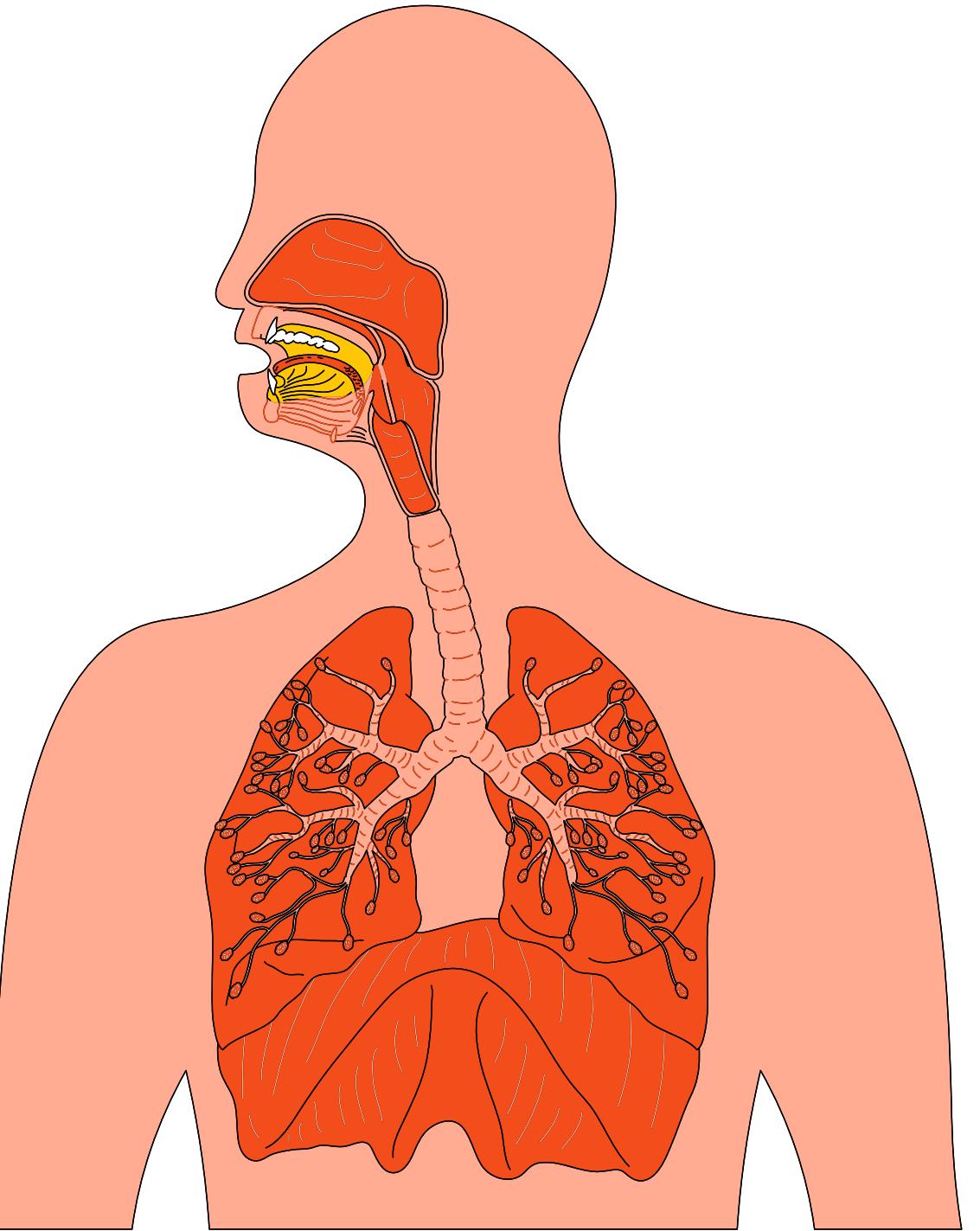


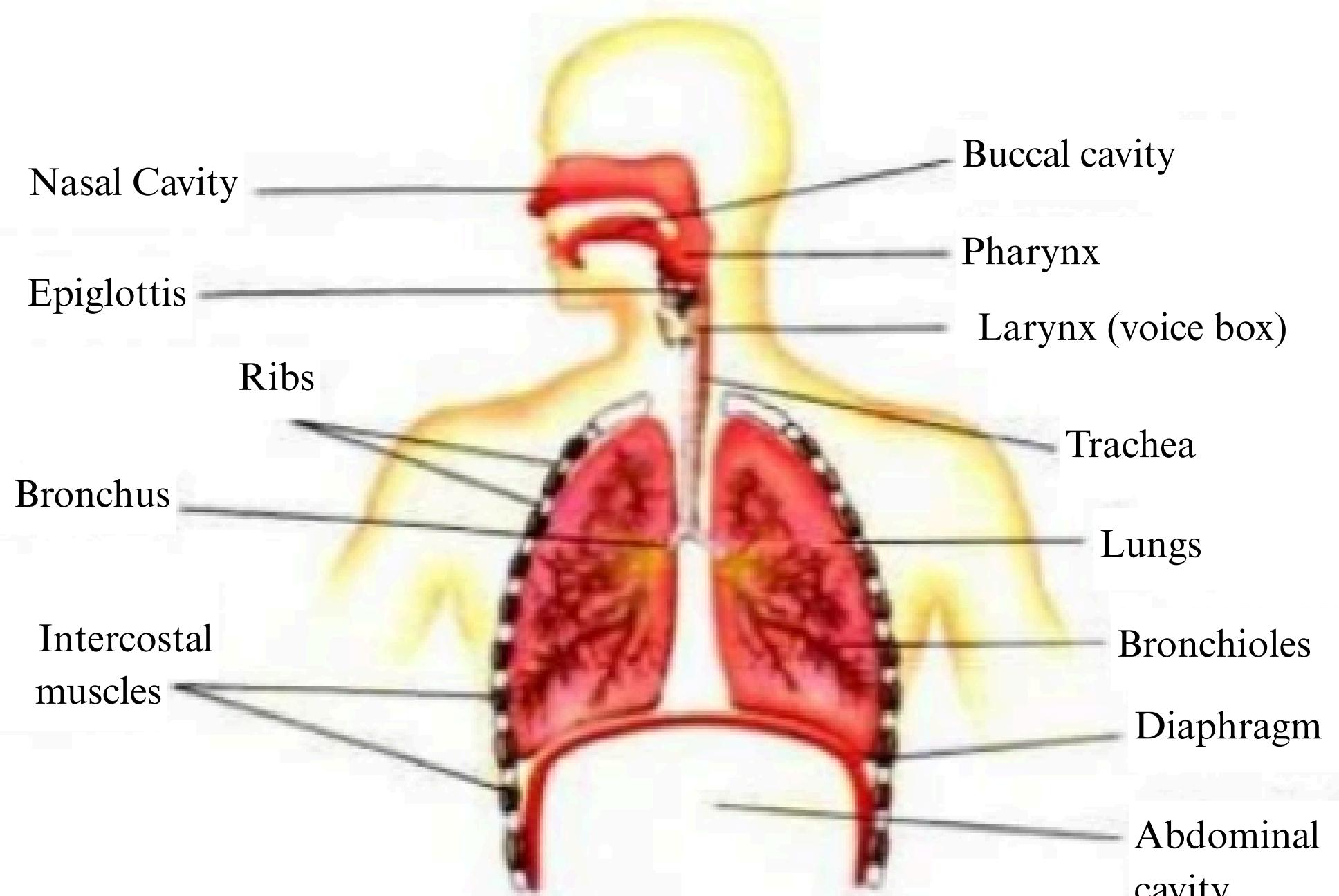
RESPIRATORY SYSTEM

Group 2

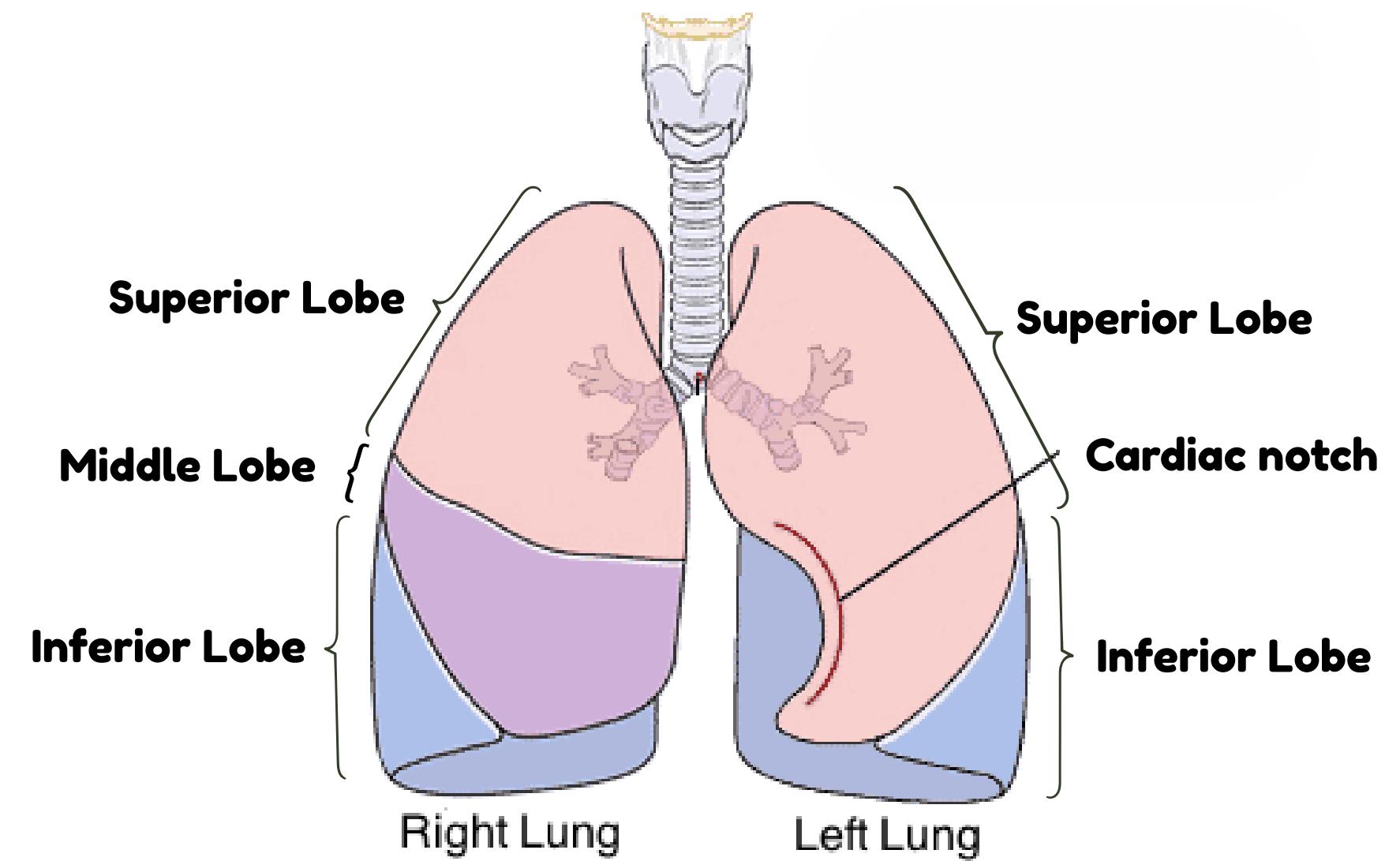
Ali Hariz bin Anuari (A22EC0037)
Chan Yek Fung (A23KT0048)
Chin Jo Ann (A23KT0053)
Chong Ke Min (A23KT0055)
Muhammad Khair bin Romzi
(A22EC0085)



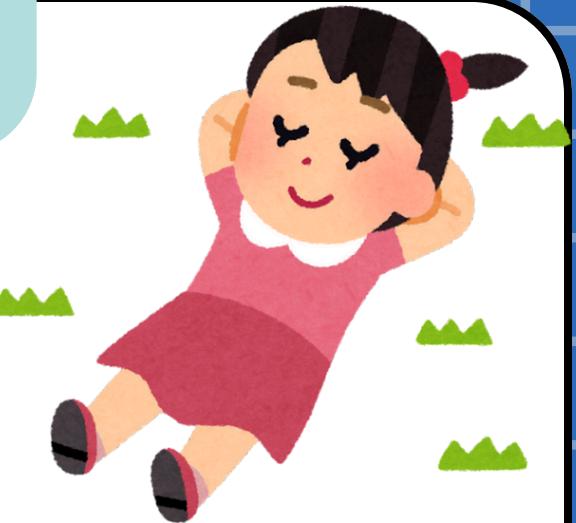
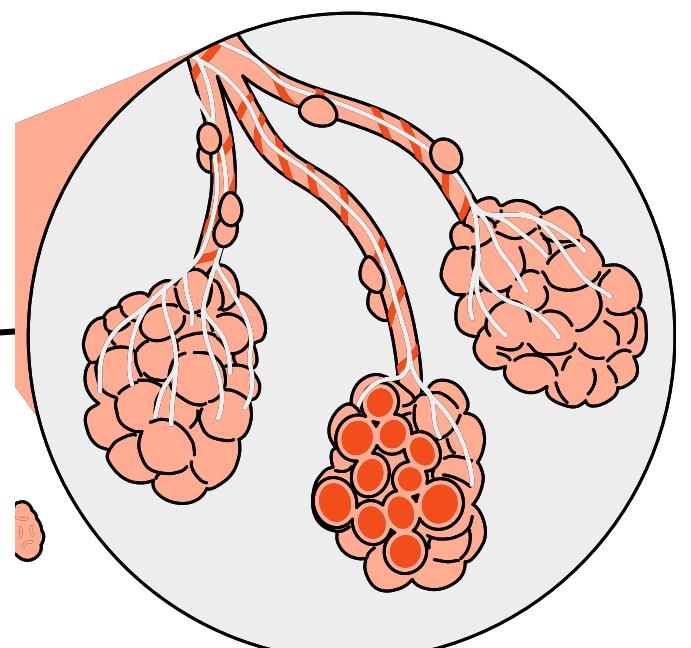
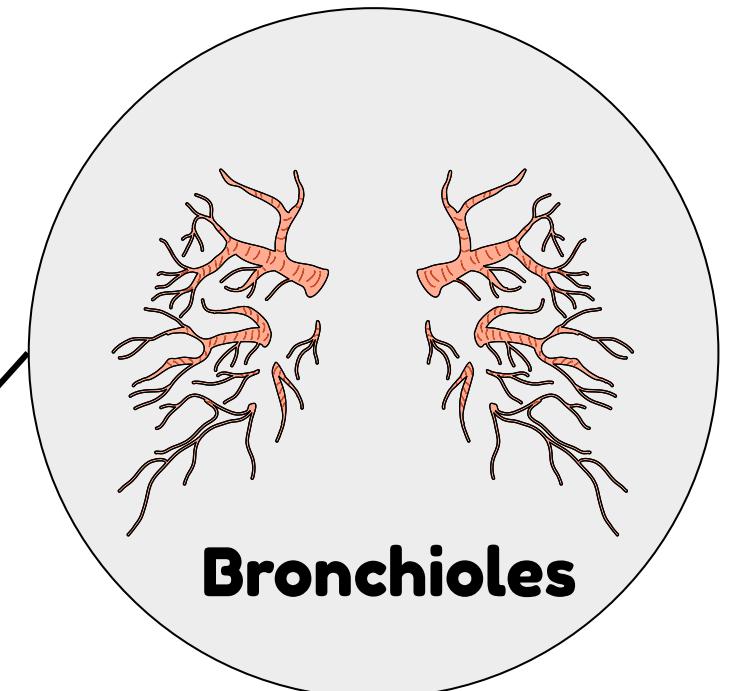
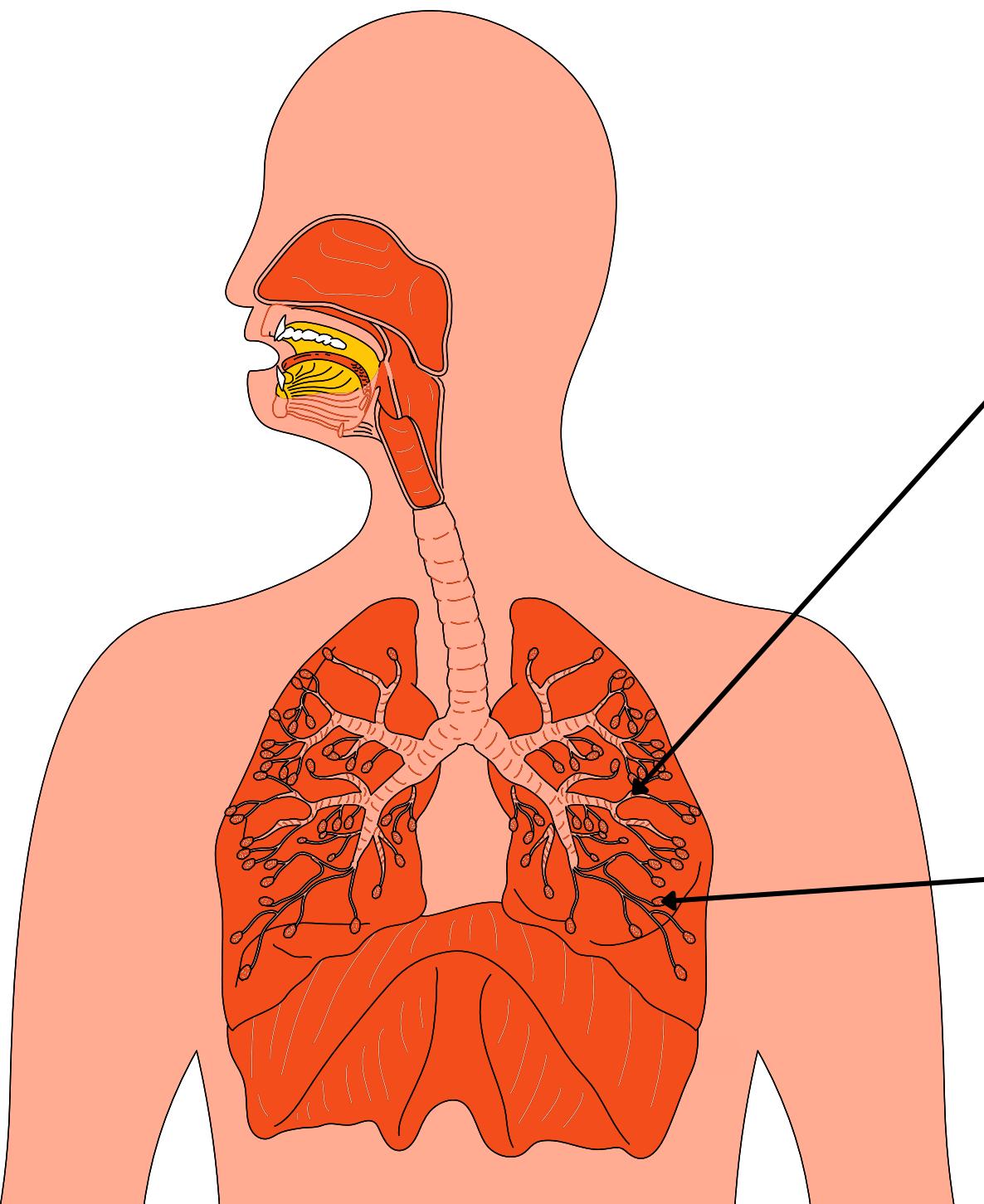
RESPIRATORY SYSTEM



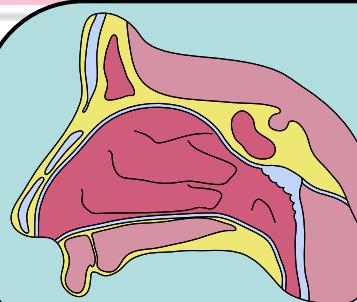
LOBES



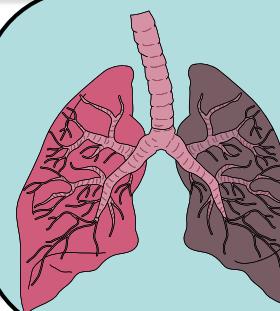
STRUCTURE IN LUNGS



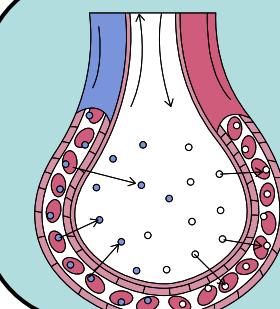
VIDEOS AND FLOWCHART



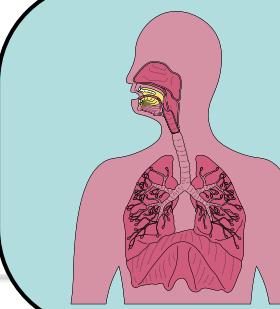
Air enters through the nose or mouth. It passes through the pharynx and larynx. The trachea carries air down into the bronchi.



The bronchi divide into smaller bronchioles. These bronchioles lead to clusters of alveoli in the lungs.

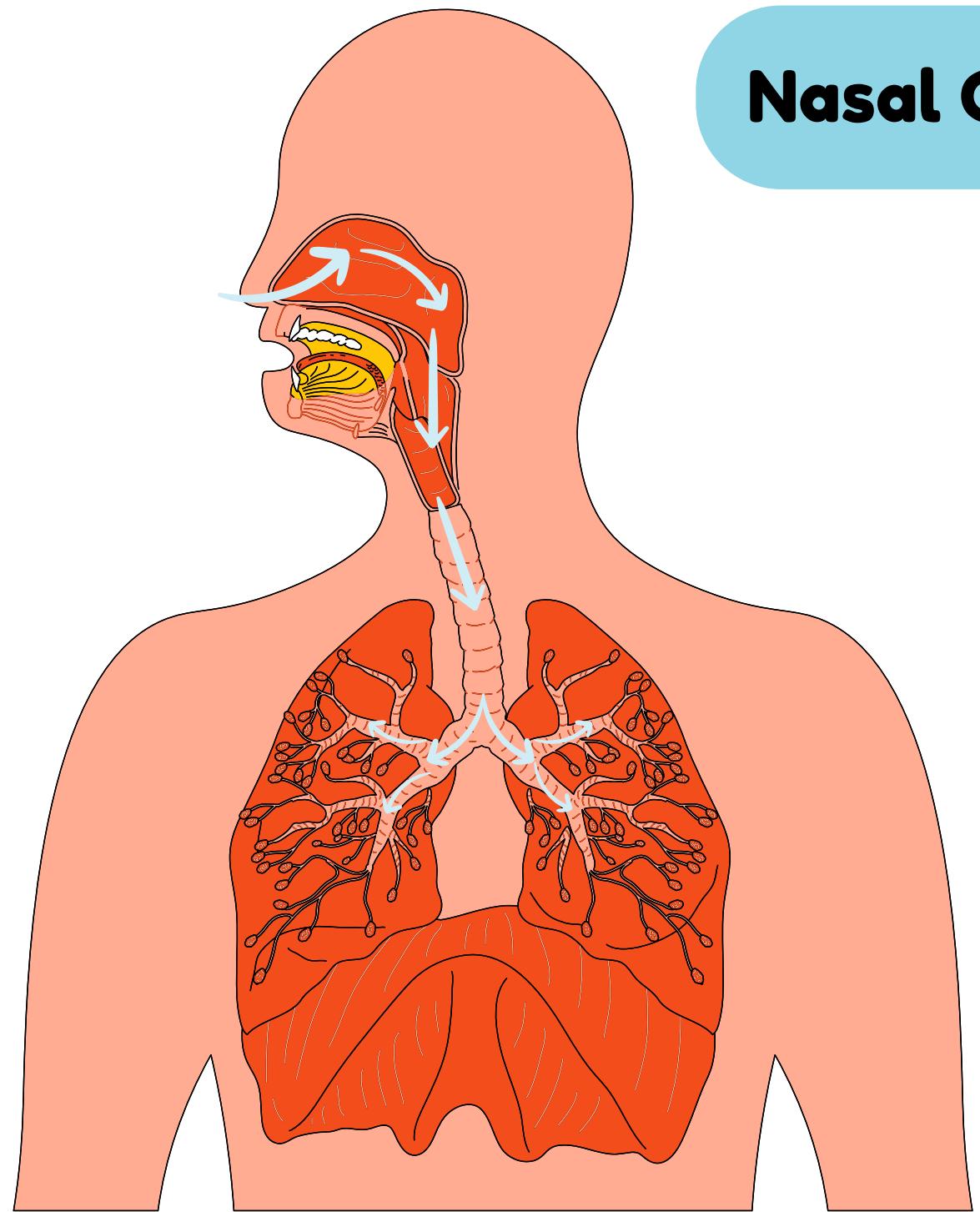


In the alveoli, oxygen diffuses into the bloodstream. Carbon dioxide diffuses out of the bloodstream into the alveoli.



The diaphragm relaxes, pushing air out of the lungs. Air exits through the trachea, larynx, and either the nose or mouth.

AIRWAYS



Nasal Cavity

Pharynx

Larynx

Trachea

Bronchus

Bronchiole

Alveoli



RESPIRATORY DISEASES

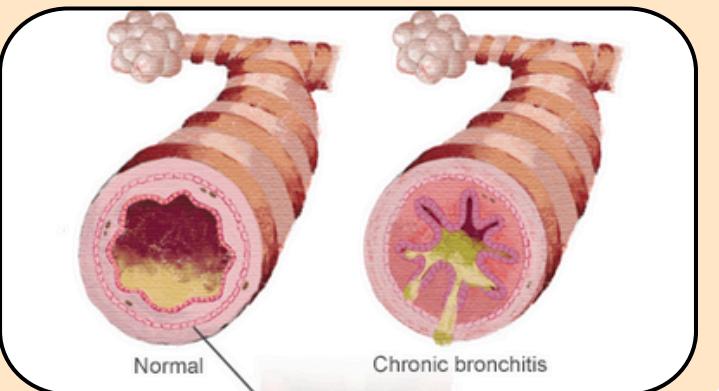
Black Lungs (Pneumoconiosis)

- Inflammation (swelling and irritation) and fibrosis (thickening or scarring) in lung tissue
- Frequently develop in coal workers // might happen in smokers
- Symptoms: cough, shortness of breath & chest tightness
- No treatment



Chronic Bronchitis

- a form of chronic obstructive pulmonary disease (COPD)
- Long term inflammation of bronchus
- Tend to get lung infection more easily
- Common among smokers / lung diseases patients
- Symptoms: cough and mucus >3 months, happens multiple times ≥ 2 years



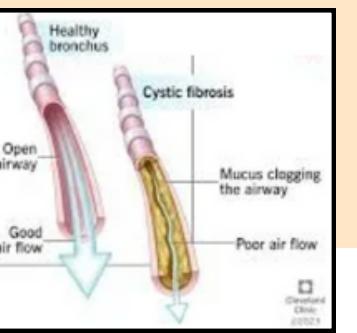
Pneumonia

- air-borne disease
- a form of acute respiratory infection
- alveoli filled with pus and fluid, which makes breathing painful and limits oxygen intake
- largest infectious cause of death in children worldwide
- caused by several infectious agents, including viruses, bacteria and fungi
- Symptoms: fast breathing or lower chest wall indrawing where their chest moves in or retracts during inhalation
- treated with antibiotics

RESPIRATORY DISEASES

Cystic Fibrosis

- genetic faulty protein affects the body's cells, tissues, and the glands that make mucus and sweat.
- Thicker and stickier mucus
- cause death in childhood
- Treatment: newborn screening, medicines, nutrition, and lung transplants
- Becoming exacerbation when lungs problem get worsen



Pulmonary Fibrosis

- alveoli becomes damaged, thickened, and scarred
- Symptoms: short of breath, dry cough, losing appetite & bulging fingers/toes
- **idiopathic pulmonary fibrosis** - unknown cause pulmonary fibrosis is more common
- High risk when: >60years old, active/passive smokers, air pollution

Pneumonitis

- inflammation of alveoli but can also caused by pneumonia
- 3 types: hypersensitivity pneumonitis, drug-induced pneumonitis and radiation-induced pneumonitis
- Symptoms: dry cough, trouble breathing, fever & muscle pain
- may gradually develop lung damage that can't be reversed



Asthma

- common chronic disease
- complex and involves airway inflammation, intermittent airflow obstruction, and bronchial hyperresponsiveness
- Symptoms: wheezing, coughing, short of breath & chest tightness
- By prevent symptoms, minimize morbidity from acute episodes, and prevent functional and psychological morbidity

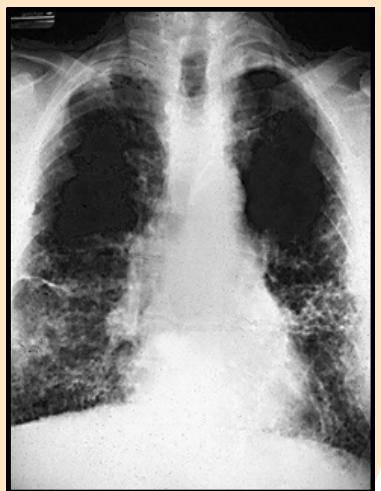


RESPIRATORY DISEASES



Asbestosis

- Exposure to high levels of asbestos fibers that trapped in the alveoli
- progressive disease (gets worse over time) - may not develop initially
- no cure for asbestosis, but treatment can help slow the progression



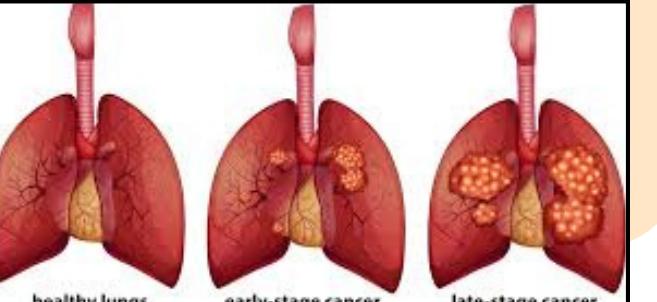
Obstructive Sleep Apnea

- common sleep-related breathing disorder caused by repetitive upper airway collapse causing cessation
- confirmed with polysomnography (PSG) or nocturnal oximetry
- Treatment: Continuous positive airway pressure (CPAP) masks, Mouthpiece, Jaw surgery or removal of tissue



Lung Cancer

- **Non-small cell lung cancer (NSCLC)**
 1. squamous cell carcinoma (SCC) - frequent in men and smokers
 2. adenocarcinoma - common in women and never smoker
- **Small cell lung cancer (SCLC)**
 - grow and spread faster
 - chemotherapy and radiation therapy



Emphysema

- **Chronic Obstructive Pulmonary Disease (COPD)**
- destroys alveolar walls, air trapping, and impaired gas exchange
- caused by prolong exposure of smokes or air pollutions
- Symptom: shortness of breath, chronic cough, and reduced exercise tolerance
- No cure but can be treated with healthy lifestyle, medications or respiratory rehabilitations

**ARE THERE ANY
QUESTIONS?**

