Notes: Mechanics of Breathing

# Inhalation

* **Inhalation:**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** muscles contract
		- Ribs go **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** contracts
		- Diaphragm goes **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of lungs **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** inside lungs **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ Air rushes **\_\_\_\_\_\_**



# Exhalation

* + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** muscles **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- Ribs go **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** relaxes
		- Diaphragm goes **\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**of lungs **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**inside lungs **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ Air rushes **\_\_\_\_\_\_\_\_\_\_\_\_**



# Diffusion

* During diffusion:
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**moves **\_\_\_\_\_\_\_\_\_\_\_\_** the blood and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** moves **\_\_\_\_\_\_\_\_\_\_\_\_\_** of the blood.
* The blood then carries the oxygen to the cells
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** moves **\_\_\_\_\_\_\_\_\_\_\_\_**of the blood (into the cells) and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** moves **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**the blood (out of the cells).
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**is brought back to the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# Composition of Air

* The air we **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**is a mixture of gases:
	+ Nitrogen (N) 78%
	+ Oxygen (O2) 21%
	+ Carbon Dioxide 0.04%
	+ Other gases < 1%
* The air we **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**is also a mixture of gases:
	+ Nitrogen 78%
	+ Oxygen 16%
	+ Carbon Dioxide 5%
	+ Other <1%

Why don’t the concentration of nitrogen and “other” gases change?

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