Review for exam 3
by Ellie, lucy and malik

- What are the functions of the paranasal sinuses?

- The sinuses secrete mucus, lighten the skull and provide resonance for one's voice.

- Smoking can cause an increase in mucus production and a decrease in cilia function.
- Explain why this combination can be so detrimental to one's health?

- Without the cilia, it becomes difficult to move the excess mucus superiorly to the pharynx where it can be swallowed.
- Pathogens can accumulate in the mucus and chronic infections may result.

- Why is the epithelium lining the nasopharynx different from the epithelium that lines the oropharynx and laryngopharynx?

- Because the nasopharynx is not a passageway for food/drink and thus lacks the need for the protection provided by stratified squamous epithelium

- What makes epiglottitis (inflammation of the epiglottis) an extremely dangerous condition?

- It can cover the airway- and can be fatal.

- If an individual were born with O-shaped tracheal cartilages, what activity would be quite difficult?

- Swallowing-because the esophagus could not expand anteriorly when trying to accommodate a large bolus of food.

- What two structures are involved in routing food and liquid away from the respiratory passages?

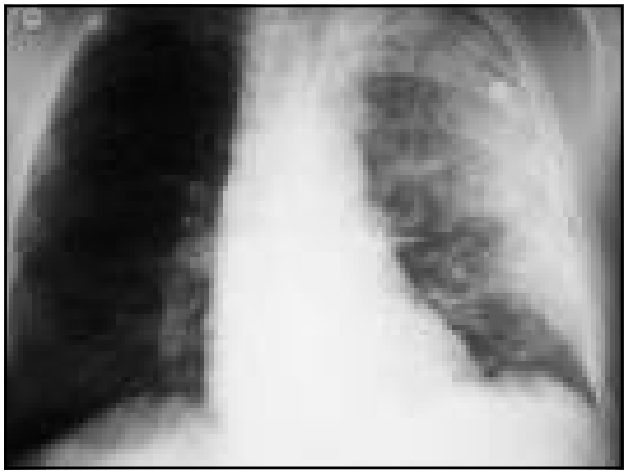
- Soft palate, uvula, and the epiglottis.

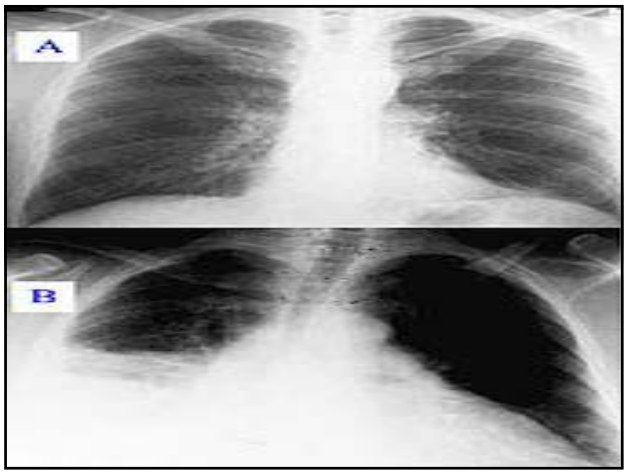
- Lois has obstruction of her right primary bronchus. How would this affect the carbon dioxide levels in her right pulmonary veins

- It would increase.

- Trace a single molecule of Oxygen from a naris to an alveolus.

- How to recognize a good xray?





- Check if the patient take a deep breath by
- looking at the position of the clavicles and scapulars
- The space between the ribs (anterior ribs)
- Cul of sac
- diaphragm

- What are the membrane around the lungs?

- pneumothorax

- What are the main organ in the upper respiratory and lower respiratory track?
- What are the paranasal structure?

- The respiratory system is consist of: nose, pharynx, larynx, trachea, bronchi, lungs.
- The upper resp. sys: nose, pharynx, and larynx, and associated structures.
- The lower resp. sys: larynx, trachea, bronchi, lungs.
- Paranasal structure are external nares, nasal cavity and septum, nasal conchae, nasal meatus.....

- What are the function of the lungs?

- Oxygen exchange
- Voice production
- Plasma ph regulation
- Infection prevention
- Old factory (sensation and smell)

- What are the side of gas exchange?

- Bronchioles
- Alveoli
- Alveolar ducts

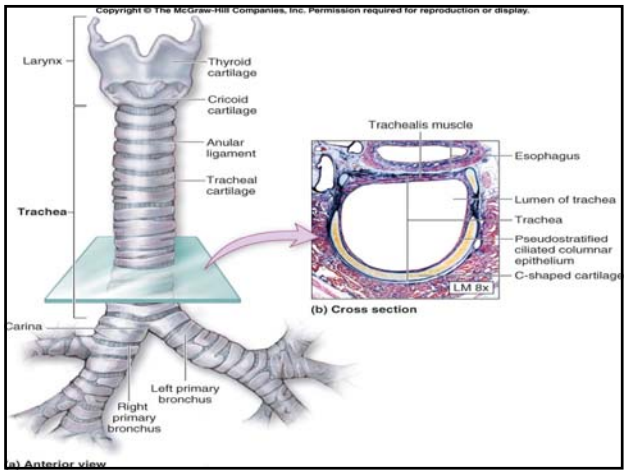
Nose

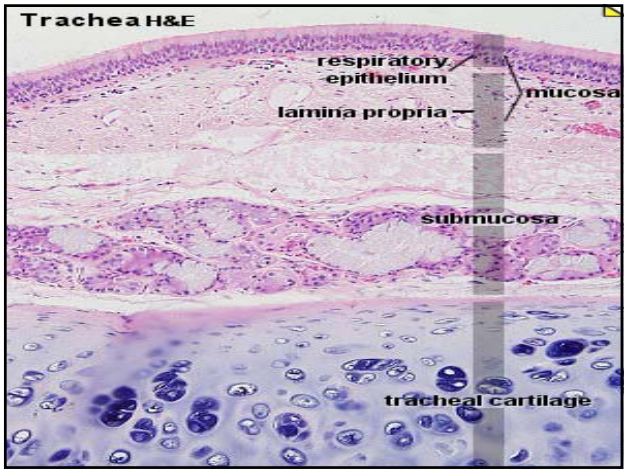
Pharynx

Trachea

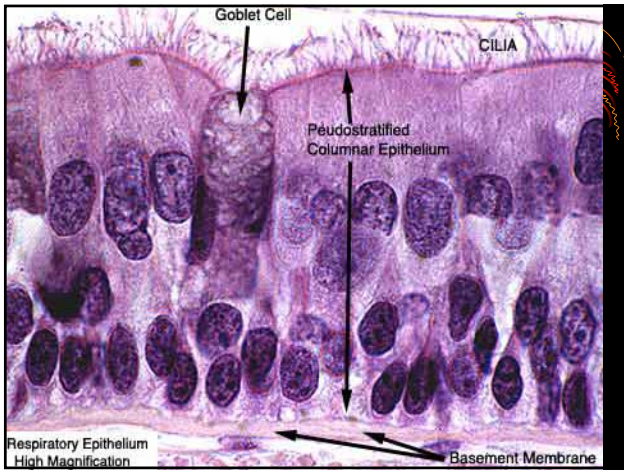
Larynx

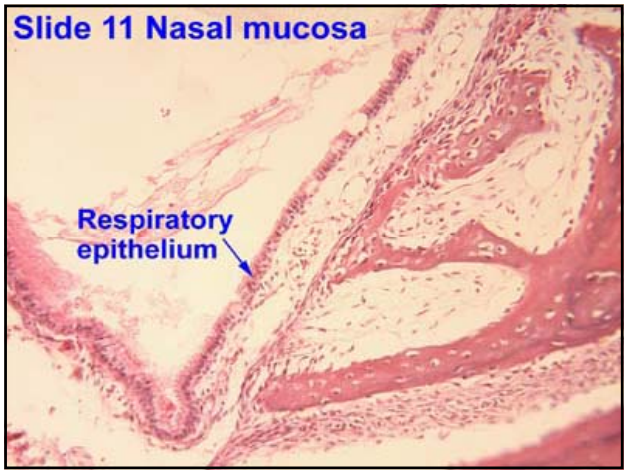
pleurae

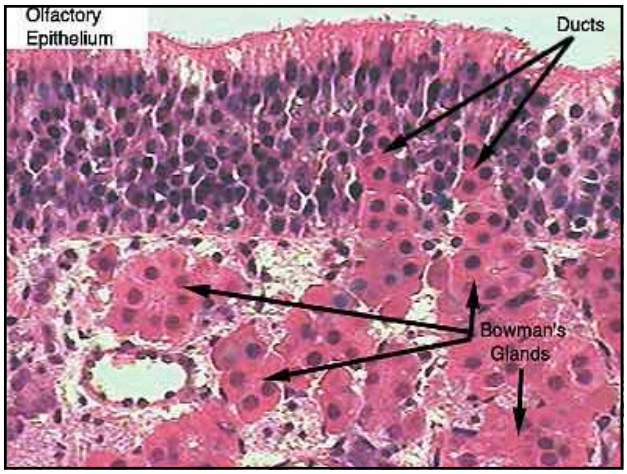


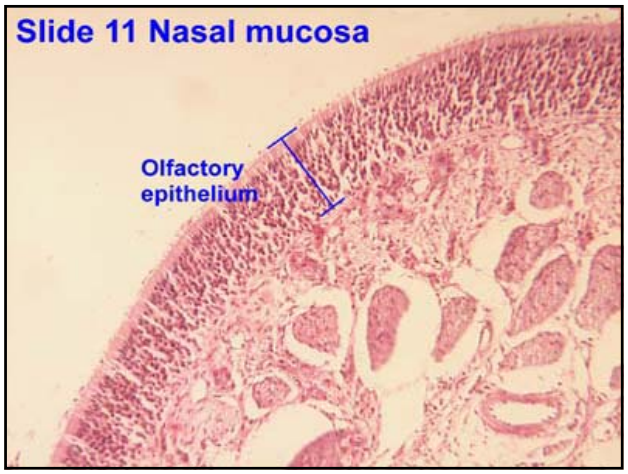


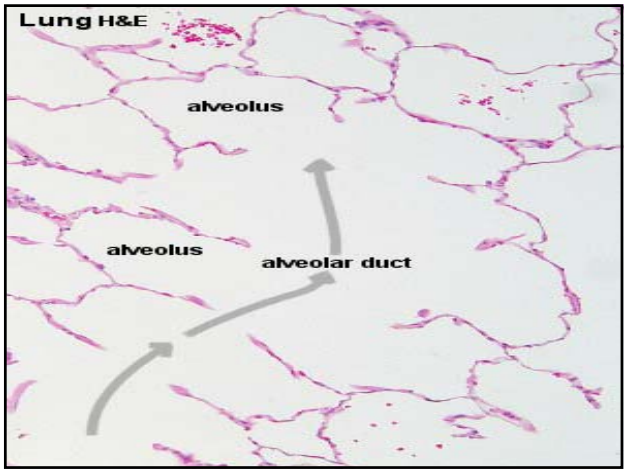
Recognize old factory from respiratory mucosa cells.

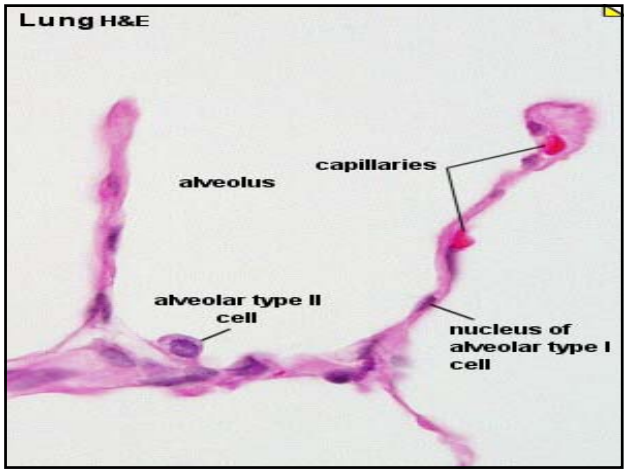


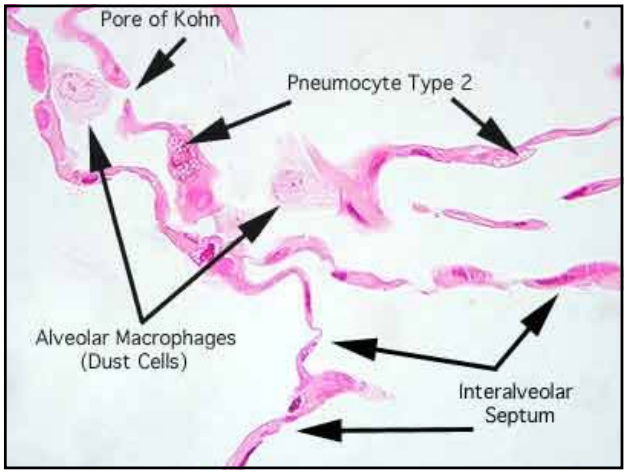


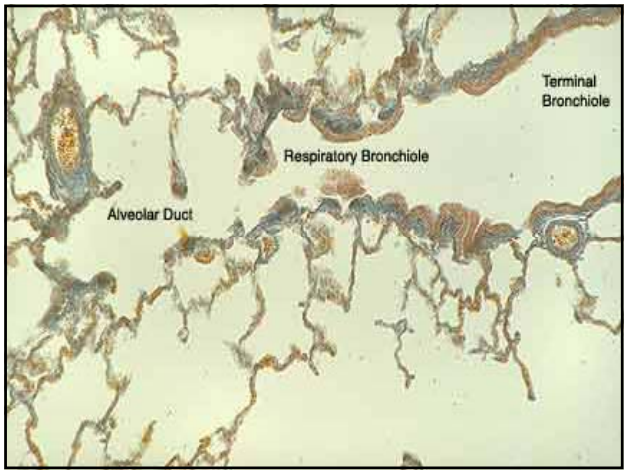

Olfactory Epithelium
Ducts
Bowman's Glands

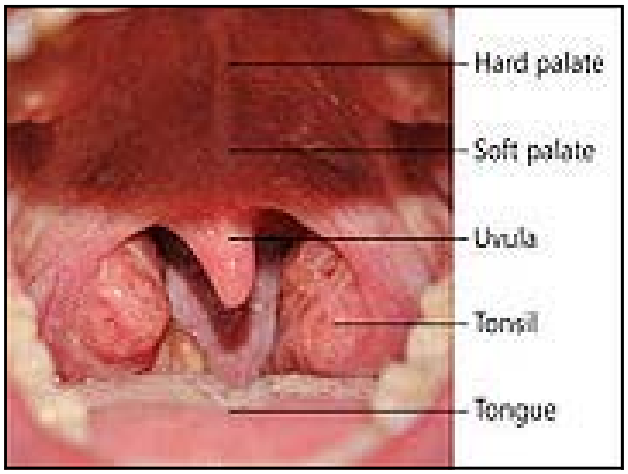

Slide 11 Nasal mucosa
Olfactory epithelium

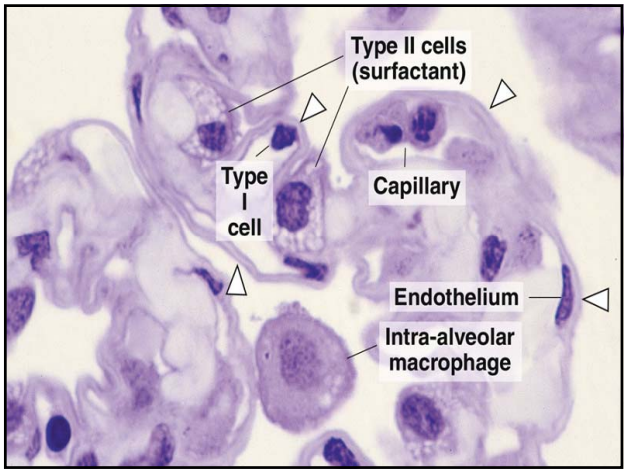

Lung H&E
alveolus
alveolus
alveolar duct

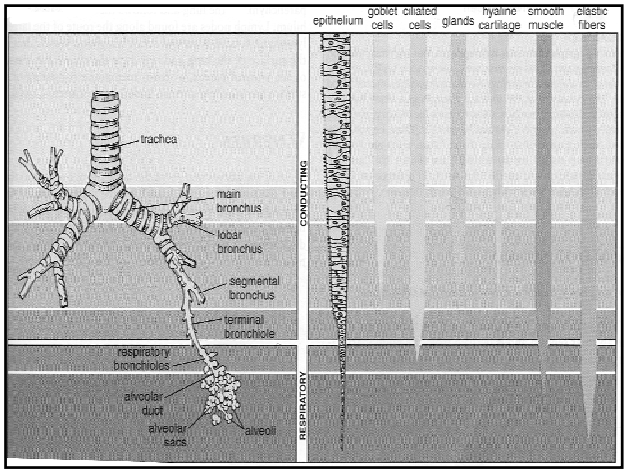

Lung H&E
alveolus
capillaries
alveolar type II cell
nucleus of alveolar type I cell

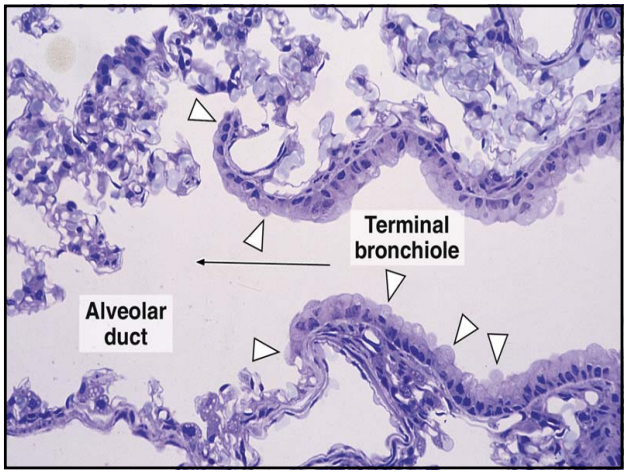

Pore of Kohn
Pneumocyte Type 2
Alveolar Macrophages (Dust Cells)
Interalveolar Septum

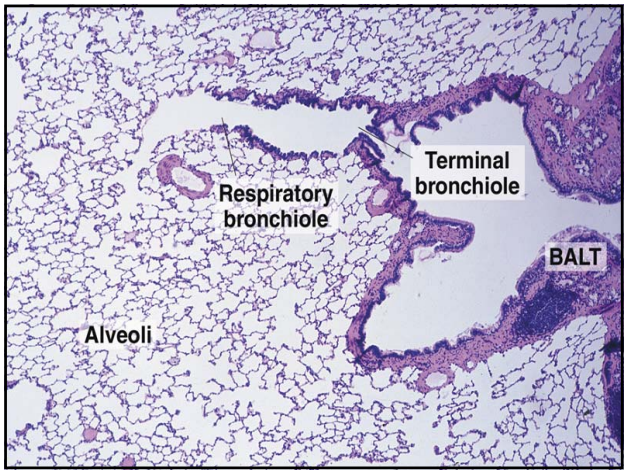

Terminal Bronchiole
Respiratory Bronchiole
Alveolar Duct

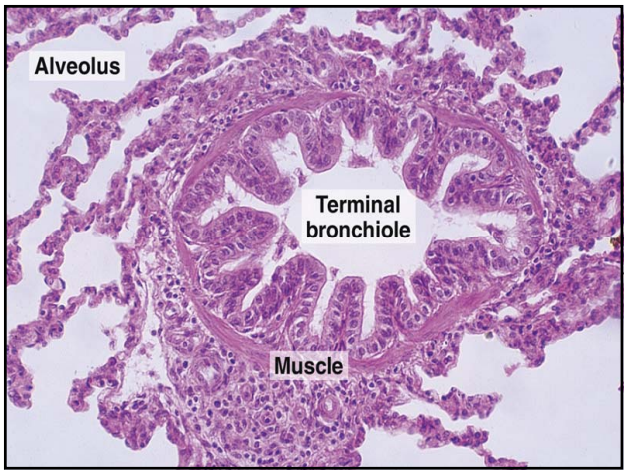

Hard palate
Soft palate
Uvula
Tonsil
Tongue

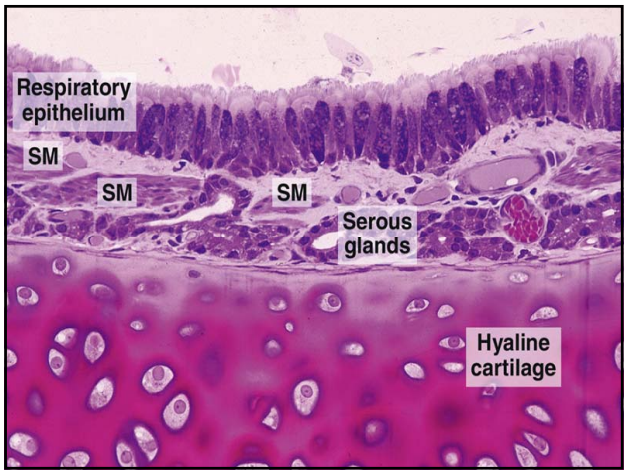

Type II cells (surfactant)
Type I cell
Capillary
Endothelium
Intra-alveolar macrophage

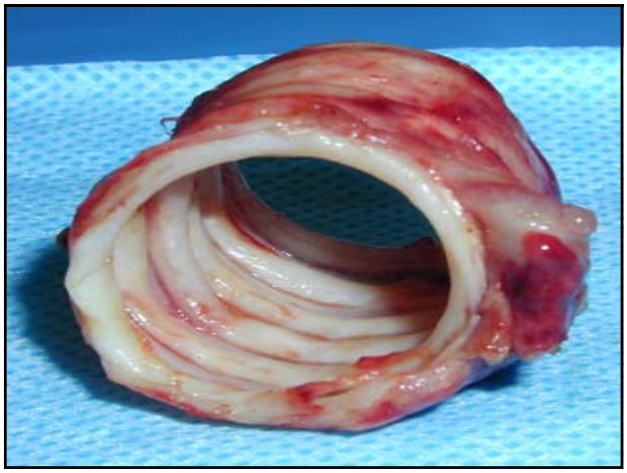

epithelium
goblet cells
ciliated cells
glands
hyaline cartilage
smooth muscle
elastic fibers
trachea
main bronchus
lobar bronchus
segmental bronchus
terminal bronchiole
respiratory bronchioles
alveolar duct
alveolar sacs
alveoli
CONDUCTING
RESPIRATORY

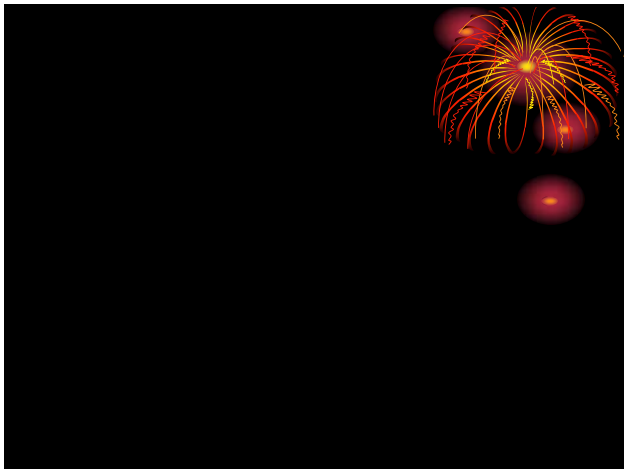

Terminal bronchiole
Alveolar duct


Terminal bronchiole
Respiratory bronchiole
BALT
Alveoli

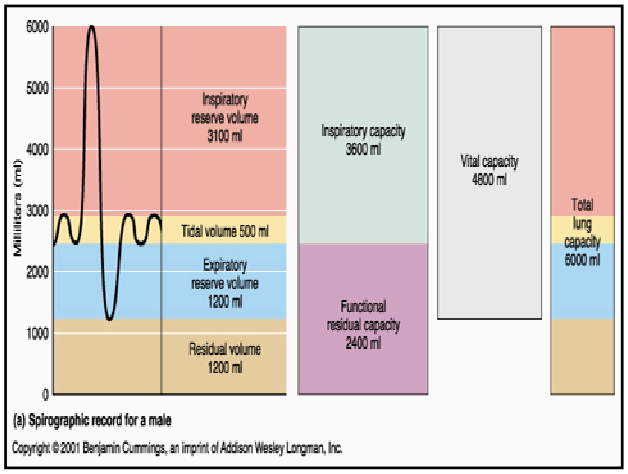


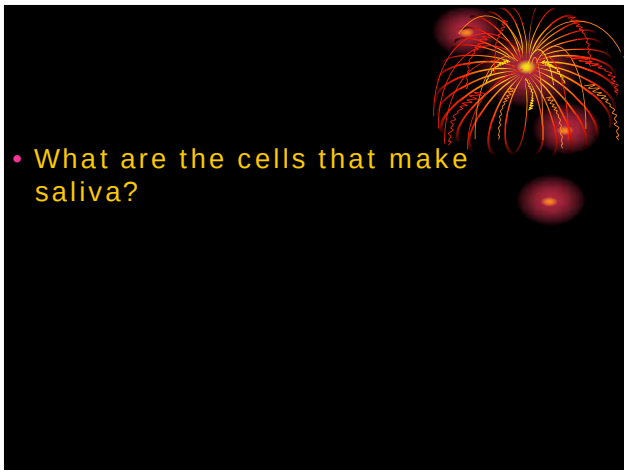






- What are the enzymes in the respiratory mucosa?




• What are the cells that make saliva?