



INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF BIOLOGY
CLASS X
LIFE PROCESSES
RESPIRATION
WORK SHEET 2

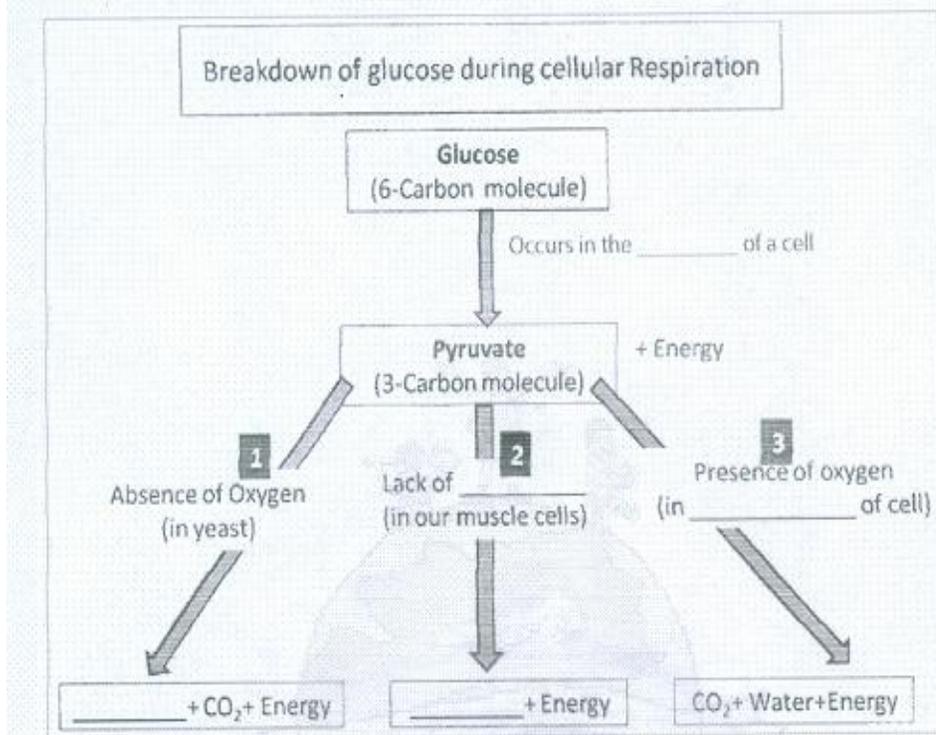
- 1 *Breathing and respiration are not synonymous. Why ?* 1
- 2 *Why does breathing rate increase at high altitudes or at high mountains?* 1
- 3 *What is residual volume of air in respiration?* 1
- 4 *Gills ,lungs ,skin ,trachea are respiratory organs of different organisms .
Mention any three common features.* 1
- 5 *Name the first three carbon compound of glucose breakdown during
respiration. Where does it take place?* 1
- 6 *What is anaerobic respiration? What happens during anaerobic
respiration in yeast?* 1
- 7 *Name the three carbon compound formed during anaerobic respiration in
muscle.* 1
- 8 *What is the specific reason for muscle cramps ?* 1
- 9 *Which pathway is common to both aerobic and anaerobic respiration?* 1
- 10 *How does diaphragm help in inhalation ?* 1
- 11 *What is the significance of residual volume of air that lungs always
contain?* 1
- 12 *Write a brief note about the nasal cavity.* 2
- 13 *Explain the role of alveoli in the lungs with respect to its structure and
function.* 2
- 14 *What type of respiration take place in human muscles during vigorous
exercise and why ?* 2
- 15 *What are the major gaseous exchange activities in plants during the day
and night?* 2
- 16 *1. Name the source of oxygen for terrestrial animal and aquatic animals. 3
2. Why the rate of breathing in aquatic organisms are faster
than terrestrial animals.*
- 17 *Briefly explain the breathing cycle ,specifically during air is taken in .* 3
- 18 *From the two lists below ,match each structure with its correct function ,
associated with respiratory system in human being.* 3

Structure	Function
1. The nasal cavity	1. Produce the sound
2. Epiglottis	2. Carries air down the lungs
3. Larynx	3. warm ,moisten and filter the air
4. Alveoli	4 Separate thorax from the abdomen
5. Diaphragm	5. Prevent entry of food to trachea
6. Trachea	6. Gas exchange takes place

19 Draw a neat well labeled diagram depicting human respiratory system.
 Explain in brief the role of lungs in the exchange of gases.

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From the flow chart given above answer the following questions.

- What is the source of glucose molecule involved in cellular respiration in plants?
- What is the source of glucose molecule involved in the cellular respiration in animals?
- Out of the three types of reactions given in the flow chart, which reaction can be termed as anaerobic? (write the number specified in the chart)
- Out of the three types of reactions given in the flow chart, which reaction can be termed as aerobic? (write the number specified in the chart)
- Name the three carbon compound formed during anaerobic respiration in muscle.