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| Respiratory System**Topic 2 – Respiration and the Respiratory system**http://www.lessontutor.com/resp8.gif | b) Test for Carbon Dioxide:

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| --- | --- | --- |
| Name of Gases in air | % in air inspired  | % in air expired |
|  |  |  |
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|  |  |  |

 | Oxygen diffuses into the blood because there is a high concentration of oxygen in the \_\_\_\_\_\_\_\_ and a low concentration of oxygen in the \_\_\_\_\_\_\_\_\_\_\_.Carbon dioxide diffuses into the lung because there is a high concentration of carbon dioxide in the \_\_\_\_\_\_\_\_\_\_ and a low concentration in the\_\_\_\_\_\_\_\_\_The Capillaries are able to let gasses diffuse in and out because they have such \_\_\_\_\_\_\_\_\_\_ walls. |
| Alveoli**What makes the lungs so efficient**? | Cilianares |    |
| PUL_diaphragm_breathingInspiration  | PUL_diaphragm_breathingExpiration  | How can we mimic breathing in the lab? What are the limitations? |
| Three harmful substances in smoke and their effects:Three SMOKING related diseases | Respiration 1. write the WORD equation for **Aerobic** respiration
2. write the WORD equation for **Anaerobic** respiration
 | Investigating the energy released as heat during respirationHow do you kill PEAS?Why would we use another flask with dead peas and disinfectant? |
| What is the difference between breathing and respiration?What is the advantage of aerobic respiration?What is an advantage of ANAEROBIC respiration?What is a disadvantage of ANAEROBIC respiration?What is oxygen debt? | **Word equations to memorise** **Aerobic respiration****Glucose + Oxygen = Carbon dioxide + water (+ chemical energy and heat)****Anaerobic respiration****Glucose = Lactic Acid (+ a little chemical energy and heat)****Yeast : Glucose = Carbon dioxide + Ethanol (+ a little chemical energy and heat)** **Dispersing oxygen debt lactic acid****Lactic acid + Oxygen = Carbon dioxide + Water (+ the remaining chemical energy and heat)** |