

## INDIAN SCHOOL DARSAIT DEPARTMENT OF BIOLOGY



Subject : BIOLOGY Topic : BREATHING AND EXCHANGE OF GASES Date of Worksheet: 22-05-2019

Resource Person: S.Subhaja Nandakumar

Name of the Student:\_\_\_\_\_ Class & Division : XI Div.\_\_ Roll Number : \_\_\_

## **ANSWER THE FOLLOWING**

| Name the disorder due to inflammation of bronchi and bronchioles                      | 1   |
|---|---|
|   |   |
| Where is the enzyme, carbonic annydrase present in high concentration?                | 1   |
| Name the instrument used for clinical assessment of pulmonary functions.              | 1   |
| What is the difference between tidal volume and residual volume?                      | 1   |
| How do we calculate the vital capacity and total lung capacity?                       | 1   |
| Which organ of our respiratory system acts as primary site of exchange of gases?      | 1   |
| Name the muscles which facilitate breathing.  | 1   |
| How is the entry of food prevented from entry into the respiratory tract?             | 1   |
| What is the role of oxyhaemoglobin after releasing molecular oxygen in the tissues?   | 1   |
| Name the principle or process of exchange of gases.                                   | 1   |
| Cigarette smoking causes emphysema. Give reason.                                      | 1   |
| About 97% of O <sub>2</sub> is transported by RBCs in the blood. How is the remaining | 1   |
| 3 % of O <sub>2</sub> transported?  |   |
| Give the name and function of a fluid filled double membranous layer which            | 1   |
| surrounds the lungs.  |   |
| How many oxygen molecules can be carried out by one haemoglobin molecule?             | 1   |
| Name the organ in human respiratory system which produces sound.                      | 1   |
| Name the organs of respiration in the organisms.                                      | 2   |
| (a) Flatworms (b) Birds (c) Frog (d) Cockroach  |   |
| What are the factors that affect the rate of diffusion of gases?                      | 2   |
| State the steps involved in the respiration process.                                  | 3   |
| Explain the neural control of respiration in human                                    | 3   |
|   | What is the difference between tidal volume and residual volume?  How do we calculate the vital capacity and total lung capacity?  Which organ of our respiratory system acts as primary site of exchange of gases?  Name the muscles which facilitate breathing.  How is the entry of food prevented from entry into the respiratory tract?  What is the role of oxyhaemoglobin after releasing molecular oxygen in the tissues?  Name the principle or process of exchange of gases.  Cigarette smoking causes emphysema. Give reason.  About 97% of O2 is transported by RBCs in the blood. How is the remaining  3 % of O2 transported?  Give the name and function of a fluid filled double membranous layer which surrounds the lungs.  How many oxygen molecules can be carried out by one haemoglobin molecule?  Name the organ in human respiratory system which produces sound.  Name the organs of respiration in the organisms.  (a) Flatworms (b) Birds (c) Frog (d) Cockroach  What are the factors that affect the rate of diffusion of gases?  State the steps involved in the respiration process. |