



**INDIAN SCHOOL AL BURAIMI**  
**BIOLOGY WORKSHEET**

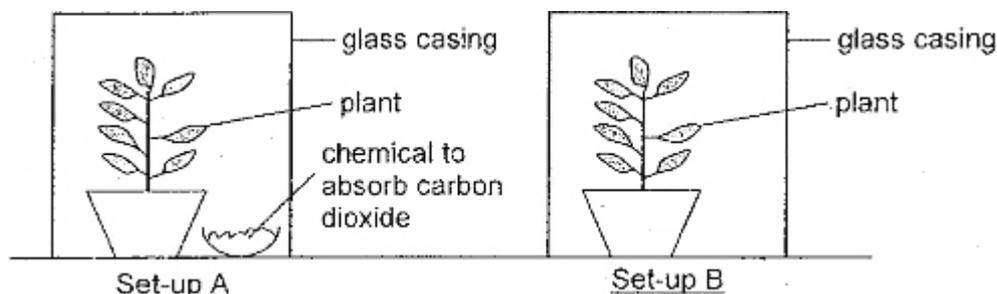
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WORKSHEET - 1

**Lesson 6. LIFE PROCESSES**

**Topic: Nutrition**

1. (a) Explain with the help of diagram, how amoeba takes its nutrition and label the parts used for this purpose. Mention any other purpose served by this part other than nutrition. What is the mode of nutrition in Amoeba?  
  
(b) Assume that you are a veterinary surgeon and you had removed a good length of the small intestine of a bear that was suffering from an intestinal tumour. Now, would you suggest a plant based or a meat based diet for the bear after its recovery? Give reasons for your answer.
2. List the events that occur during the process of photosynthesis.
3. In the human alimentary canal, name the site of complete digestion of various components of food. Explain the process of digestion. Which protein digesting enzyme is present in pancreatic juice?
4. What is the role of HCl in protein digestion? What is emulsification of fats?
5. The inner lining of the small intestine has numerous finger like projections. What are they called? List their functions.
6. a) Name the glands associated with digestion of starch in human digestive tract and mention their role. (b) How is the required pH maintained in the stomach and small intestine?
7. (a) Draw the diagram of cross – section of a leaf and label its following parts - chloroplast, guard cells, lower epidermis and upper epidermis. (b) State the function of guard cells.  
(c) Name the organelle essential for photosynthesis.
8. List the steps of preparation of a temporary mount of leaf to show stomata.
9. Given below is the experimental set-up to establish that one of the atmospheric gases is essential for photosynthesis in plants.



- (a) Name the atmospheric gas which is essential for photosynthesis.
  - (b) What chemical is kept in watch-glass in set-up A and why?
  - (c) What are the results obtained in set-up A and set-up B?
  - (d) Why is a leaf boiled in alcohol before using iodine solution for starch test?
10. If a plant is releasing carbon dioxide and taking in oxygen during the day, does it mean that no photosynthesis is occurring? Justify your answer.



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WORKSHEET - 2

**Topic: Respiration**

1. Give reasons

- a) Rings of cartilage are present in trachea.
- b) Nostrils are lined with mucus
- c) The breathing cycle is rhythmic whereas exchange of gases is a continuous process.

Answer these questions:

2. During breathing cycle what is the advantage of residual volume of air in the lungs?
3. How does opening and closing of stomata take place?
4. (a) Name two different ways in which glucose is oxidised to provide energy in various organism.

OR

Explain the process of breakdown of glucose in a cell

- (i) in the presence of oxygen,
- (ii) in the absence of oxygen.

- (b) Write any three differences between the two ways of oxidation of glucose in organisms.
5. (a) Name the process by which autotrophs prepare their own food.  
(b) List the three events, which occur during this process.  
(c) State the two sources from which plants obtain nitrogen for the synthesis of proteins and other compounds.
6. How is 'respiration' different from 'breathing'?
7. (a) Draw a labelled diagram of the respiratory system of human beings with diaphragm at the end of the chest cavity. (b) List any four conditions required for efficient gas exchange in an organism.
8. Explain the process by which inhalation occurs during breathing in human beings.
9. Name the energy currency in the living organisms. When and where is it produced?
10. Why do fishes die when taken out of water?

HOTS

1. Why is the small intestine in herbivores larger than in carnivores?
2. What is the significance of emulsification of fats?
3. Describe an experiment to show that sunlight is necessary for photosynthesis.
4. What will happen if mucus is not secreted by the gastric glands?
5. Plants have low energy needs as compared to animals. Explain.