

Science - Biology - Key Stage 3
Cell, Tissues and Organs

Lesson 12 - Respiratory system (Worksheet)

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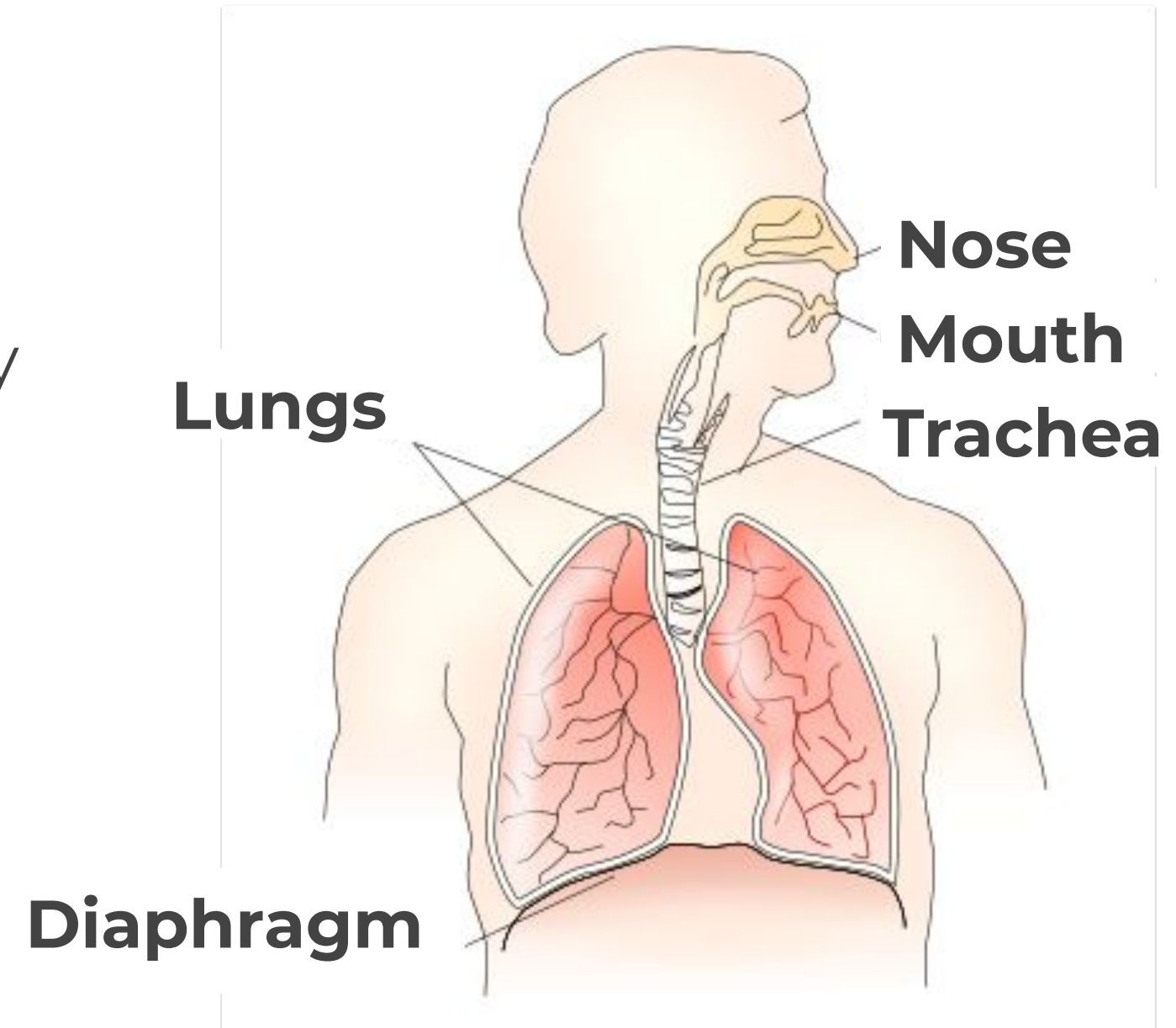


OAK
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The respiratory system

Recap question

1. What is the job of the respiratory system?
2. Name the gases involved in the respiratory system.



The respiratory system

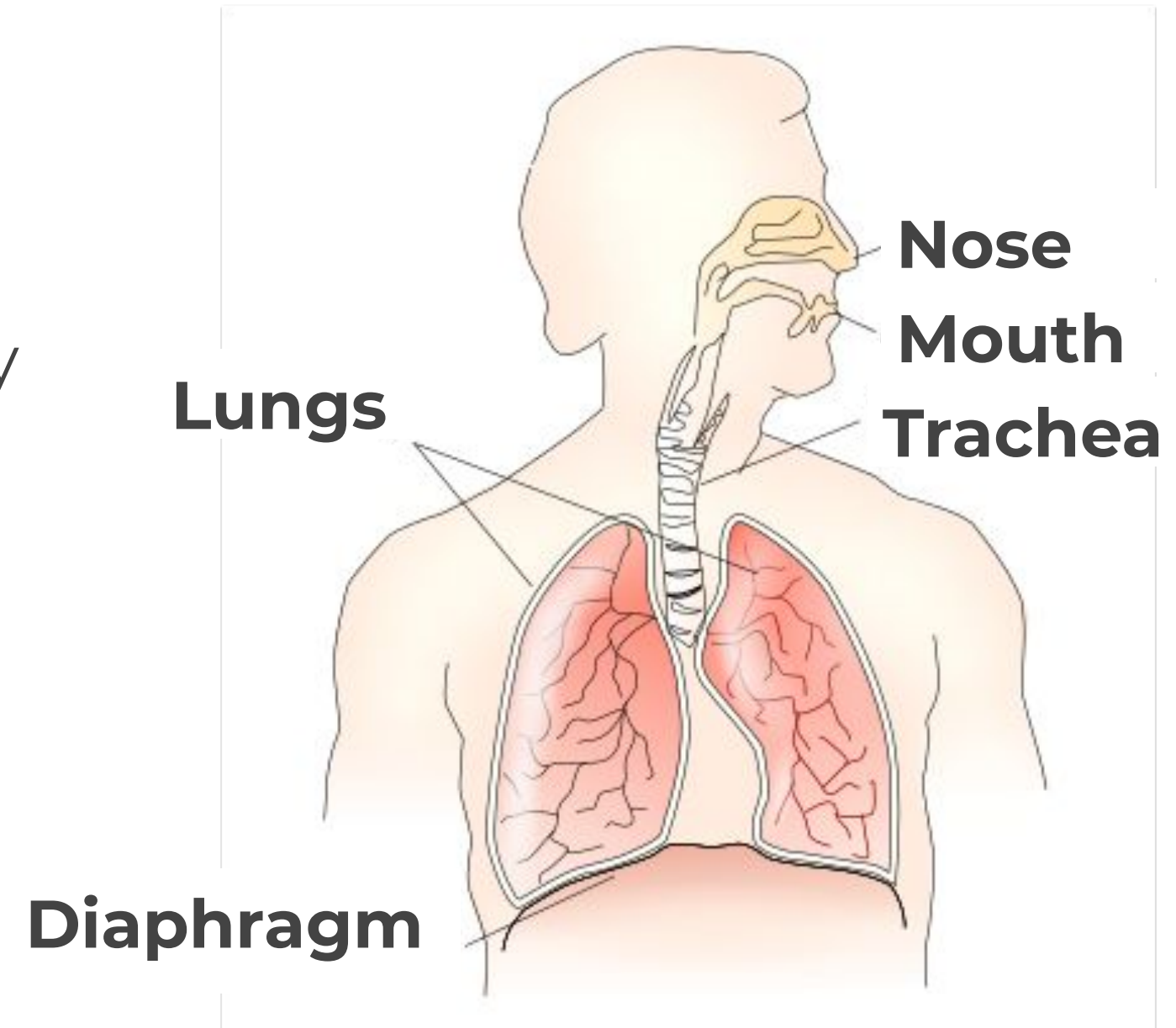
Recap question

1. What is the job of the respiratory system?

Gas exchange

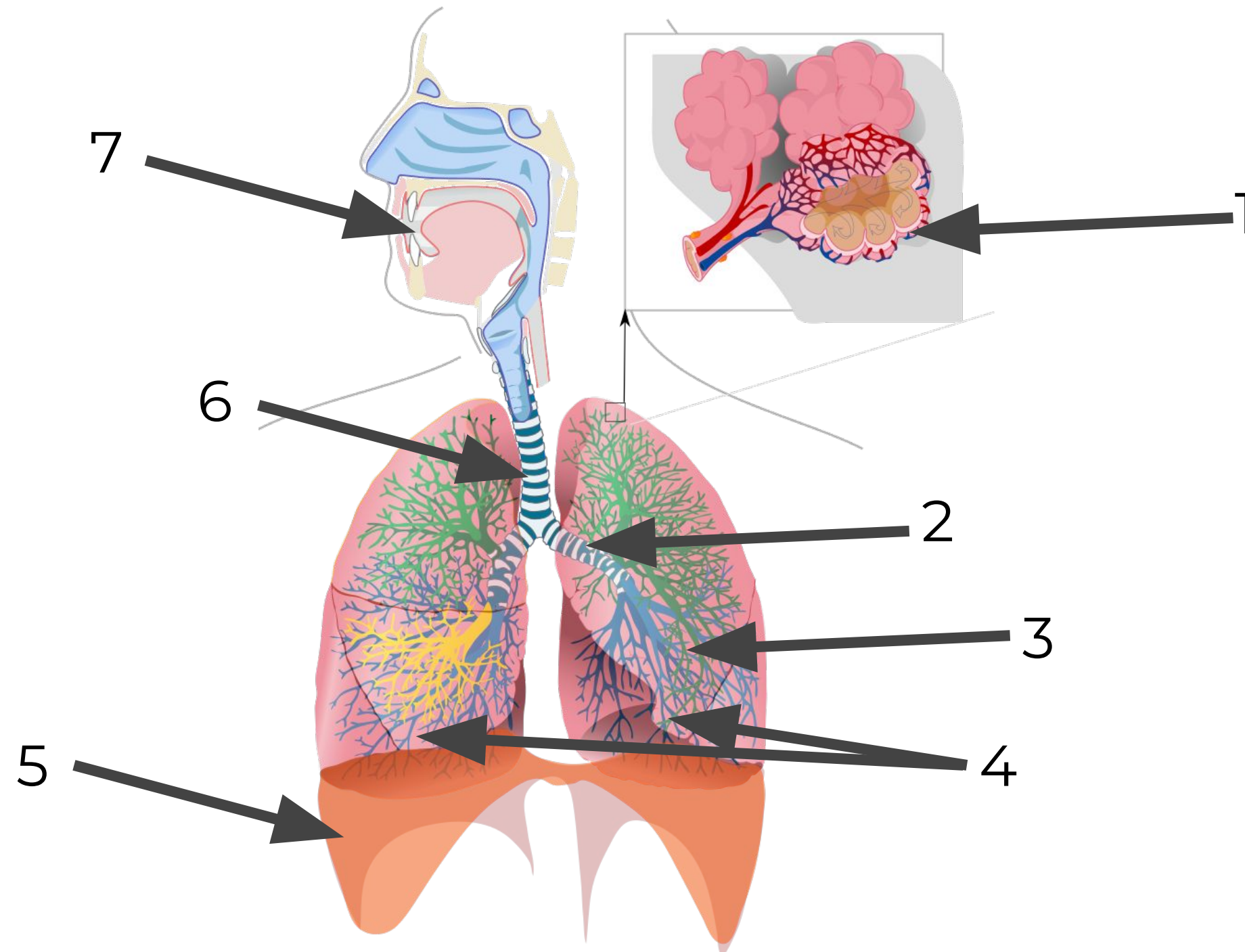
2. Name the gases involved in the respiratory system.

Oxygen and carbon dioxide



Label the diagram

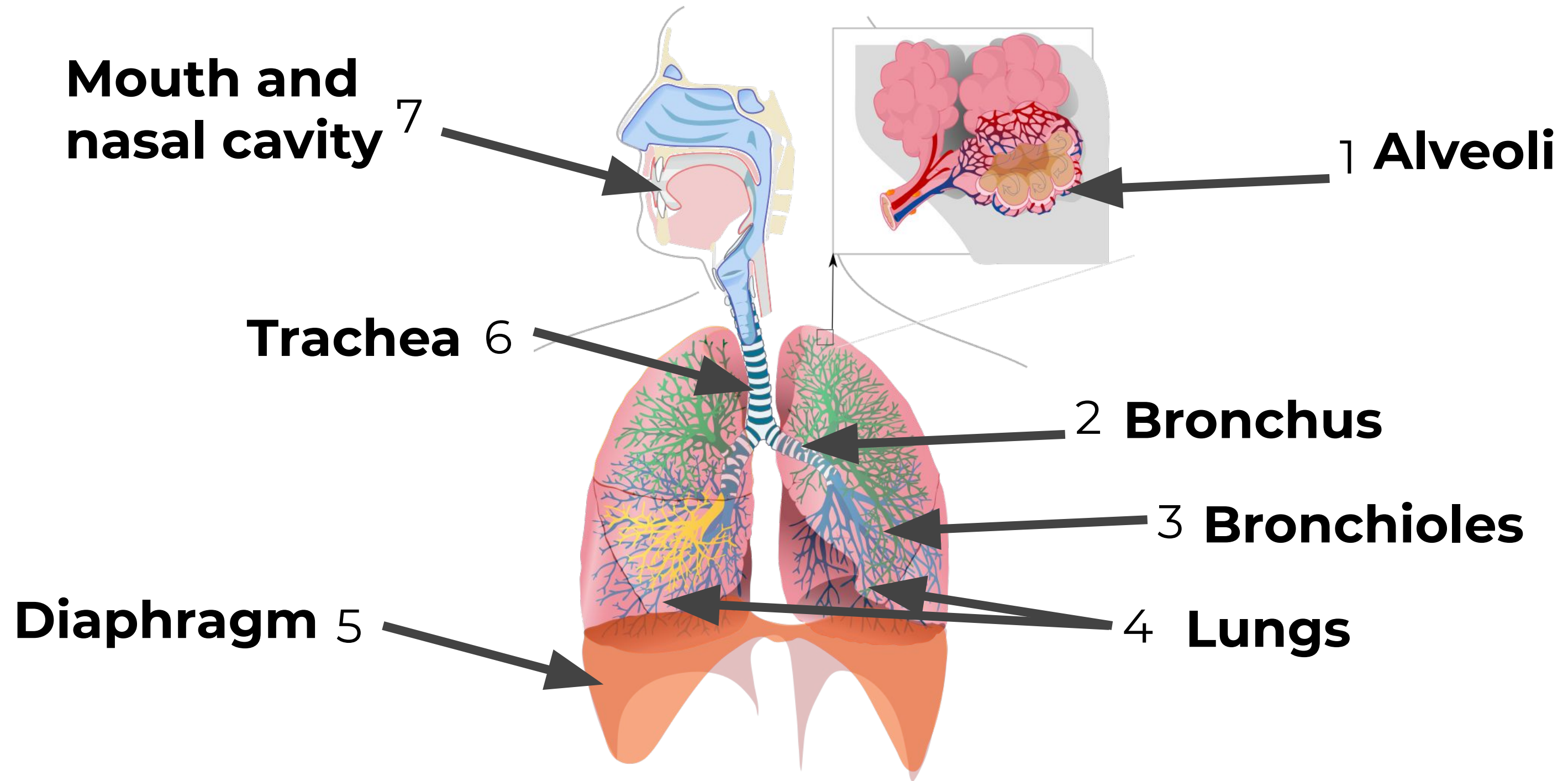
- Mouth and nasal cavity
- Bronchioles
- Bronchus
- Diaphragm
- Alveoli
- Lungs
- Trachea



Respiratory_system_complete_en.svg but without labels., JMarchn [Wikimedia Commons]



Label the diagram



Complete the following gap fill activity:

The lungs are protected by _____. Our body takes in _____ and releases _____ when breathing. The process of taking air into our lungs is known as _____. The process of pushing air out from our lungs is known as _____. Alveolus are surrounded by _____.

Key words: capillaries, oxygen, carbon dioxide, rib cage, exhalation, inhalation



Complete the following gap fill activity:

- 1. The lungs are protected by the **rib cage**.**
- 2. Our body takes in **oxygen** and releases **carbon dioxide** when breathing.**
- 3. The process of taking air into the lungs is known as **inhalation**.**
- 4. The process of pushing air out from our lungs is known as **exhalation**.**
- 5. Alveoli are surrounded by **capillaries**.**



Describe how the parts of the digestive system and parts of the respiratory system work together.

Link to:

- **Respiration (explain in terms of reactants and products)**
- **life processes (link to digestive and respiratory system)**
- **Give specific example of organs in each system**

The digestive system breaks down food molecules to make them small enough to diffuse into the...

The respiratory system involves inhaling oxygen...

Key words: energy, oxygen, carbon dioxide, water, glucose, inhale, exhale, alveoli



Describe how the parts of the digestive system and parts of the respiratory system work together.

The **digestive system** breaks down food molecules to make them small enough to **diffuse** from the **small intestine** into the bloodstream. **Glucose** is an example of a food molecule that will diffuse in the blood and be transported around the body. The respiratory system involves **inhaling oxygen**, which will diffuse into the bloodstream and be transported to cells. **Glucose** will **react** with **oxygen** in cells, producing **energy, carbon dioxide and water**. This is known as **respiration**. The carbon dioxide will diffuse from the cell into the blood, and will diffuse out of the bloodstream into the **alveoli**, into the **lungs** and will be **exhaled**. Therefore, linking the digestive system and the respiratory system as they are **reliant on one another** to fulfil the following life processes: **nutrition and respiration**.

