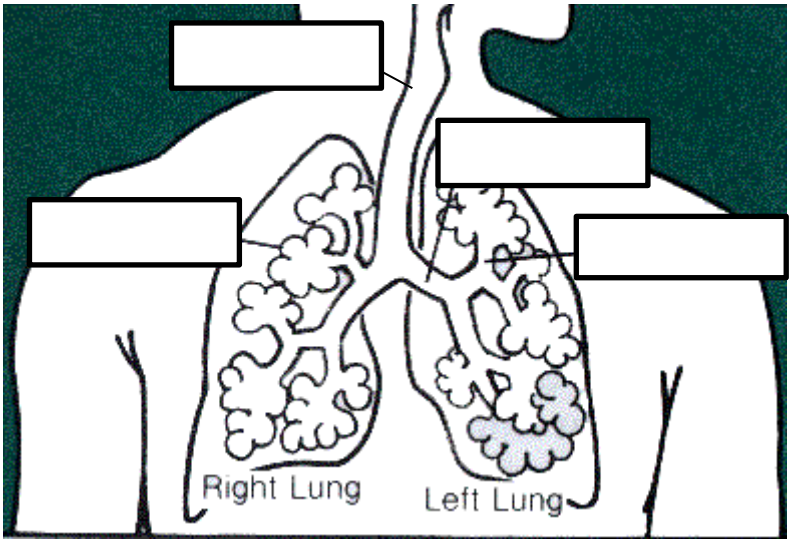
# The Lungs

1. Read the passage.

Air passes from the nose or mouth into the **trachea**, or wind pipe. The **trachea** splits into two bronchi (the plural for bronchus), one for each lung. Each **bronchus** splits into smaller **bronchioles**, like branches of a tree. At the end of the **bronchioles** are the **alveoli**, sacs of air where gas exchange takes place.

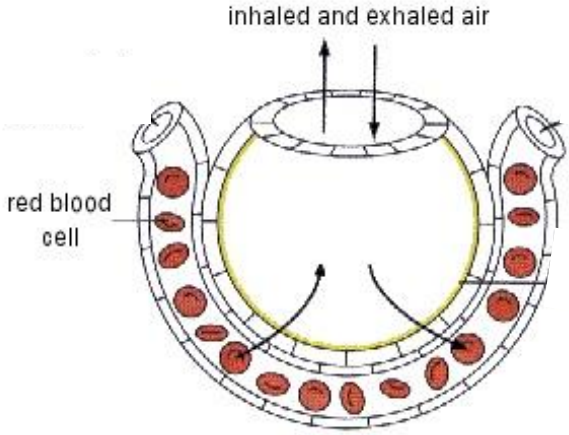
2. Label the diagram using the words in bold.




3. Read the passage

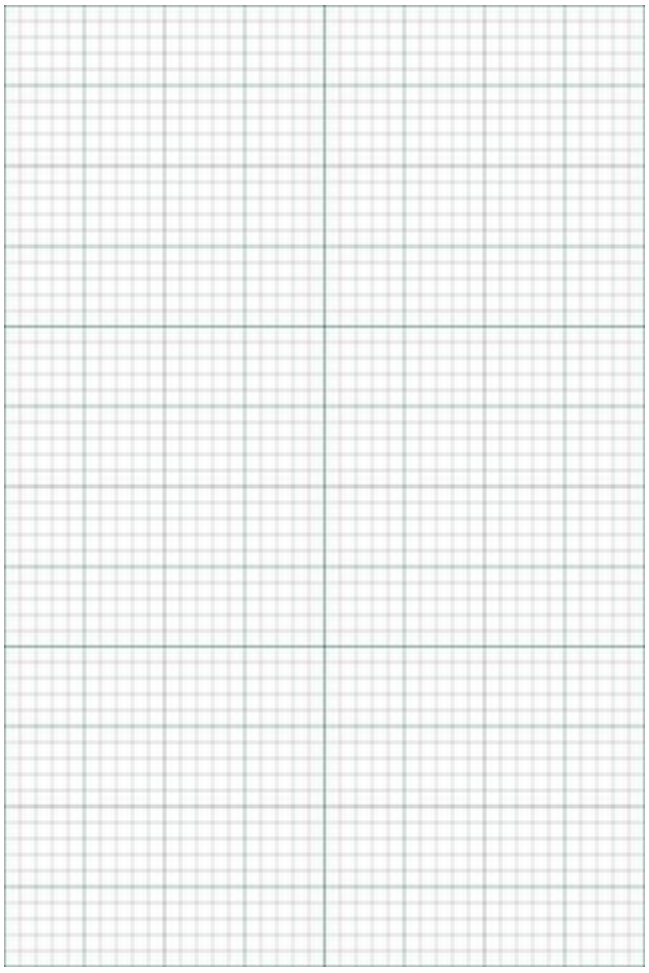
The job of the lungs is to allow gas exchange. Oxygen enters the blood and carbon dioxide leaves. The lungs are specialised for this job. The alveoli have a large surface area, so there is lots of space for gases to move. There is a good blood supply and the walls of the alveoli are thin to allow quick diffusion of gases.

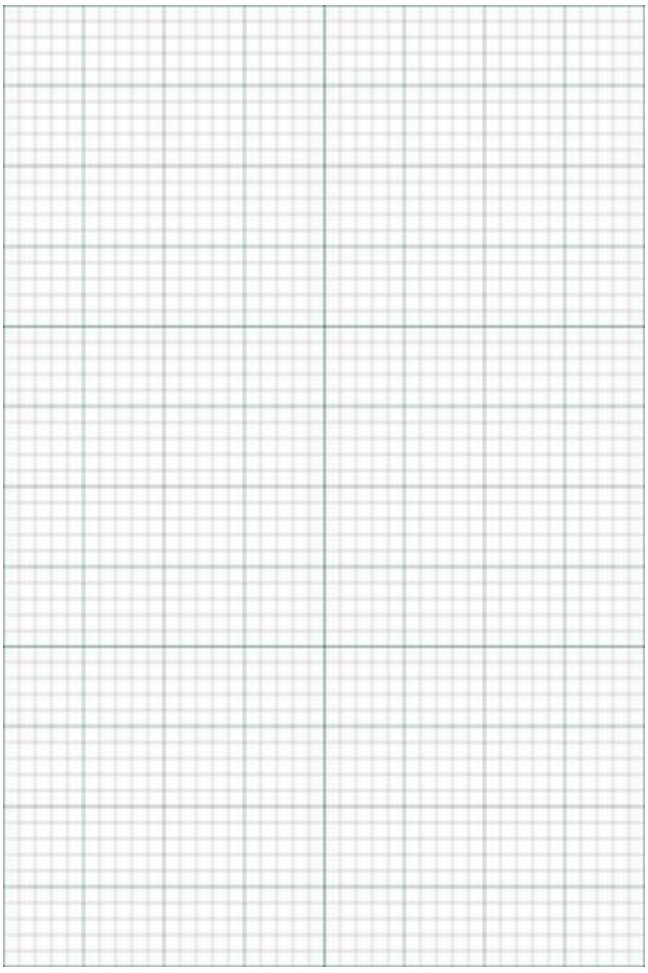
4. Label the diagram. Add **three** ways the lungs are specialised for gas exchange and say which **two** gases are moving in and out of the blood.



5. Look at the table showing the composition of inhaled and exhaled air. Draw two graphs, one for each table.
   Remember:
   - Bar chart or line graph?
   - Scale
   - Labels
   - Title

| Gas | Inhaled air | Exhaled air |
|---|---|---|
| Nitrogen | 58% | 48% |
| Water vapour | 20% | 30% |
| Oxygen | 21% | 16% |
| Carbon dioxide | 0.04% | 4% |





6. Explain why it is dangerous to breath in and out of a plastic bag too many times

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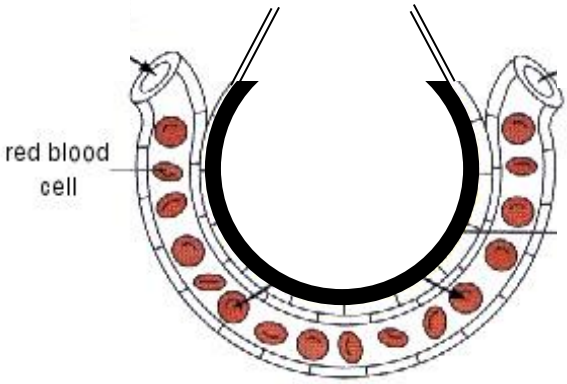
# Lung Disease

**Explain** how these changes make the lungs less good at gas exchange.




1. When you smoke a cigarette, tar enters the lungs. It coats the alveoli with a layer of tar.

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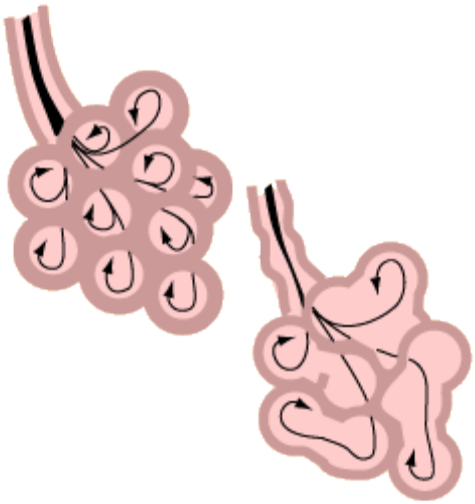
2. Emphysema is a disease smokers develop. The walls of the alveoli break down.



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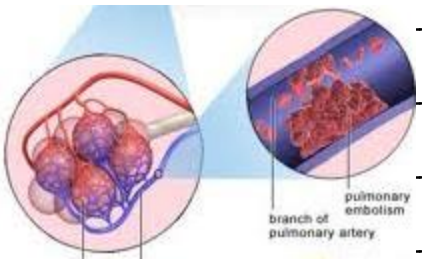
3. Very rarely, people on a long flight get a blood clot. If the blood clot blocks an artery supplying the lungs, the person may die.

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