



**INDIAN SCHOOL MUSCAT**  
**SENIOR SECTION**  
**DEPARTMENT OF BIOLOGY**  
**CLASS XI**  
**RESPIRATION**  
**WORKSHEET-17**

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1. What are respiratory substrates? Write the most common respiratory substrate. 1
2. Which are the organs for gaseous exchange in plants? 1
3. Name the final electron acceptor in aerobic respiration. 1
4. Mention the location of Electron Transport System in mitochondria. 1
5. Explain the term “Energy Currency”. Which substance acts as energy currency in plants and animals? 2
6. Different substrates get oxidized during respiration. How does Respiratory Quotient (RQ) indicate which type of substrate, i.e., carbohydrate, fat or protein is getting oxidized? 2
7. Fo-F1 particles participate in the synthesis of \_\_\_\_\_. 2
8. What is meant by the statement “aerobic respiration is more efficient.”? 2
9. Why is respiratory pathway referred to as an amphibolic pathway? Explain. 3
10. RuBP carboxylase, PEPcase, Pyruvate dehydrogenase, ATPase, cytochrome oxidase, Hexokinase, Lactate dehydrogenase. Select/choose enzymes from the list above which are involved in
  - a. Photosynthesis
  - b. Respiration
  - c. Both in photosynthesis and respiration 3
11. Calculate the efficiency of respiration in the living system. 3
12. Explain the major steps in Kreb’s cycle. Where does this process occur in a cell? 5