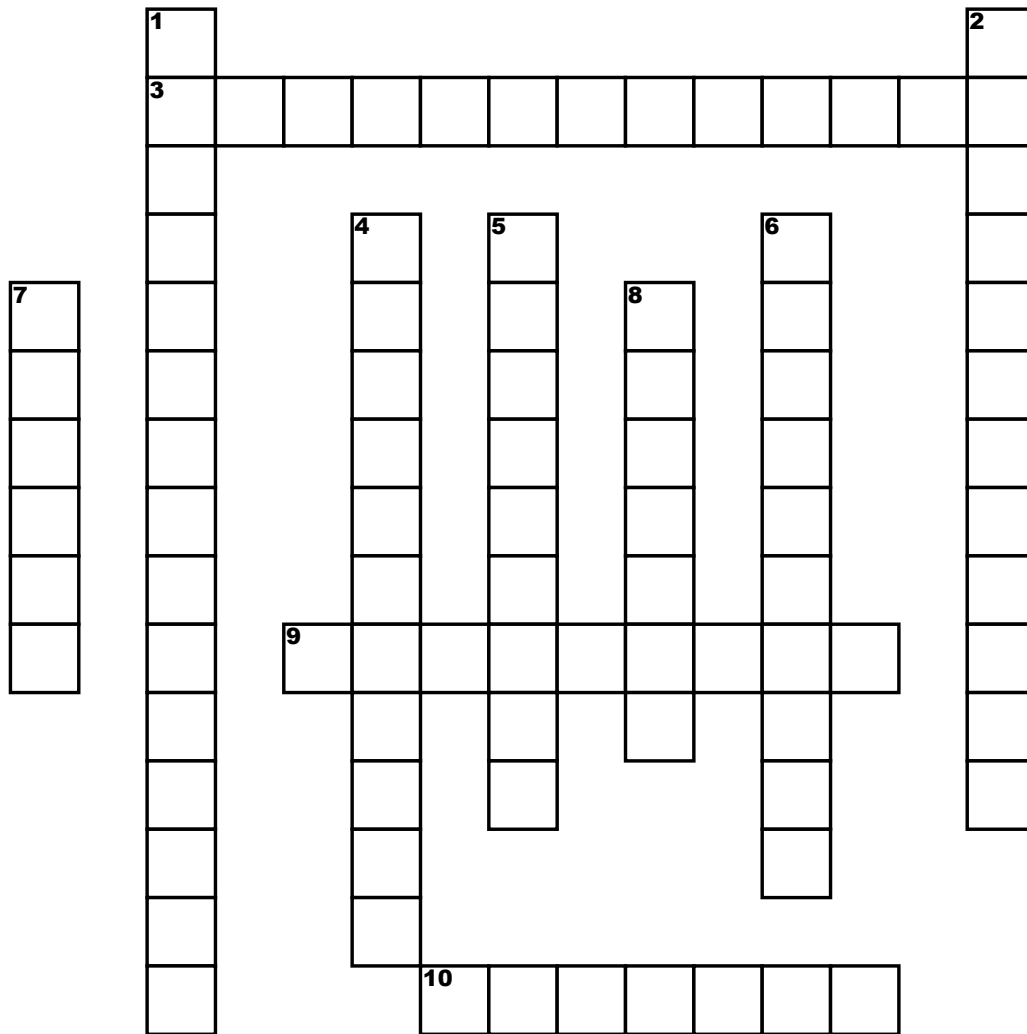


# Gas Exchange Surfaces



## **Across**

**3.** Gas by-product of respiration

**9.** Which one-cell-thick blood vessel comes in contact with the alveolar walls to increase gas exchange in the lungs by increasing surface area?

**10.** What is the term to describe the release of energy from glucose by combining it with oxygen? (Glucose + Oxygen = Carbon Dioxide + Water + Energy)

## **Down**

**1.** The process by which dissolved molecules move across a cell membrane from a lower to higher concentration (concentration gradient) using energy obtained from respiration.

**2.** Uses the protein, haemoglobin, to carry oxygen from the lungs around the body and carry carbon dioxide to the lungs away from the body

**4.** The cellular process which releases energy from the macronutrients (carbohydrate, fat, protein)

**5.** The movement of gas particles, solvent or solute, from an area of high concentration to an area of low concentration

**6.** What term describes a process (e.g respiration) that releases energy

**7.** Needed alongside glucose for respiration to take place

**8.** What parts of the lungs does gas exchange occur in humans?

## **Word Bank**

**Red Blood Cell**

**Alveoli**

**Respiration**

**Capillary**

**Oxygen**

**Diffusion**

**Exothermic**

**Aerobic**

**Active transport**

**Carbon dioxide**