

Respiration

Ted Ed Lungs

I. Respiratory System Responsibilities

- A. Removing **waste** product of cellular respiration (**CO₂**)
- B. Taking in gas (**O₂**) necessary for **ATP** formation via electron transport chain

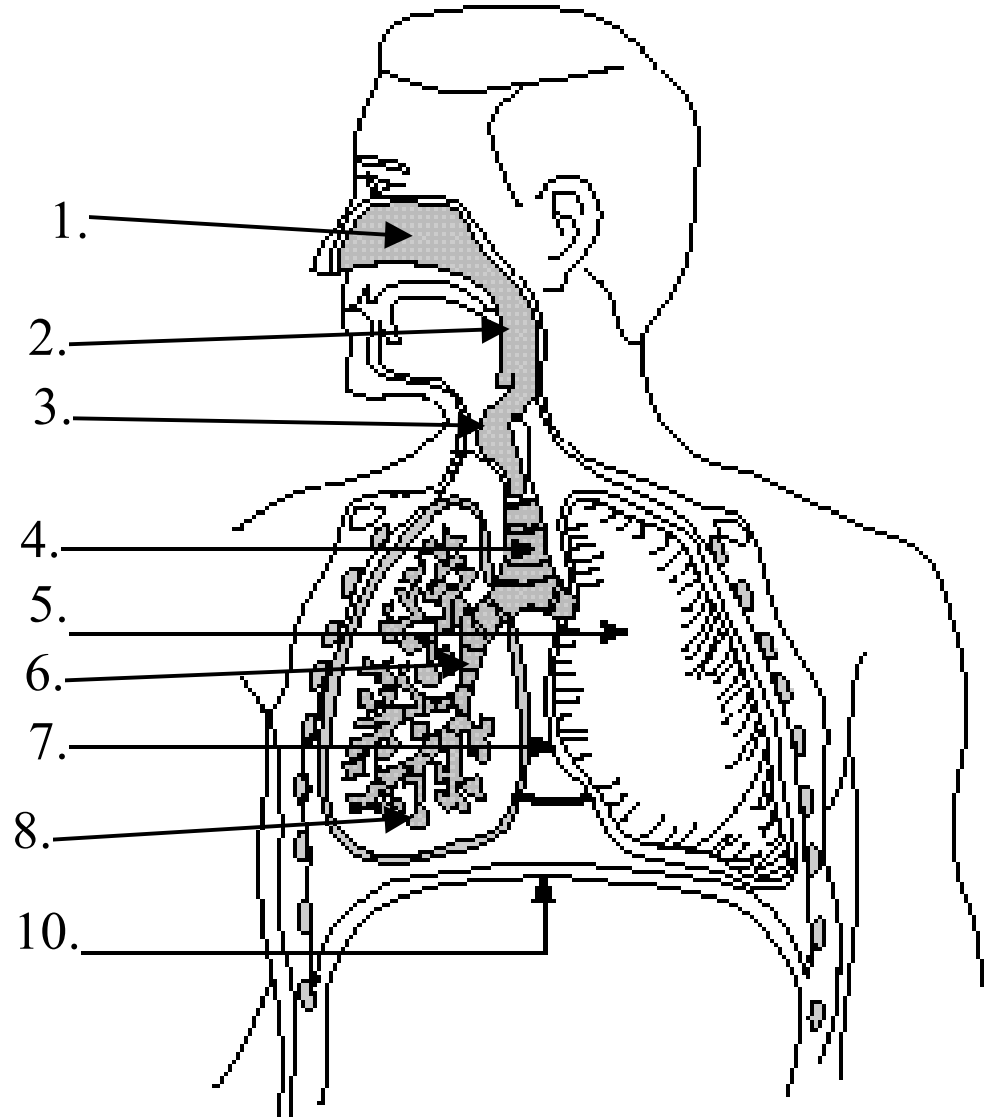
II. Divided into four areas

A.	Breathing	the movement of air into and out of the lungs
B.	External Respiration	the exchange of O ₂ and CO ₂ between AIR and BLOOD .
C.	Internal Respiration	the exchange of O ₂ and CO ₂ between BLOOD and TISSUE FLUID
D.	Cellular Respiration	the process which produces ATP in mitochondria → requires O ₂ and releases CO ₂

Anatomy, Alveoli Structure/Function

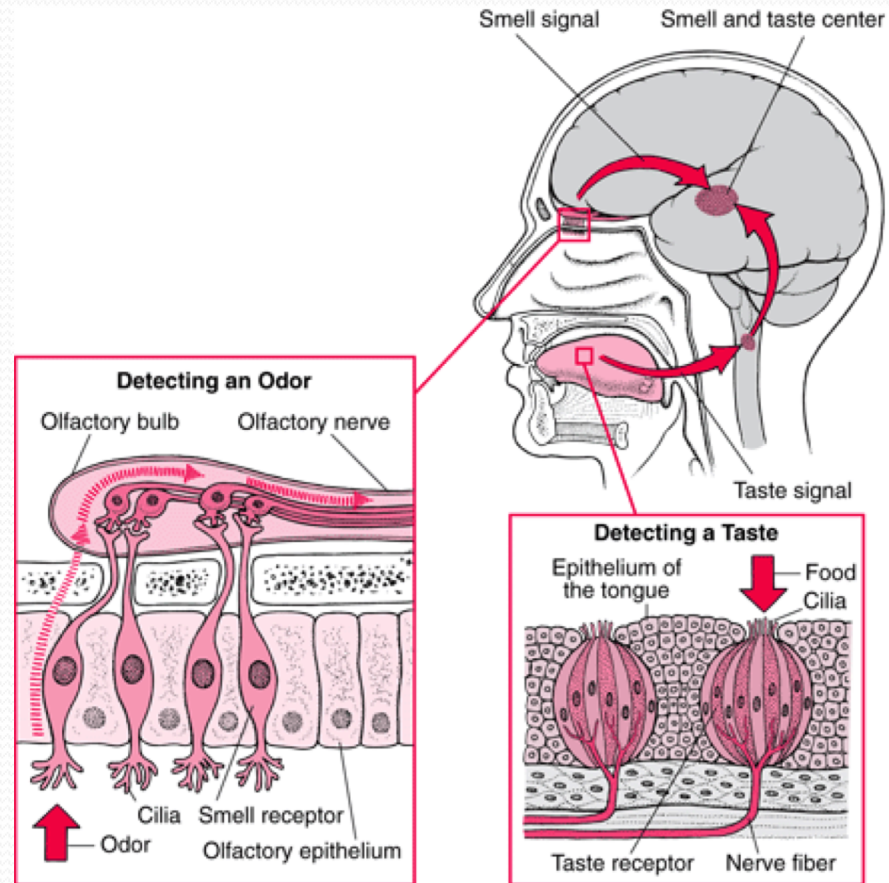
I. Anatomy of Breathing

	Name
1	nasal cavity
2	pharynx
3	larynx
4	trachea
5	lung
6	bronchi
7	pleura membrane
8	alveoli
9	bronchioles
10	diaphragm



A. Nasal Cavity

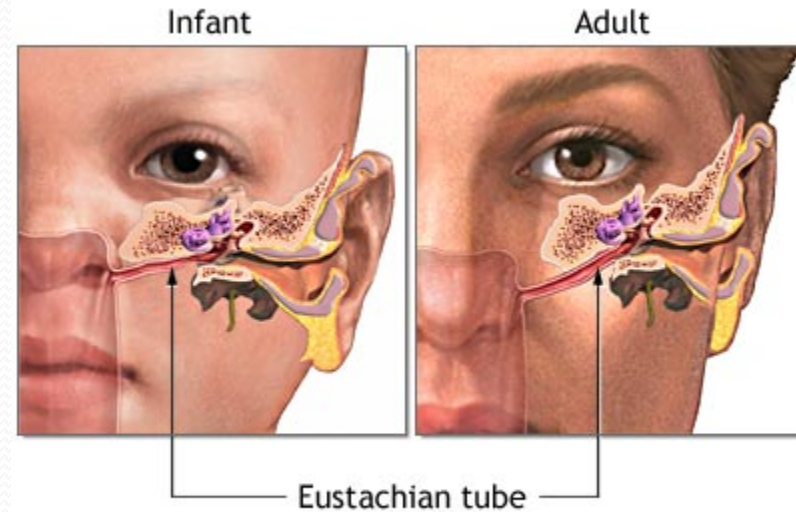
1. **NOSE** contains **two** nasal cavities which contains narrow canals with convoluted lateral walls that are separated from one another by a septum
2. Contains special **ciliated** cells that act as **scent** receptors located at the top recesses of the nasal cavities



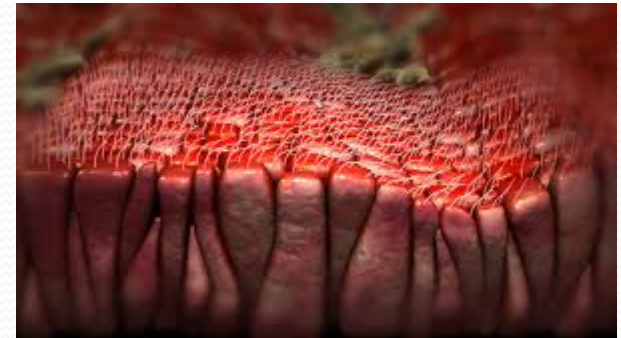
3. Nasal cavities are connected by tubes to the tear ducts and to the ears via the **eustachian** tubes

4. Air enters the nasal passages

- a. Air is **filtered** by the **hairs** and **cilia** that trap dust and debris
- b. Air is **warmed**
- c. Air is **moistened**



ADAM.



B. Pharynx

1. Common passage for **respiratory** and **digestive** systems
2. Above the **epiglottis**
3. When swallowing food, the epiglottis **covers** the glottis.

