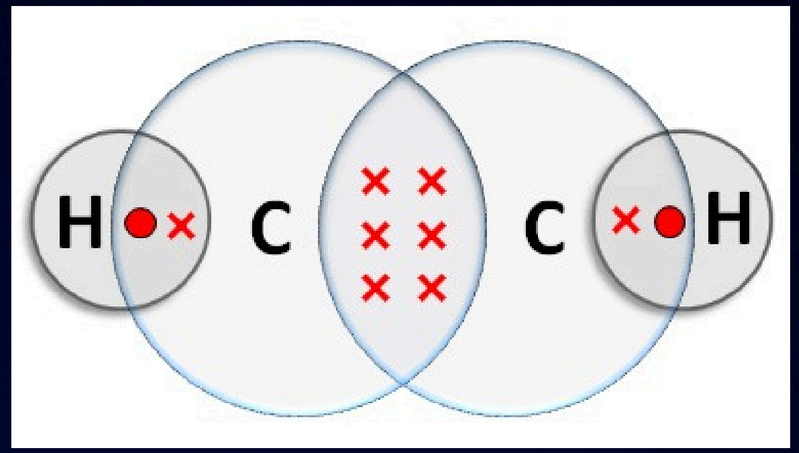
Ethane



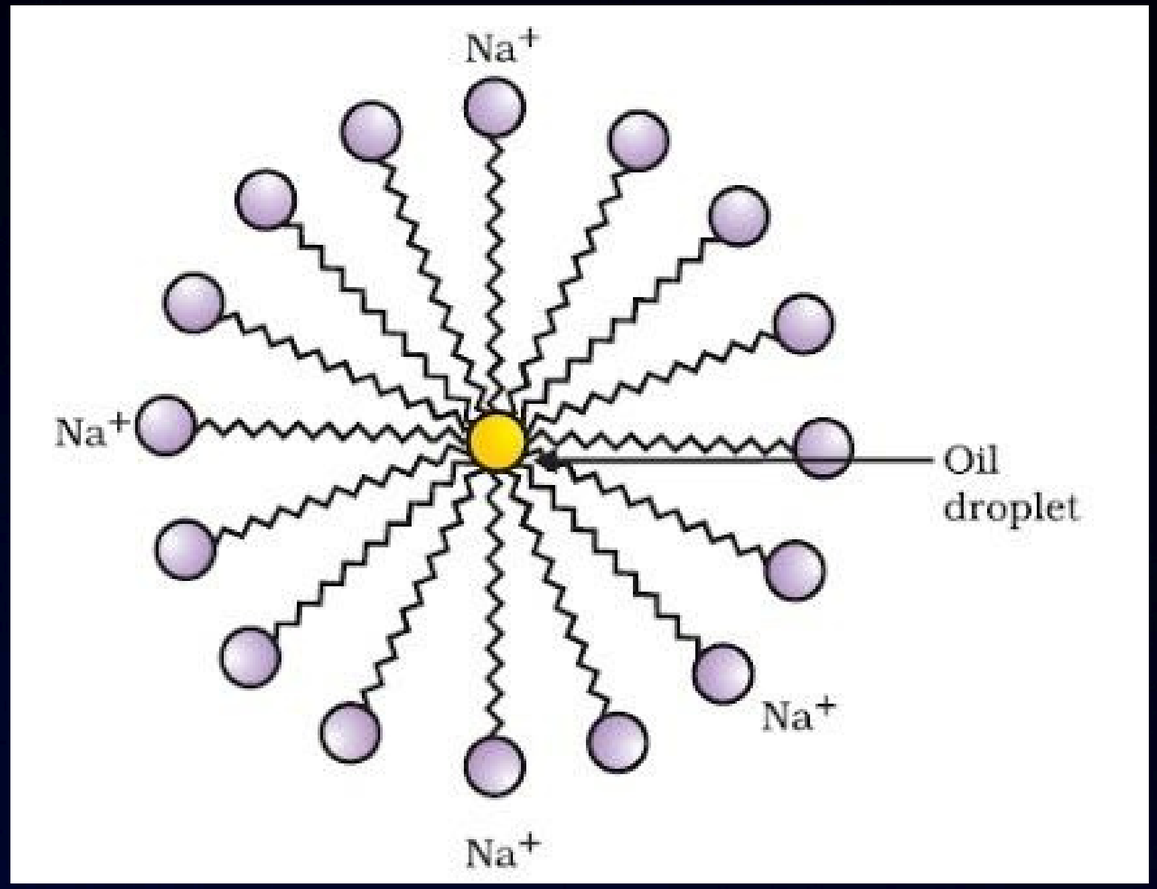
Ethene



Ethyne

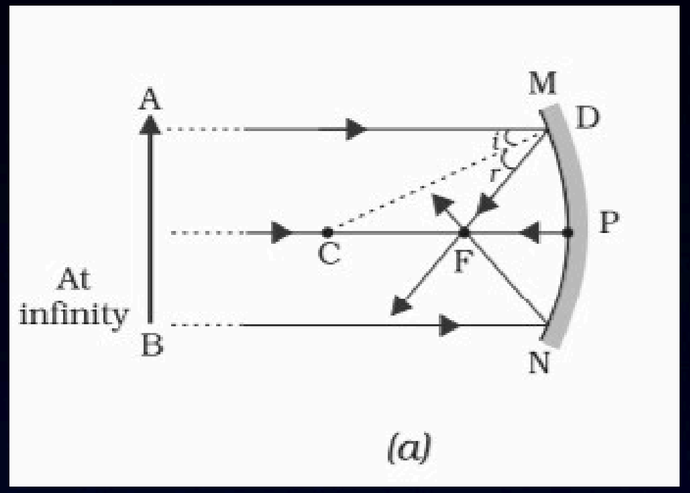


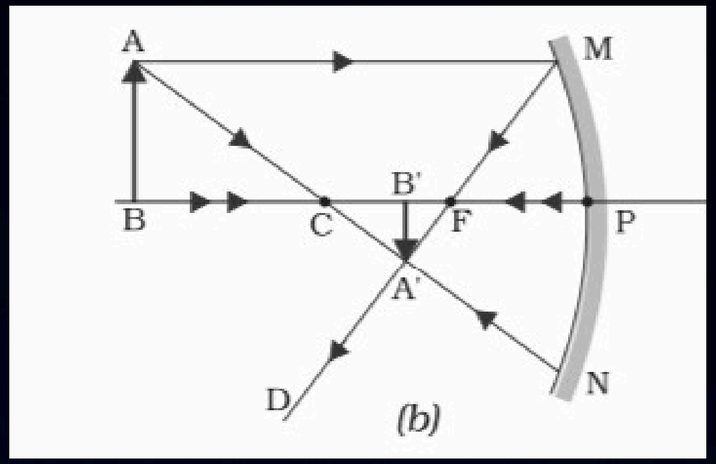
Micelle Formation

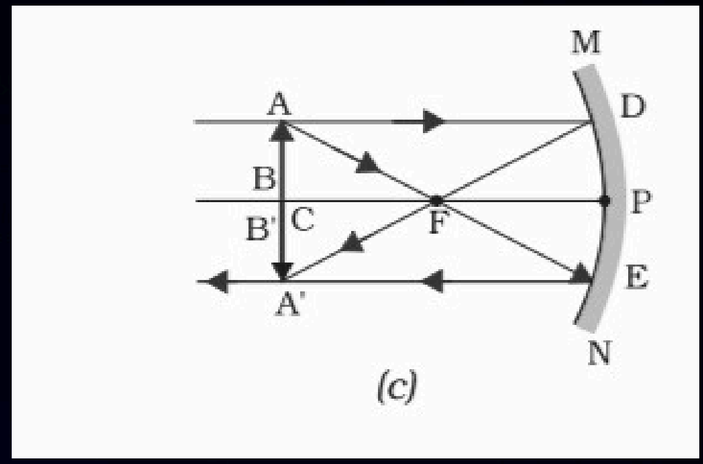


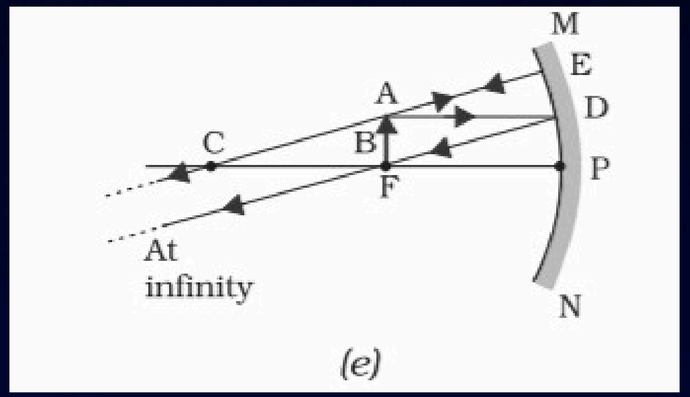
PHYSICS

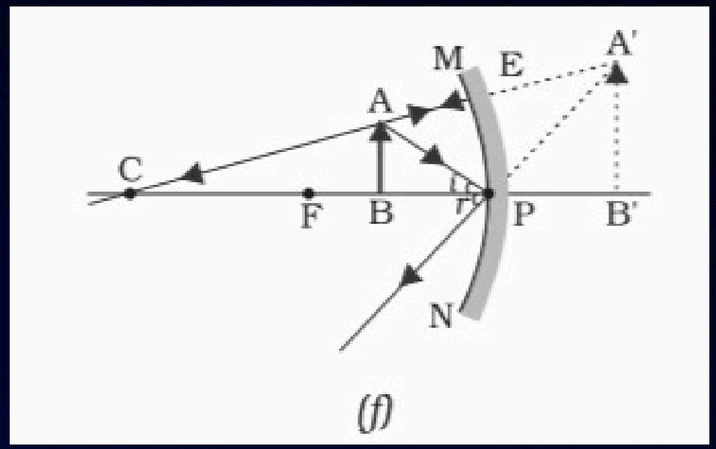
Image formation by Concave Mirror











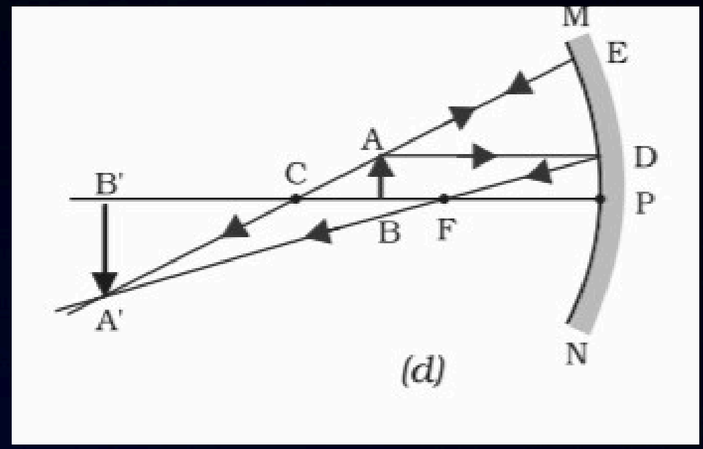
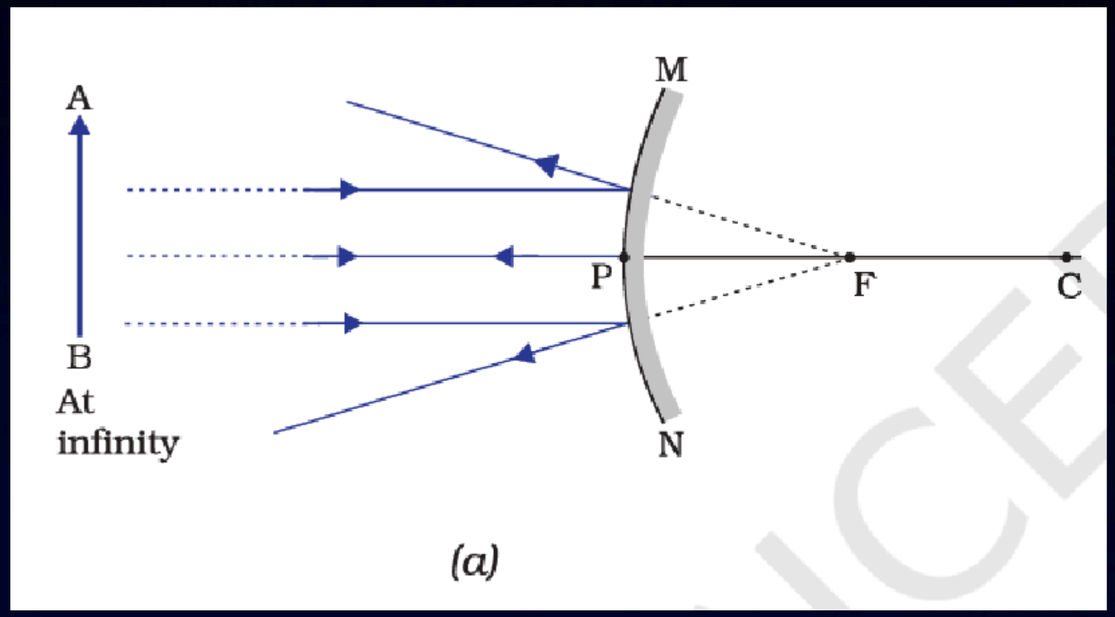
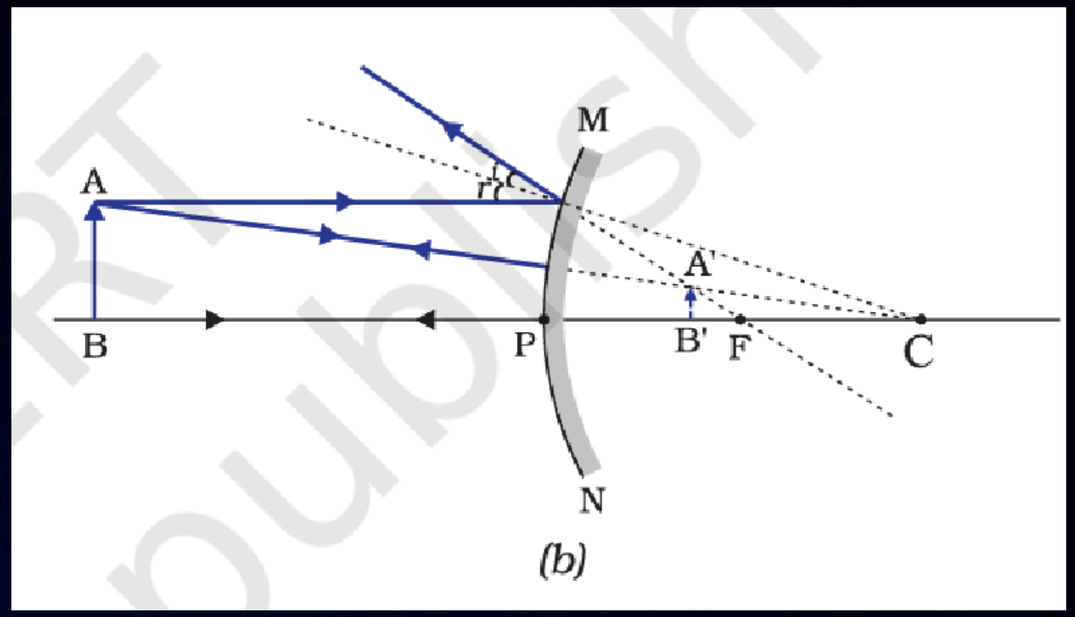


Image formation by Convex Mirror





Refraction of Light through a rectangular glass slab

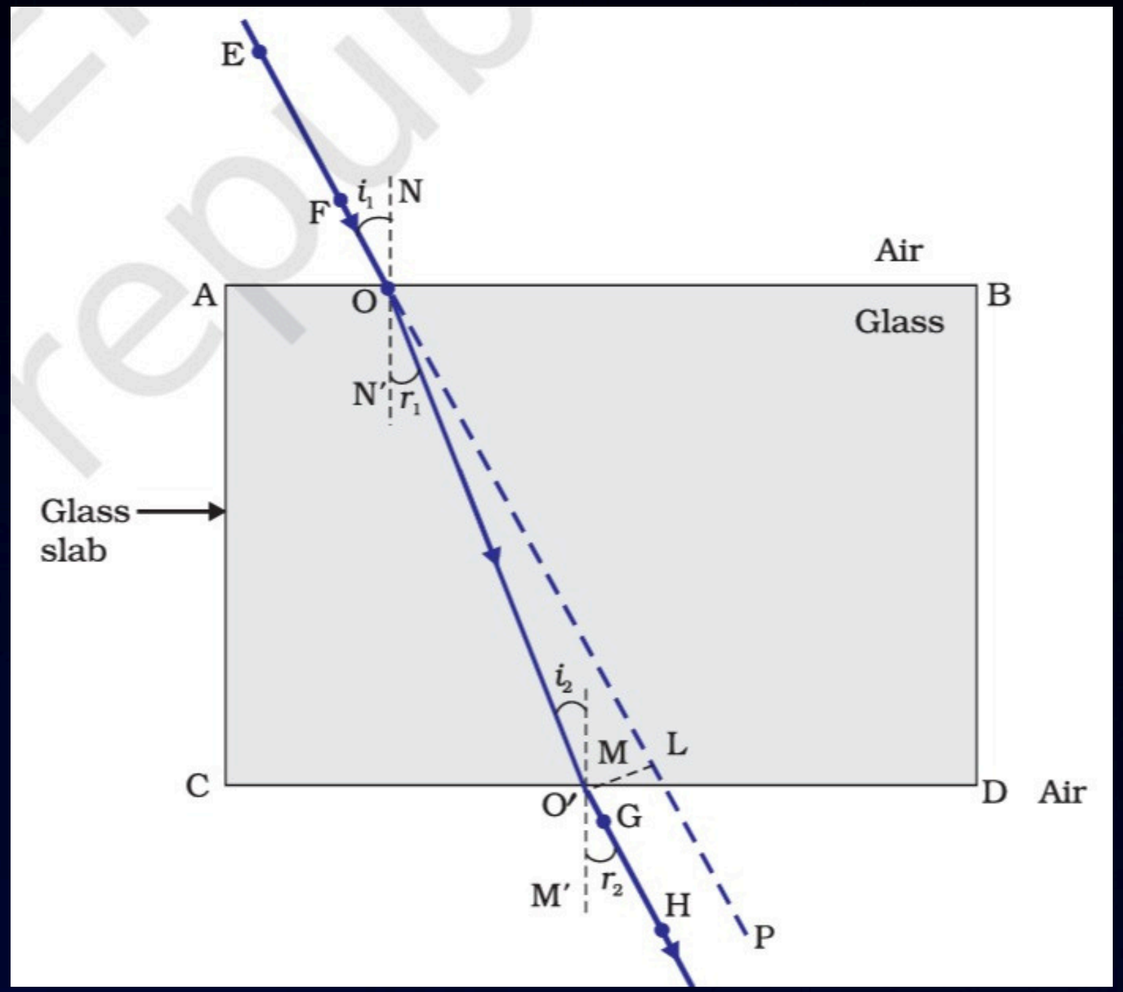
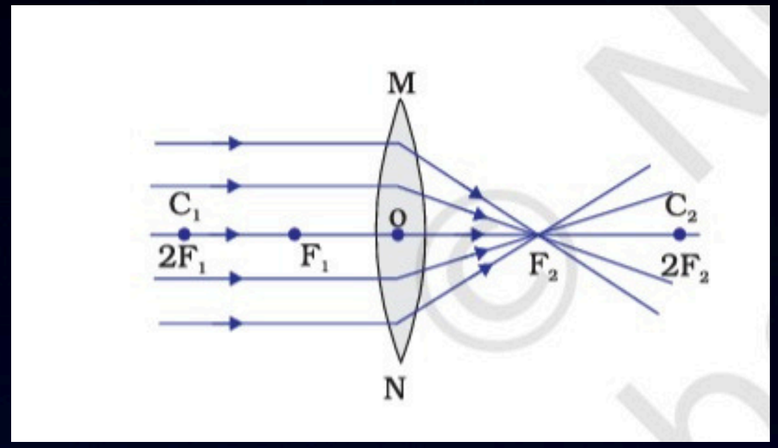
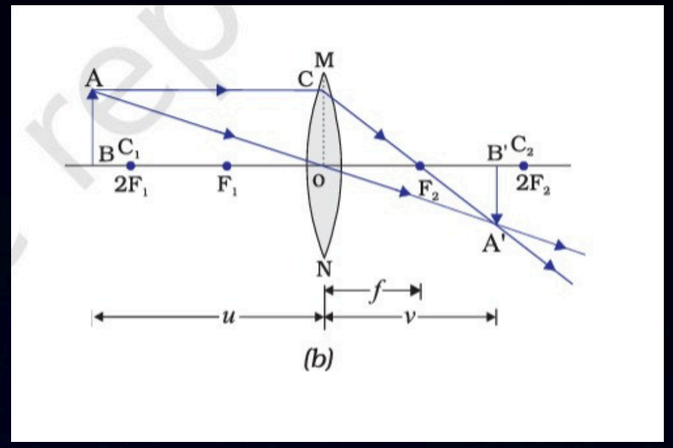
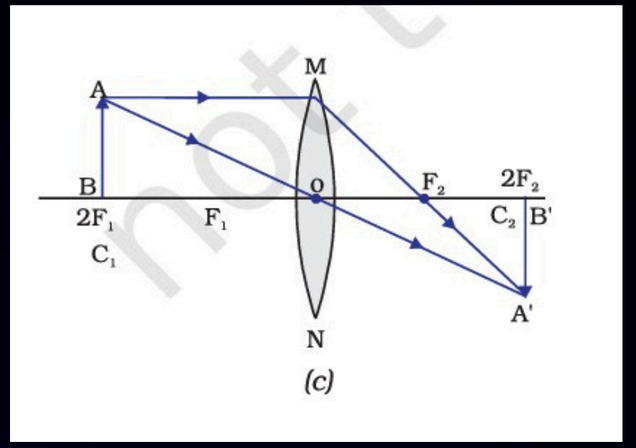
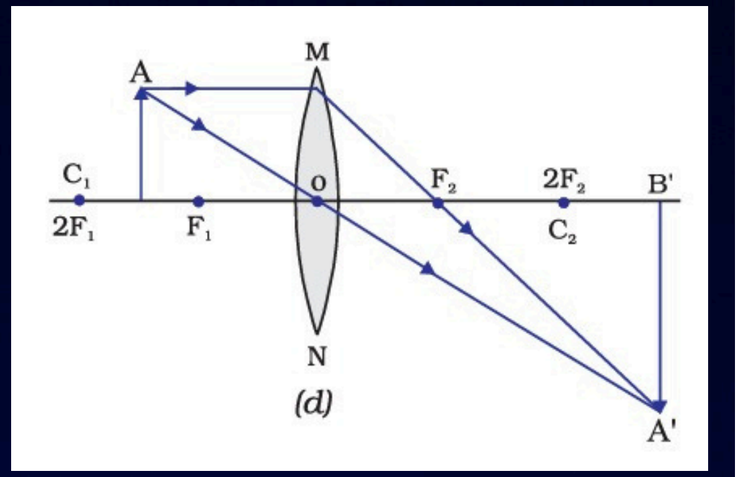


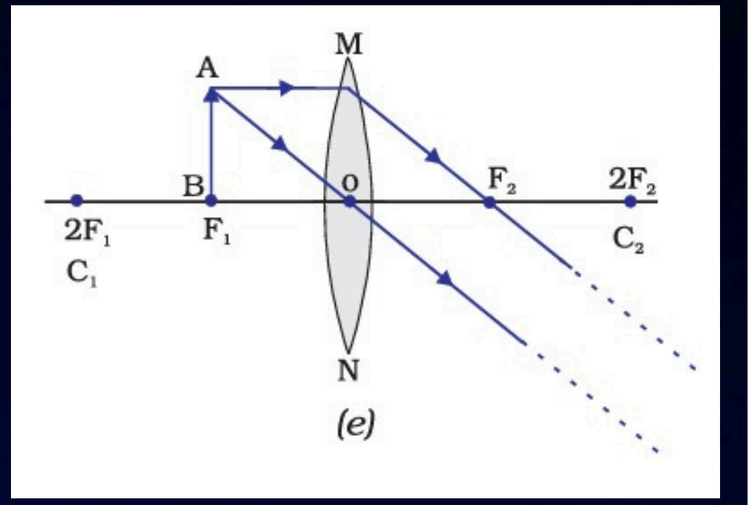
Image formation by Concave Lens











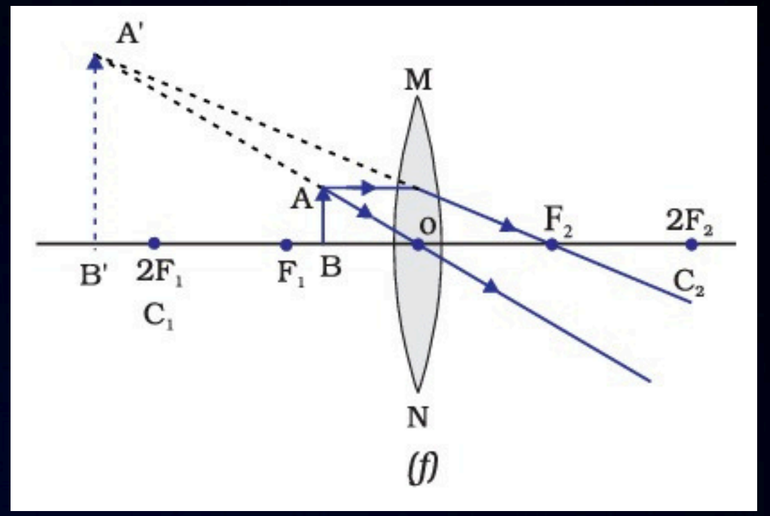
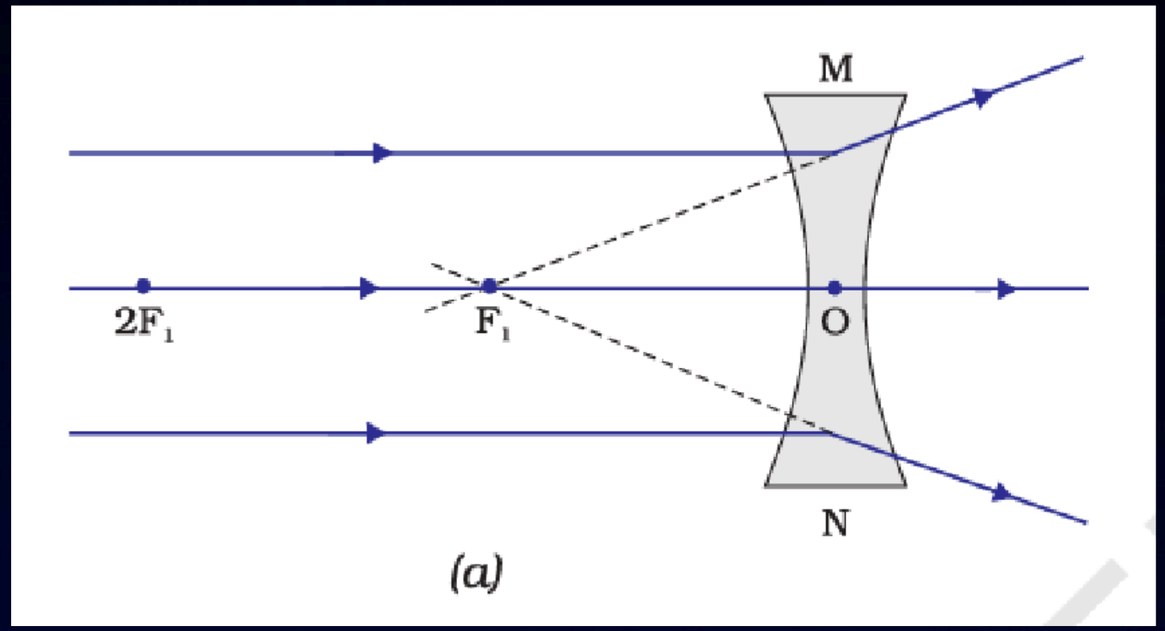
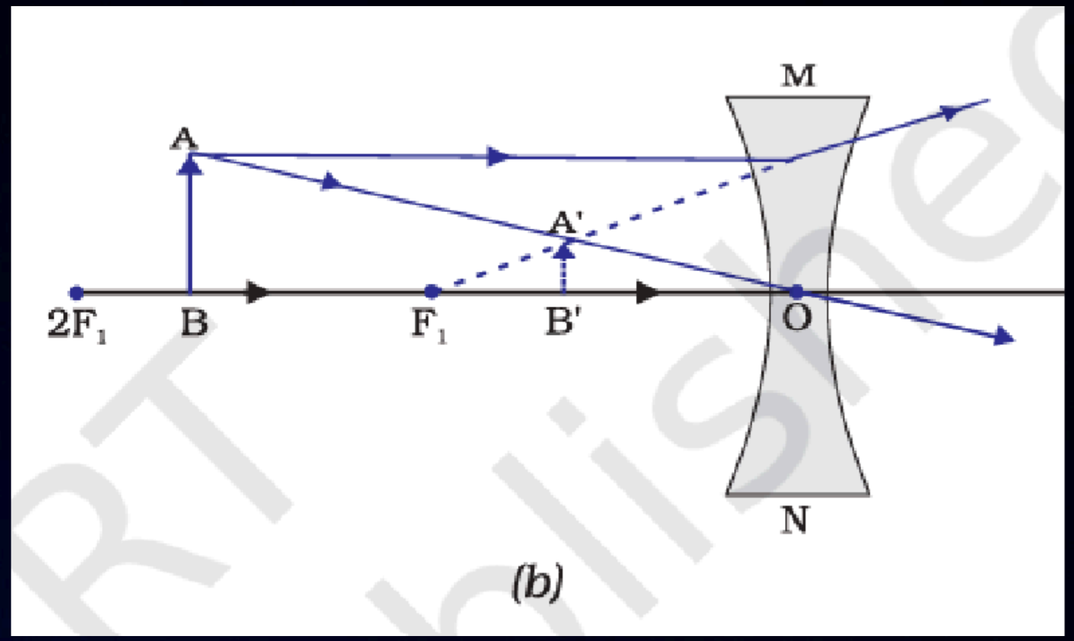
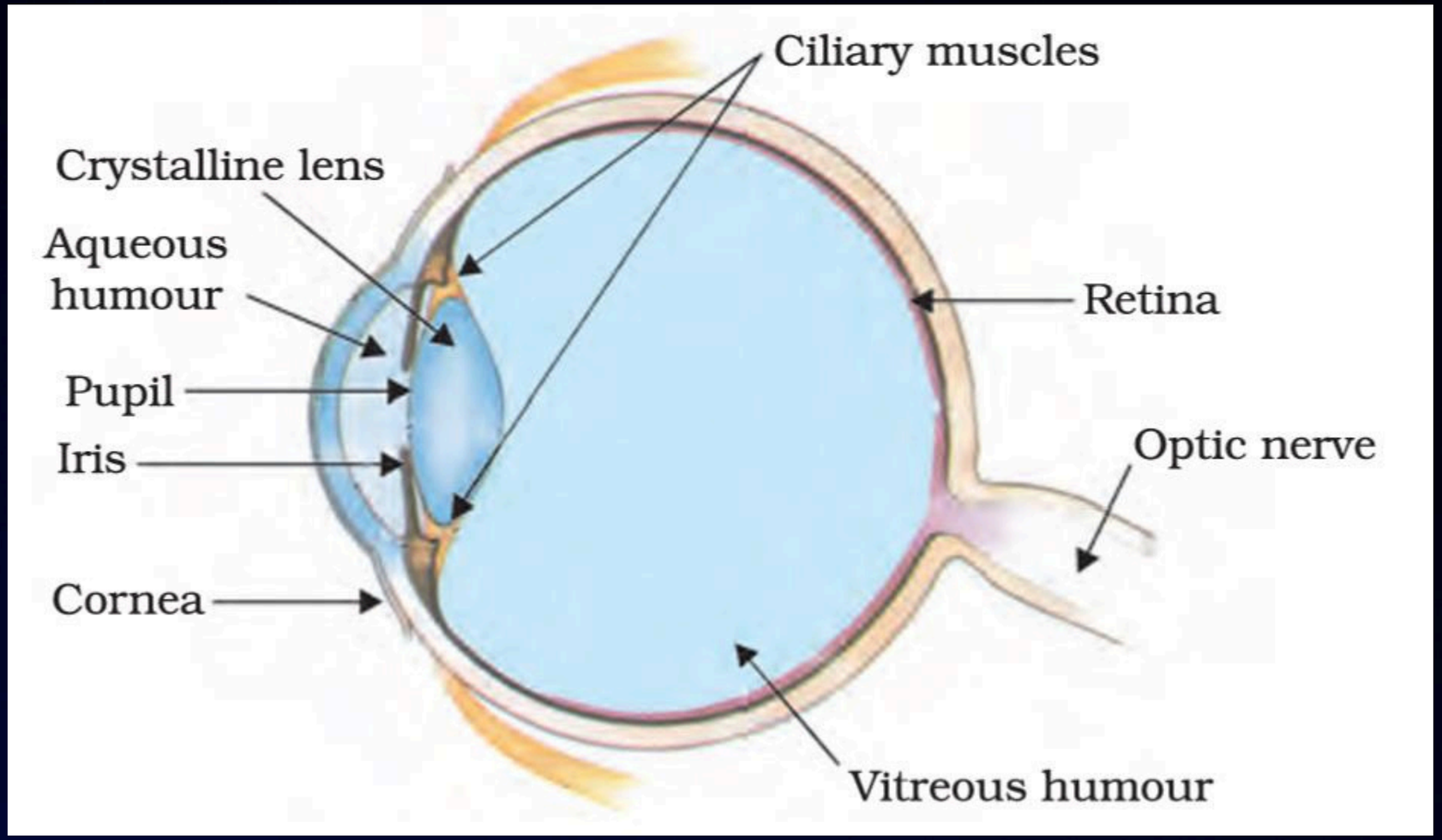


Image formation by Convex Lens

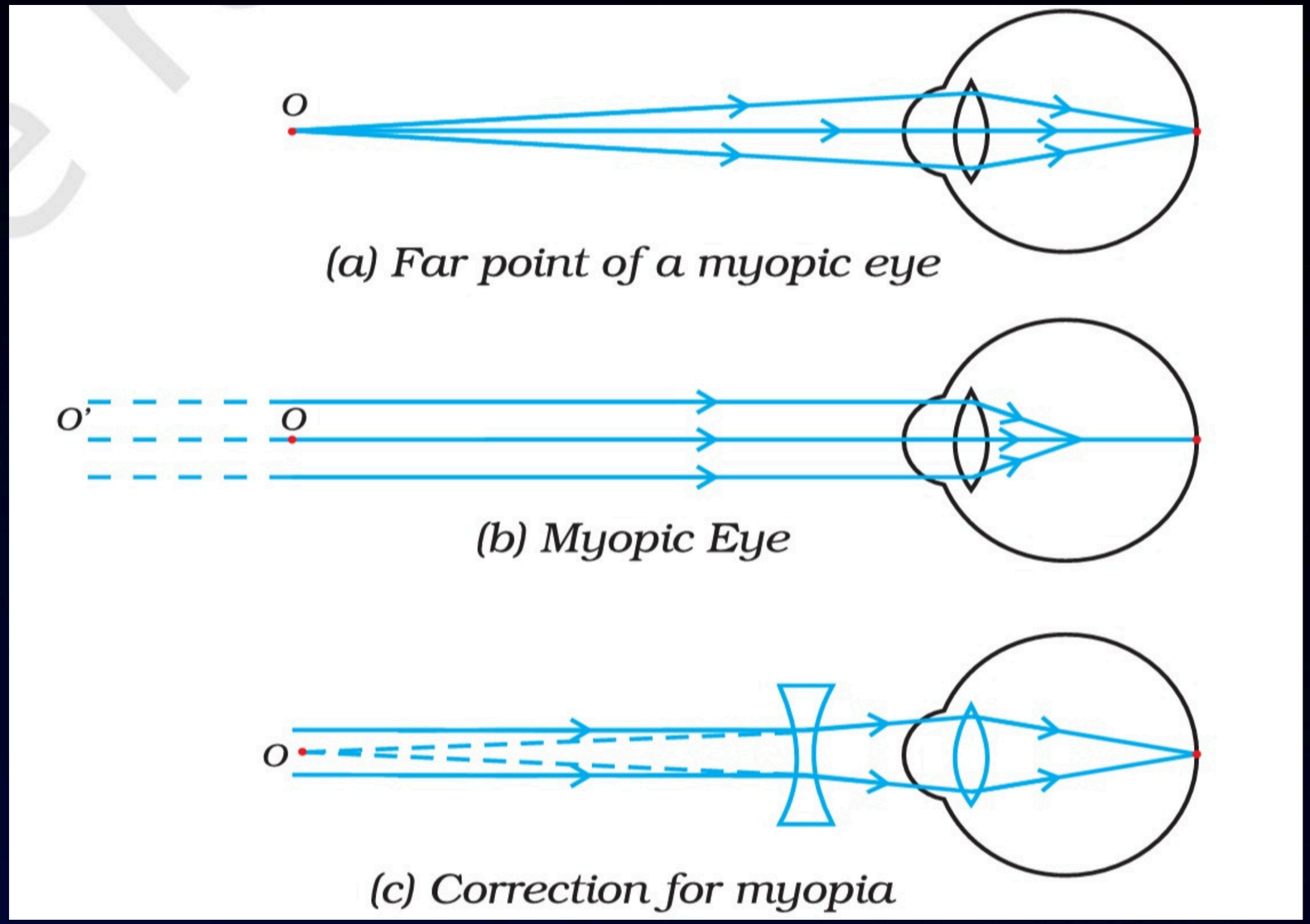




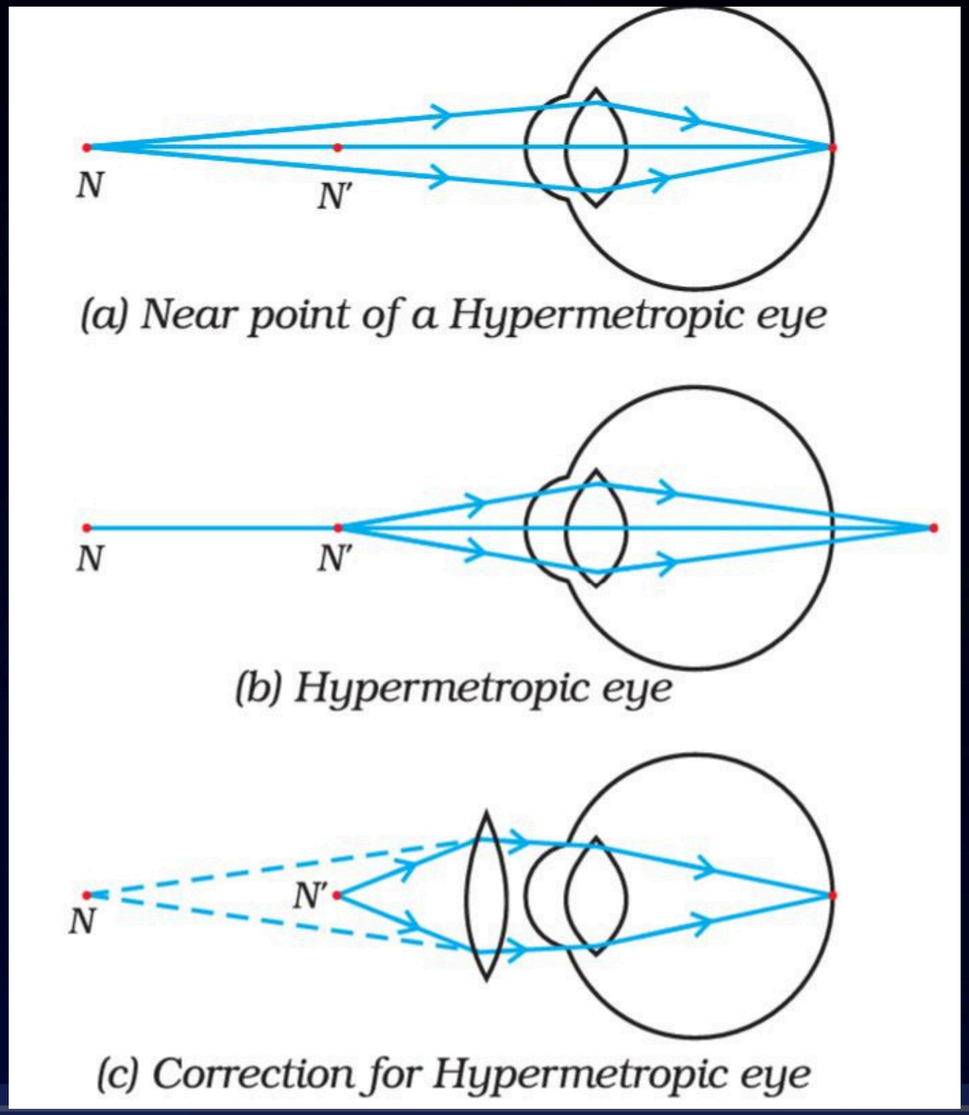
Human Eye


Ciliary muscles
Crystalline lens
Aqueous humour
Retina
Pupil
Optic nerve
Iris
Cornea
Vitreous humour

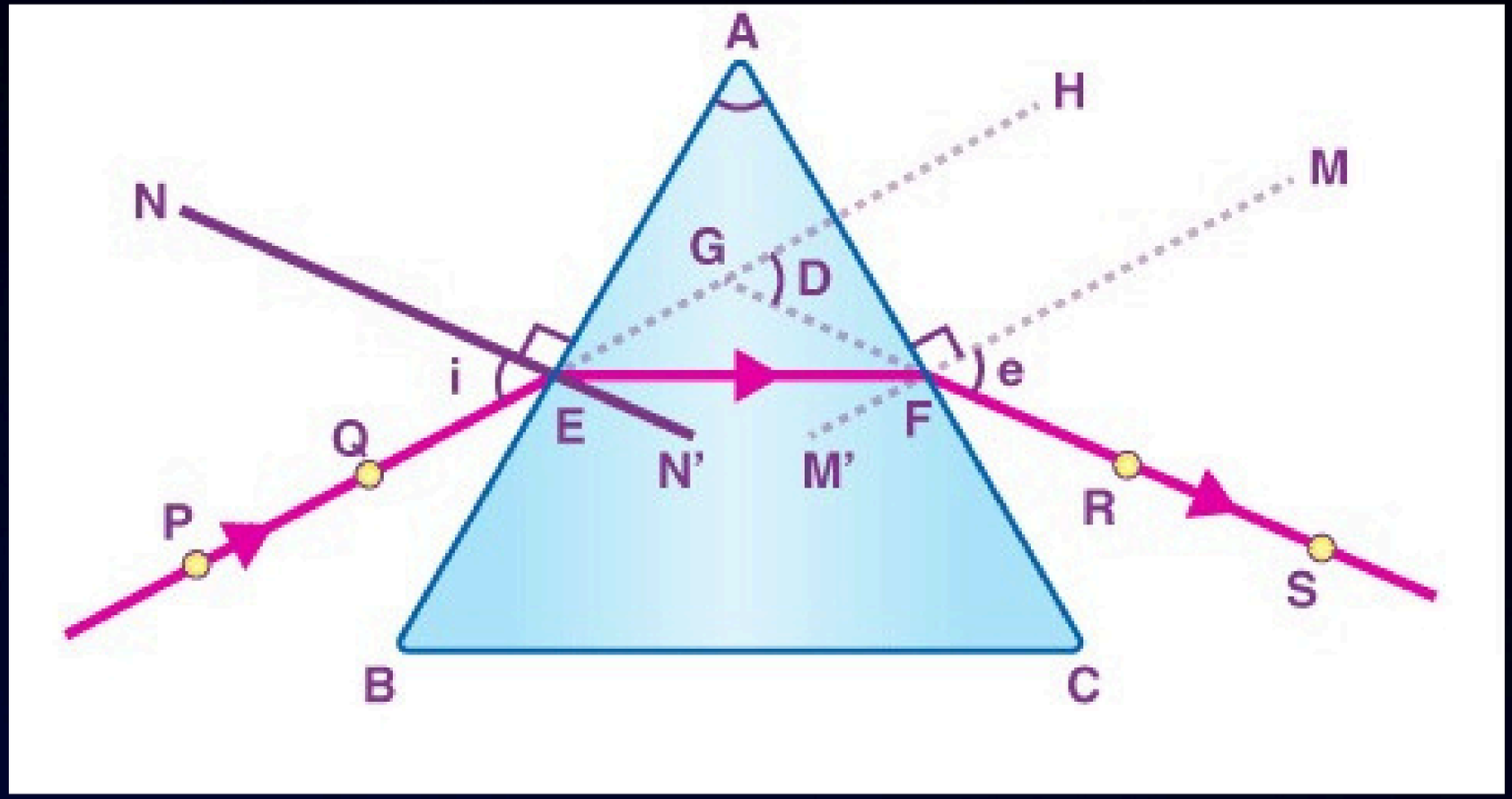
Myopia


O
(a) Far point of a myopic eye
O'
O
(b) Myopic Eye
O
(c) Correction for myopia

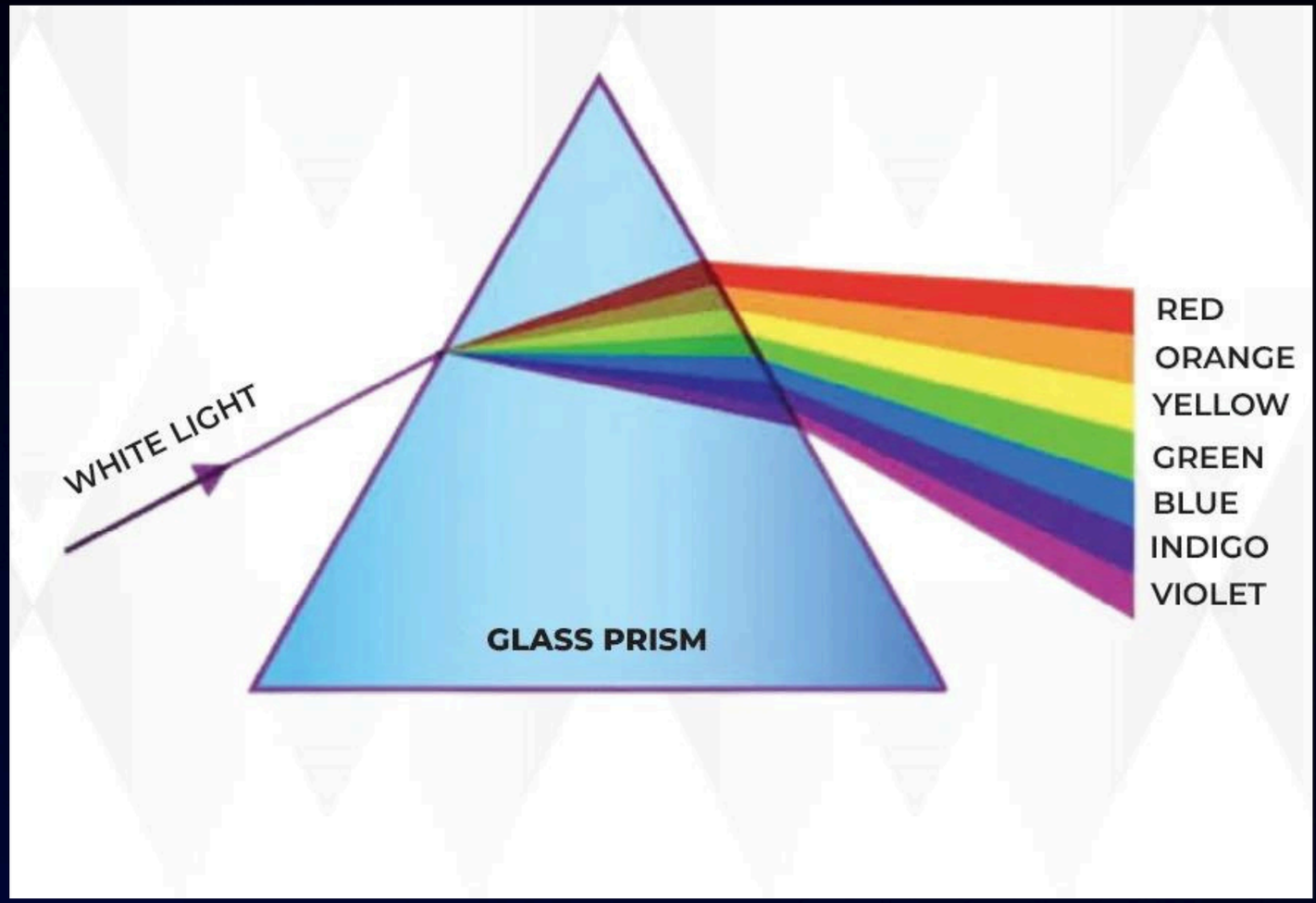
Hypermetropia



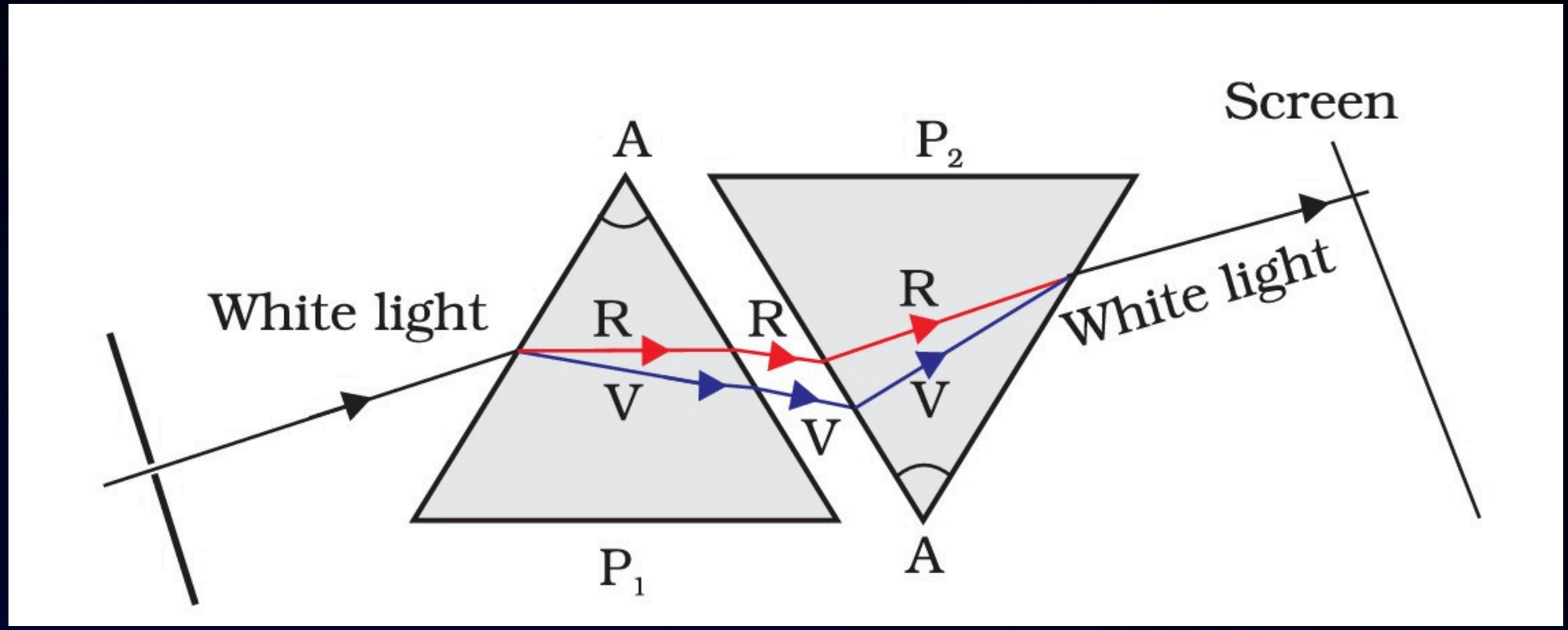
Refraction of light through a glass prism



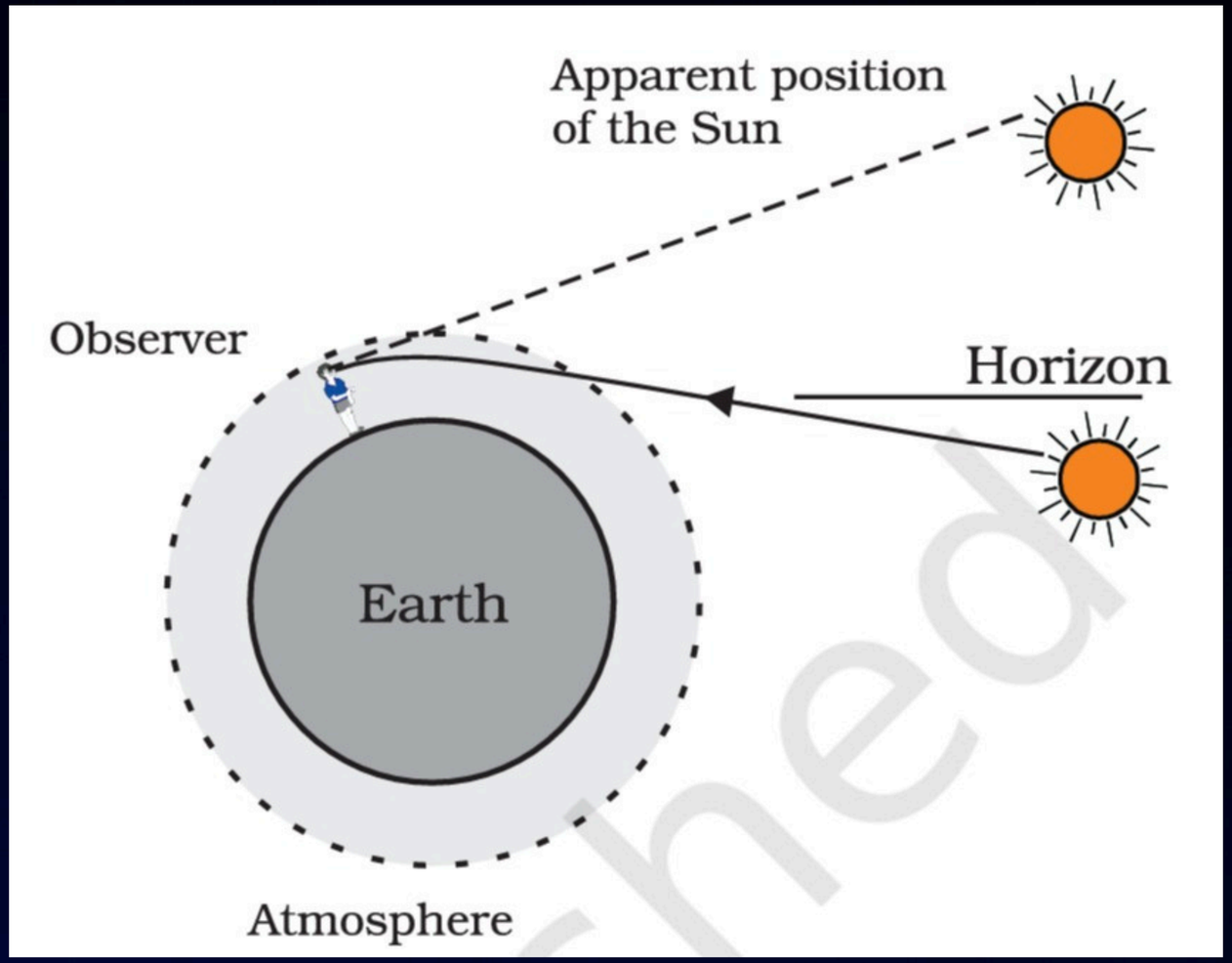
Dispersion of white light by the glass prism



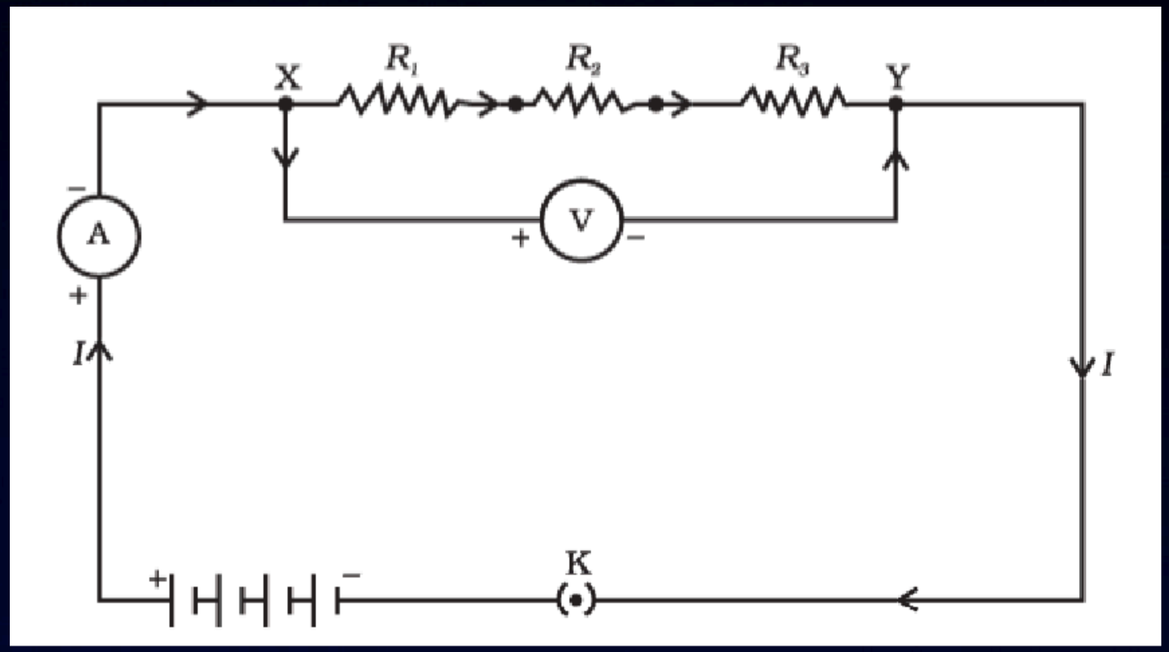
Recombination of the spectrum of white light



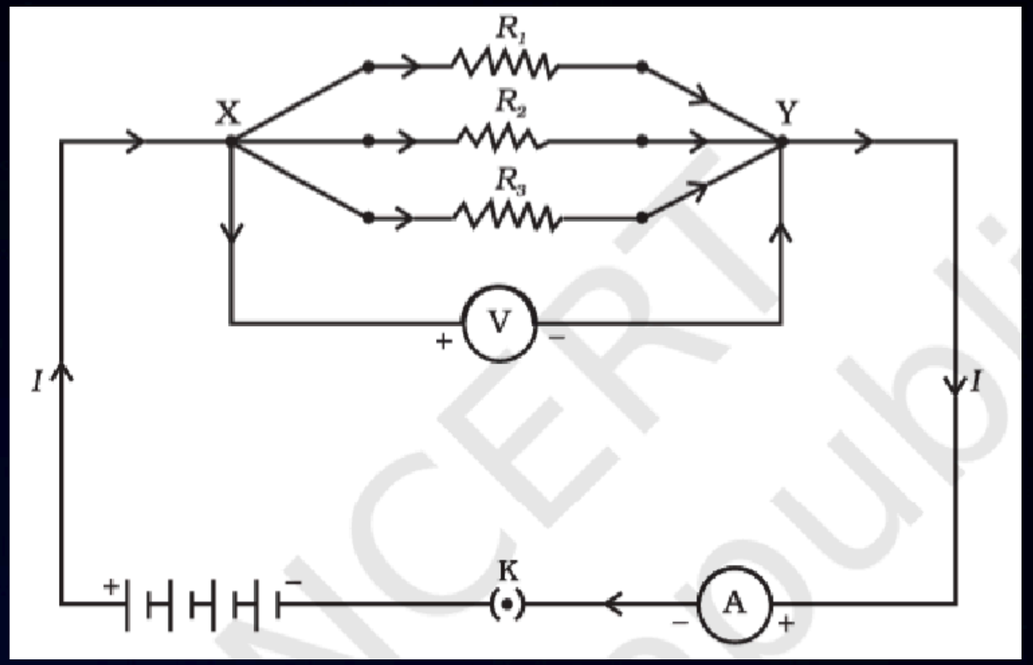
Atmospheric refraction effects at sunrise and sunset



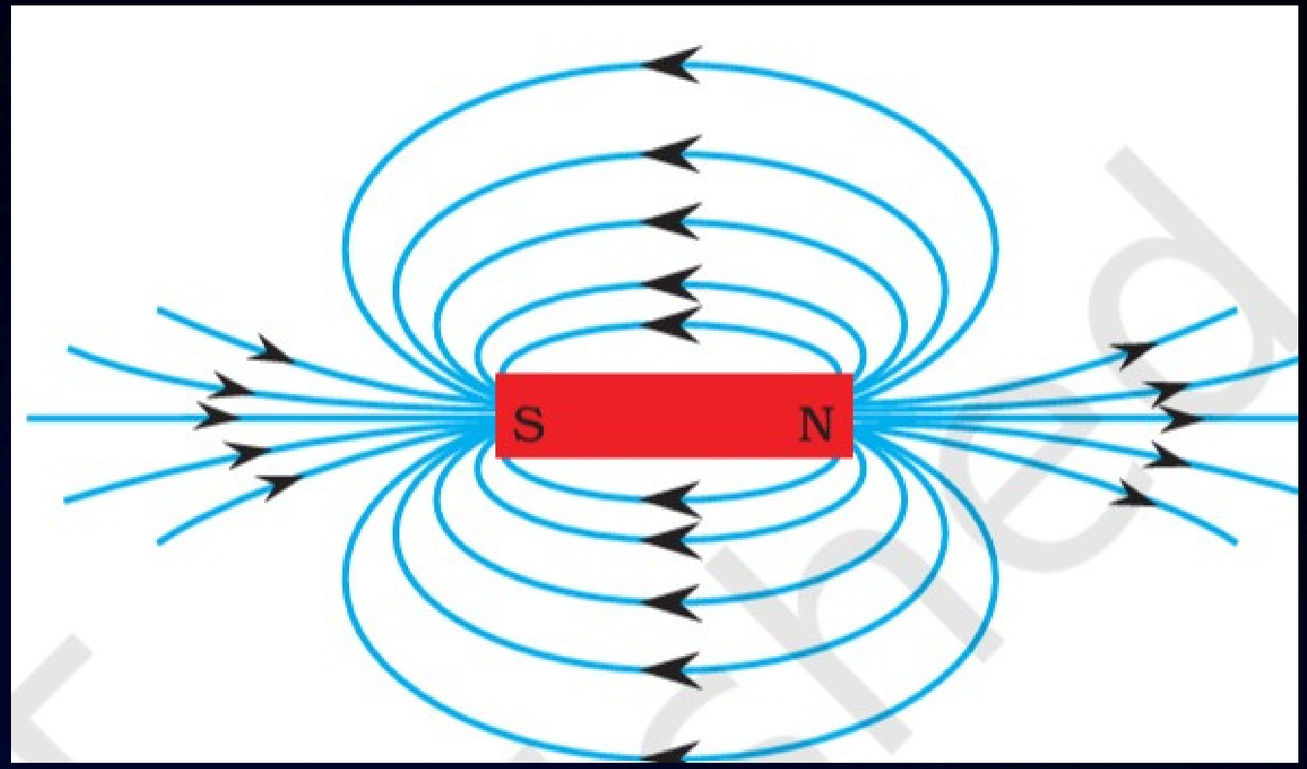
Resistors in Series



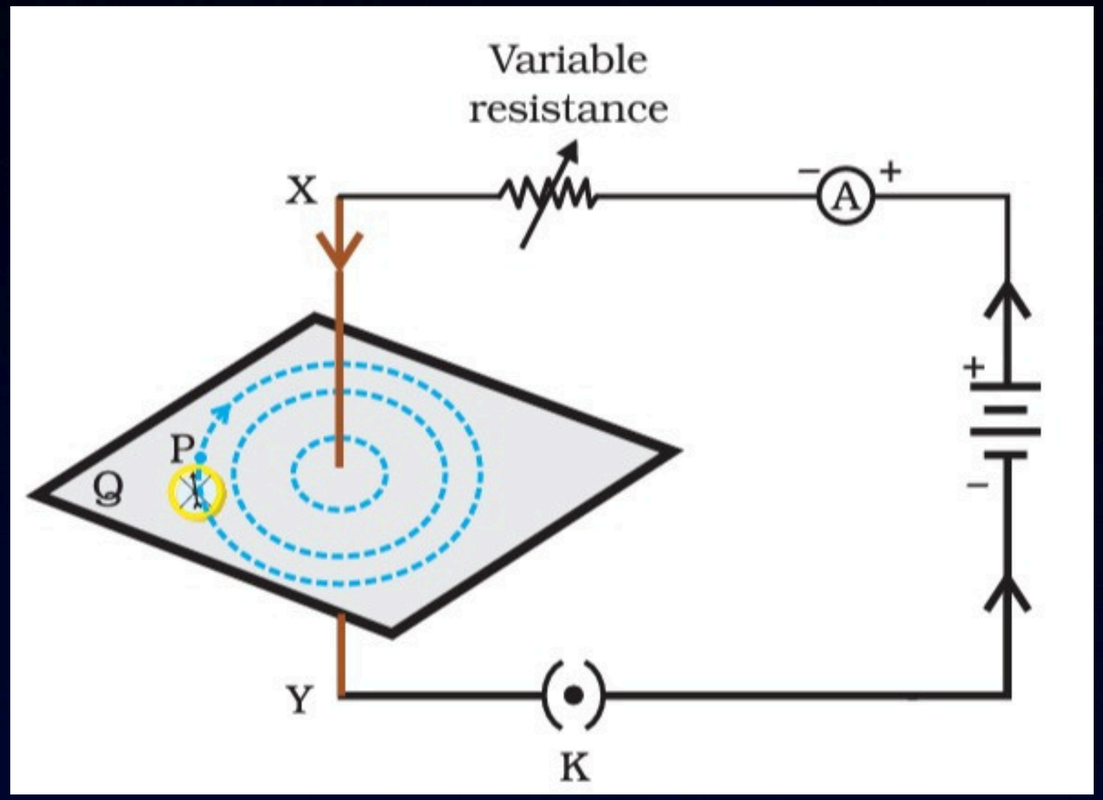
Resistors in Parallel



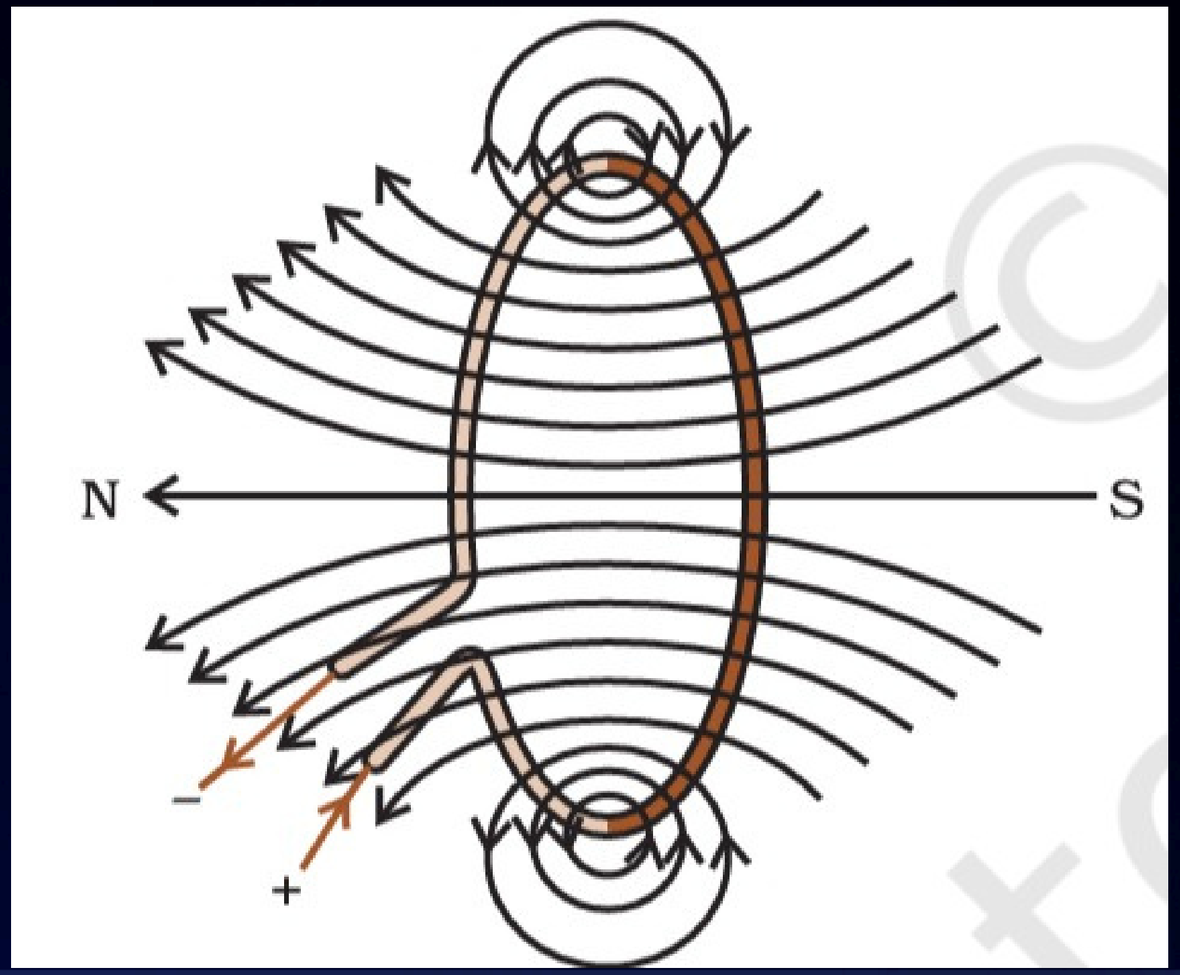
Field lines around a bar magnet



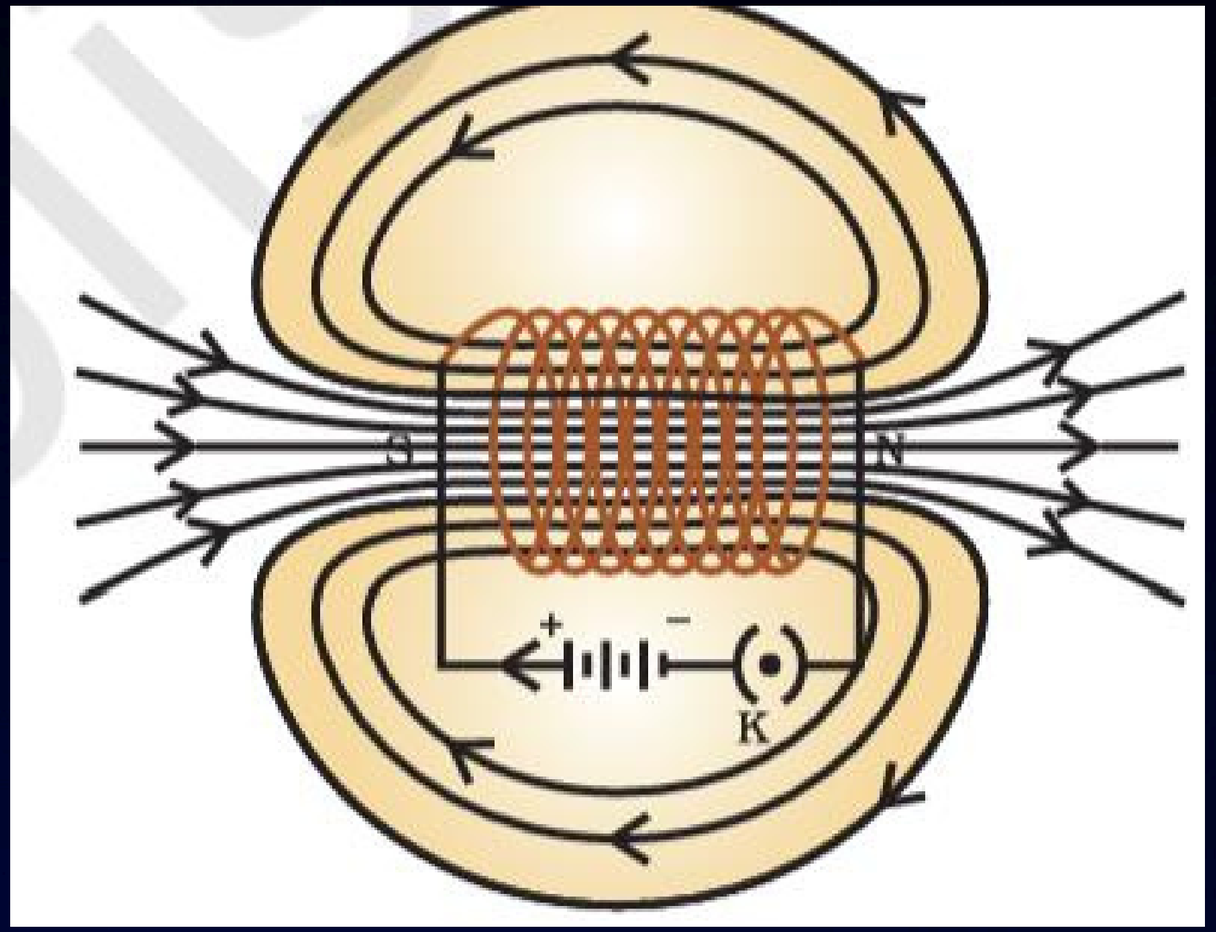
Pattern of concentric circles

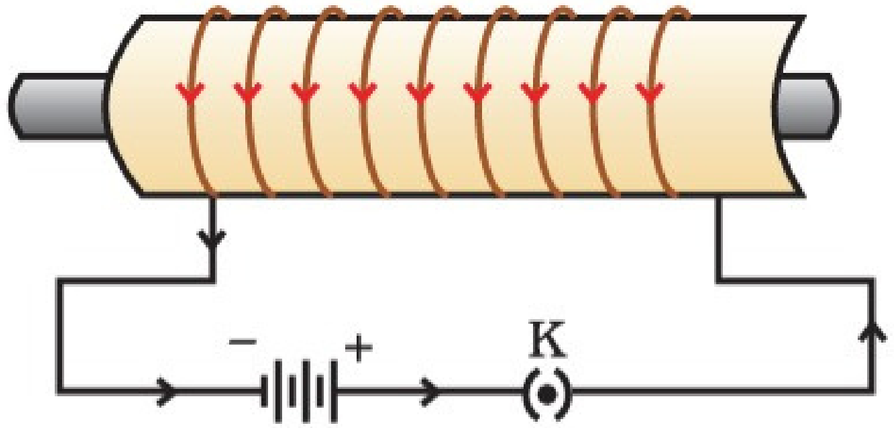


Magnetic field lines of the field produced by a current-carrying circular loop



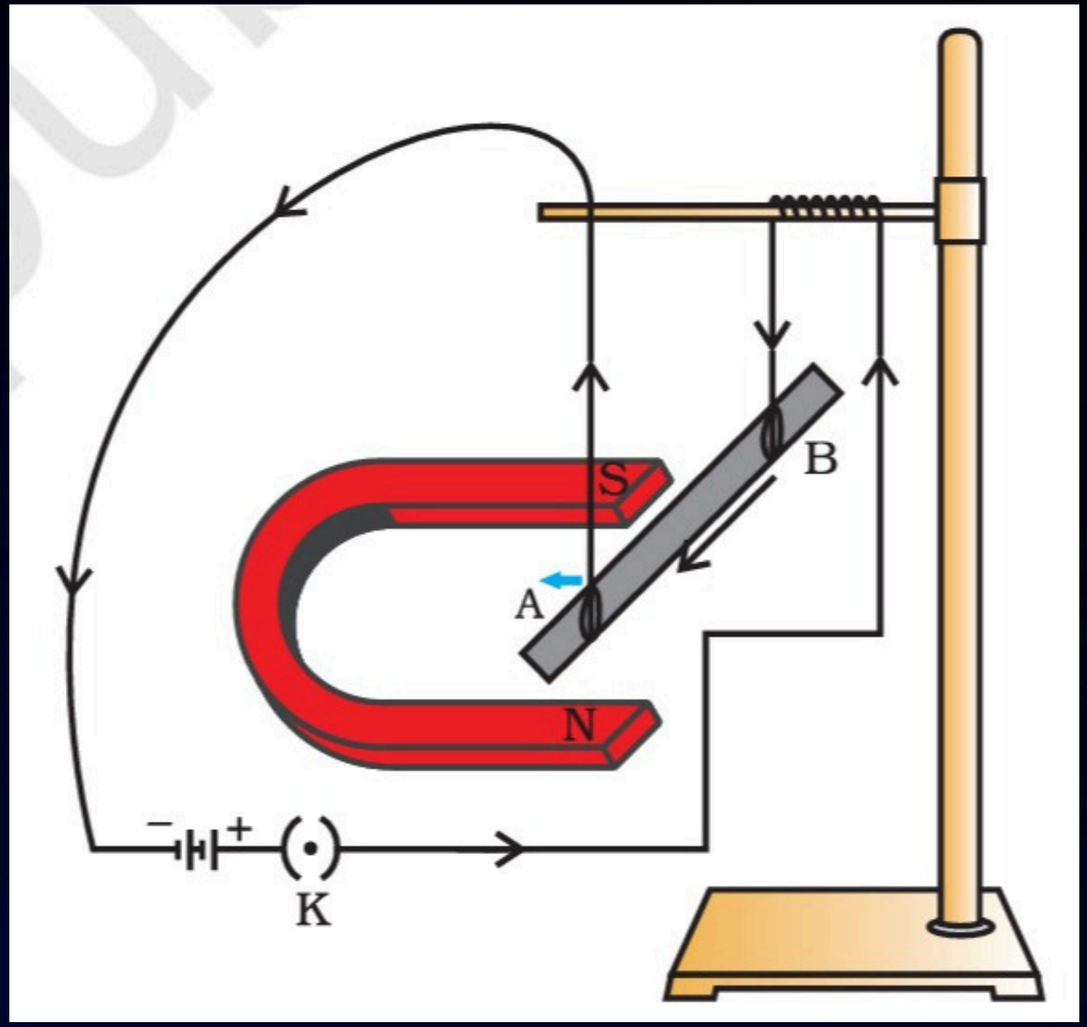
Magnetic field lines of the field produced by a current-carrying solenoid

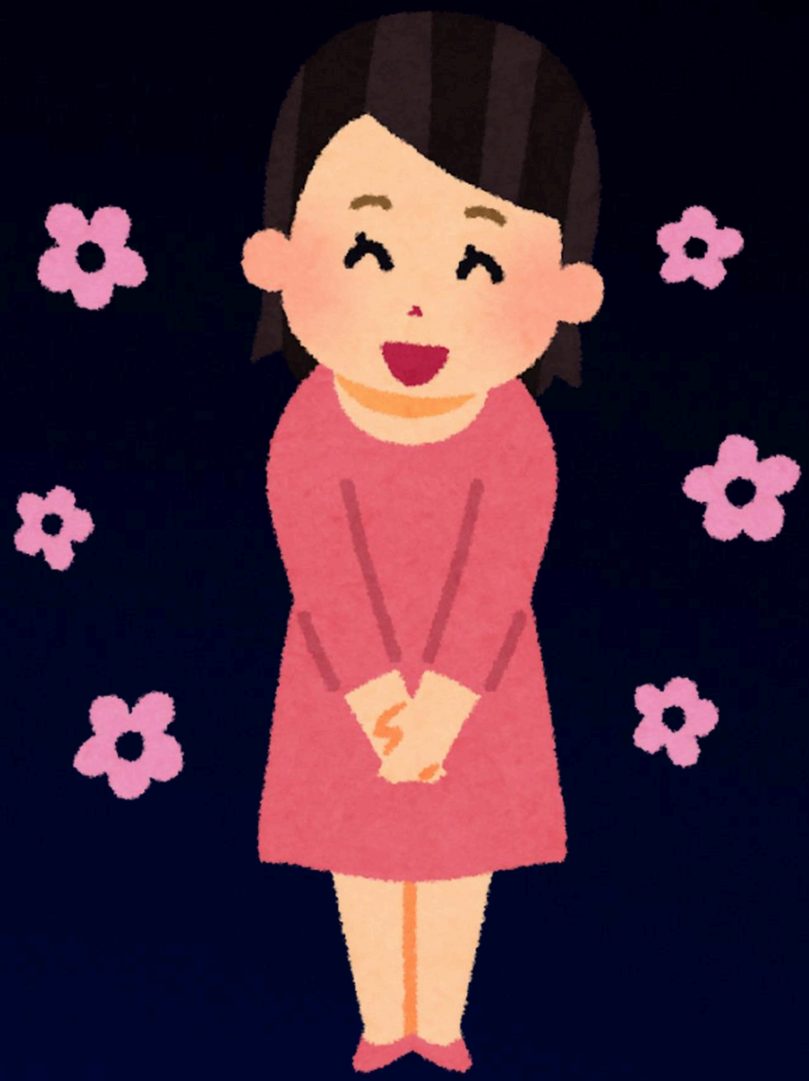




A current-carrying solenoid coil is used to magnetise steel rod inside it – an electromagnet.

Fleming’s Left Hand Rule





Thank You