

Class 10 Science – Life Processes – Topic: Nutrition in Living Organisms (Worksheet)

ALPHA CLASSES DEOBAND | Session 2026–27 | CBSE Board Pattern

Name: _____ Roll No.: _____ Date: _____

Level 1 – Basic (Build Confidence)

- Q1. What is nutrition? Why is it necessary for living organisms?
- Q2. Define photosynthesis in one sentence.
- Q3. Name the pigment that absorbs sunlight in the leaves of green plants.
- Q4. Write the word equation for photosynthesis.
- Q5. Name the five steps of nutrition in humans in the correct order.
- Q6. What is the role of villi in the small intestine?
- Q7. Name the enzyme present in saliva that digests starch. What does starch get converted into?
- Q8. What is emulsification? Which substance in the human body carries out this process?
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Level 2 – Standard / Exam-Oriented

- Q9. Write the balanced chemical equation for photosynthesis. Name two raw materials and two conditions required for the process.
- Q10. Prepare a comparison table for autotrophic and heterotrophic nutrition with at least four points of difference.
- Q11. Describe the function of each of the following in human digestion: (a) Hydrochloric acid in the stomach (b) Pancreatic juice (c) Intestinal juice (succus entericus)
- Q12. Explain why the inner lining of the small intestine has millions of finger-like projections called villi. What would happen to a person whose villi are severely damaged?

Q13. A plant is kept in complete darkness for 48 hours. Then, one of its leaves is partially covered with aluminium foil and the plant is placed in bright sunlight for 6 hours. The leaf is then tested with iodine solution. Predict and explain the result for both the covered and uncovered parts of the leaf.

Q14. Name the glands associated with digestion in the human body. For each gland, state its secretion and the function of that secretion.

Q15. The stomach produces hydrochloric acid and the enzyme pepsin, both of which can break down proteins. Why does the stomach not digest itself?

Q16. A student claims: “All organisms that eat food are heterotrophs.” Is this statement completely correct? What about insectivorous plants like Venus flytrap — are they autotrophs or heterotrophs? Explain with reasoning.

Do not write solutions on this sheet. Use a separate notebook for working.
