* RESPIRATION *

→ In case of helminthes (parasite), they respire anaerobically.

→ Annelids -
Cutaneous mode of respiration. Respiratory surface is true site of exchange of gases. Here skin itself performs.
In lec worm branchial gills is pr. for respiration.

→ Arthropodes -
Here respiratory pigments present.
→ Here highly mode of respiratory adaptation.
→ Tracheal mode of respiration.

→ Molluscs -
→ By help of ctenidium aquatic mode of respiration is found there.
→ Mantle also makes respiratory surface.

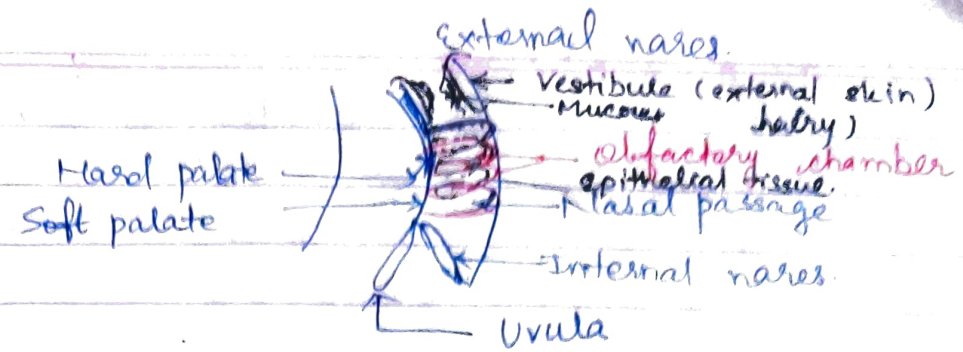
→ Echinoderms -
→ 60% by W.V.S
→ 40% by special extension of coelom i.e. dermal brachae.

→ In piesces - Pair of gill slit (which is going decreased with evolution)

* In amphibia cutaneous & pulmonary both type of respiration. Here bucco pharyngeal (air breething & like a patches) type of respiration is also present.
→ Lung of frog is also a hydrostatic organ which help in swimming.

* HUMAN RESRIRATION *

NASAL PASSAGE -
→ Olfactory chamber is covered by turbinal bone

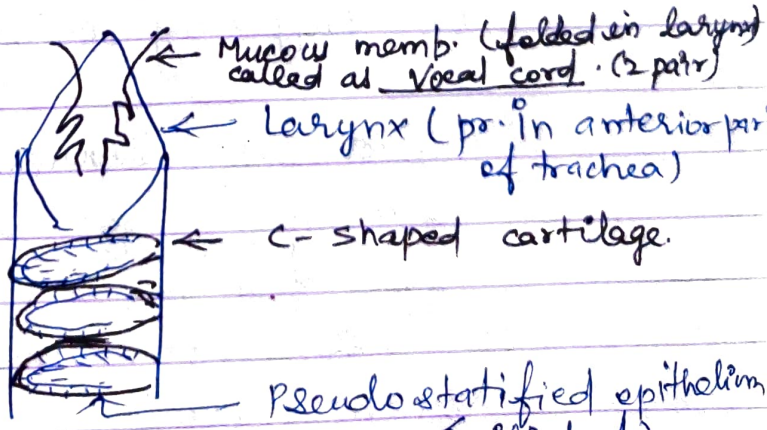


→ Turbinal ~~made~~ bone is made up of
(1) Extenetion of premaxillary bone.
(2) Extenetion of maxillary bone.
(3) Ethmoidal bone.

→ Epithelial tissue, covering nasal passage is made up of
(1) Mucous secreting cells. — Mucous.
(2) Sensory cells — Olfaction
(3) Supporting cells.

→ Lubricated hair present for purification of blood, and it ~~prese~~ prevents air born infecti
→ Turbinal bone acts as air conditioner ~~o~~ for ~~outer~~ inner respiratory tissue from outer environmental temperature.

From nasal passage enter into trachea.



→ Larynx is supported by cartilages
(1) Arytenoid cartilage — paired
(2) Thyroid cartilages — paired
(3) Cricoid cartilage — unpaired

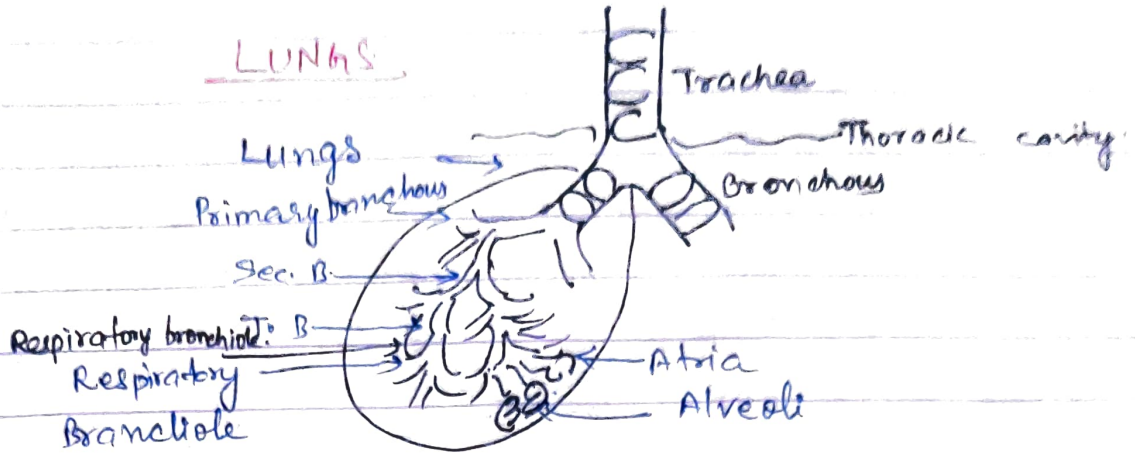
⇒ Adam's apple is example of thyroid cartilage.
⇒ In males thyroid cartilage is slightly protruded which make a sexual dimorphism.

→ Two pairs of vocal cord is are present in humans but only one pair is functional.
→ Sound produced due to vibration of vocal cord.
→ Vocals are folding of mucous membrane entered in larynx which help in production of sound.
* Oesophagus is dorsal which putted on open part of C-shaped cartilage so that the trachea is ventral in future.

→ Pseudo stratified epithelium covering of C-shaped cartilage have 3 type of cell.
(1) Mucous secreting — Mucous.
(2) Sensory cells - For tasting of foreign particle.
(3) Supporting cells -

→ Cilia is beating upward always. which functions for cleaning of passage for freshly respiration.
* Once smoke is gone in trachea then cilia is dead which are air purifier. When continuously used then cilia is dead for permantly.

LUNGS



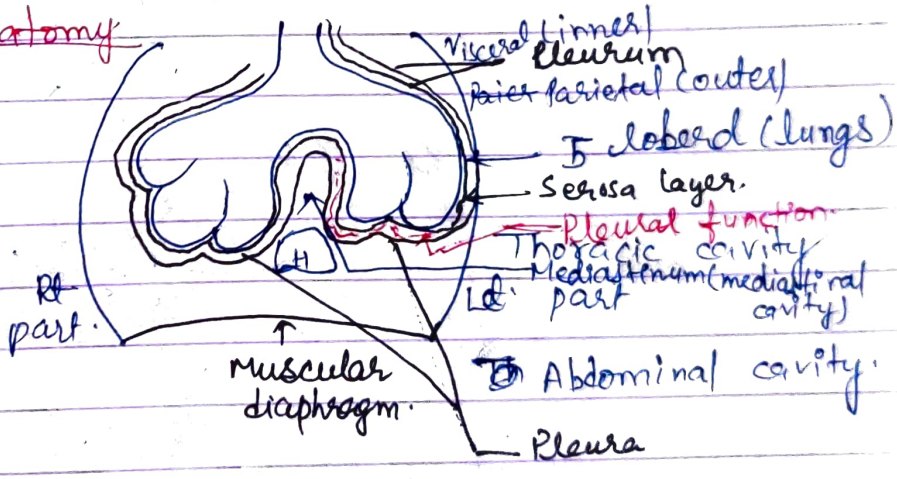
→ C– shaped cartilage enters into lungs and is present till bronchous is of diameter of 1mm

* 90 m^2 long tennis court can be made by no. of alveoli present in our lungs.

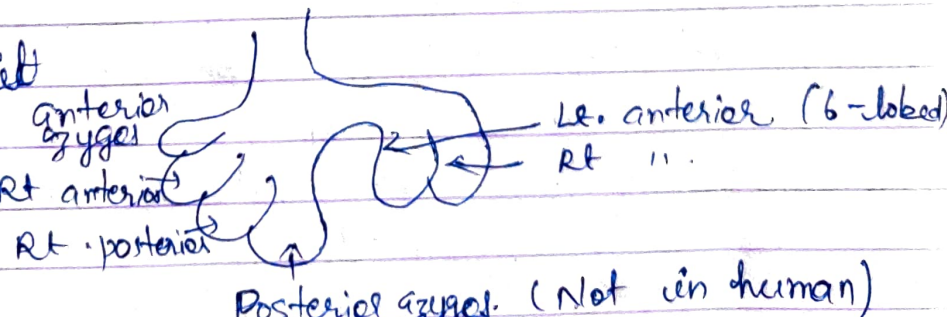
→ Mucous membrane is lending to alveoli even.

→ This membranes makes (endodermal derivatives) the mucosa layer (of GIT) in lungs, pancreas, urinary bladder etc.

Anatomy



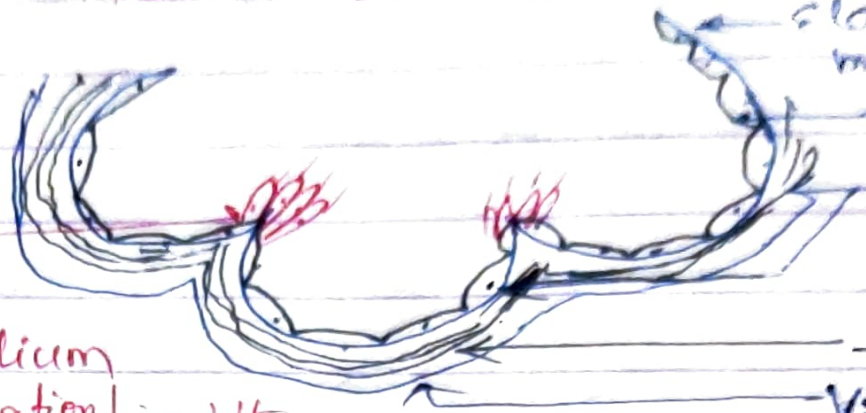
* In Rabbit



* Pleurasy — Infection in pleural fluid. It is just like brother of tuberculosis.

* Oesophagus is passed through mediastinal

HISTOLOGY OF LUNGS



* Epithelium with bulged (3rd) nucleous — squamous