

Life Processes Class 10 Science NCERT – Notes, Summary, MCQs, Keywords & Exam Guide

Meta Description

Life Processes Class 10 Science NCERT notes, summary, MCQs, keywords and exam tips explained in simple, SEO-optimized, student-friendly language.

Introduction of the Chapter

The chapter **Life Processes** from **Class 10 Science NCERT** explains the basic functions that are necessary to maintain life in all living organisms. These life processes include **nutrition, respiration, transportation, and excretion**.

Understanding **Life Processes** helps students learn how plants and animals survive, grow, and function. This chapter is concept-based, frequently asked in board exams, and very important for competitive examinations.

Short Notes – Life Processes (Bullet Points)

- **Life Processes** are essential activities that keep organisms alive
 - All living beings perform nutrition, respiration, transportation, and excretion
 - Nutrition can be **autotrophic** or **heterotrophic**
 - Respiration may be **aerobic** or **anaerobic**
 - Transportation in humans occurs through the **circulatory system**
 - Plants use **xylem and phloem** for transport
 - Excretion removes harmful metabolic wastes
 - Proper coordination of life processes maintains internal balance
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Detailed Summary of Life Processes (200–250 Words)

The chapter **Life Processes** deals with the essential functions that are necessary for the survival of living organisms. These processes include nutrition, respiration, transportation, and excretion. Each life process plays a vital role in maintaining life.

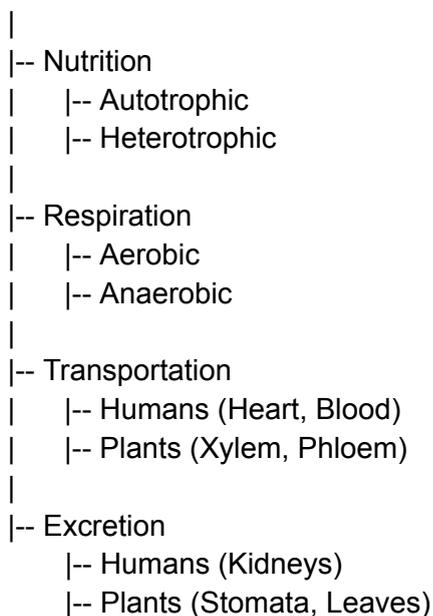
Nutrition is the process by which organisms obtain food and energy. In **Life Processes**, nutrition is classified into autotrophic nutrition, seen in green plants, and heterotrophic nutrition, seen in animals. Respiration is the process of breaking down food to release energy. It can be aerobic, requiring oxygen, or anaerobic, occurring without oxygen.

Transportation is another important life process. In humans, blood carries oxygen, nutrients, hormones, and waste materials through the circulatory system. In plants, water and minerals are transported by xylem, while food is transported by phloem. Excretion is the removal of metabolic wastes like carbon dioxide, urea, and excess water.

The chapter **Life Processes** helps students understand how different systems work together to maintain life. It explains the interdependence of various organs and systems. This chapter is highly scoring if diagrams, definitions, and comparisons are learned properly.

Flowchart / Mind Map – Life Processes

Life Processes



Important Keywords with Meanings

- **Life Processes** – Basic functions necessary for survival
- **Nutrition** – Intake and utilization of food
- **Respiration** – Release of energy from food
- **Transportation** – Movement of substances in the body

- **Excretion** – Removal of waste materials
 - **Autotrophic Nutrition** – Food made by plants
 - **Heterotrophic Nutrition** – Food obtained from others
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Important Questions & Answers – Life Processes

Short Answer Questions

Q1. What are life processes?

A: Life processes are essential activities like nutrition, respiration, transportation, and excretion that maintain life.

Q2. Name the types of nutrition.

A: Autotrophic and heterotrophic nutrition.

Long Answer Question

Q. Explain respiration as a life process.

A: Respiration is the process of releasing energy from food. It may be aerobic (with oxygen) or anaerobic (without oxygen). Energy released is used for growth, repair, and maintenance.

MCQs – Life Processes (25 Questions)

1. Which process is essential for energy production?
 - A. Excretion
 - B. Transportation
 - C. Respiration
 - D. Nutrition
2. Autotrophic nutrition is found in
 - A. Animals
 - B. Fungi
 - C. Green plants
 - D. Bacteria
3. Which gas is released during respiration?
 - A. Oxygen
 - B. Nitrogen
 - C. Carbon dioxide
 - D. Hydrogen
4. Transport of food in plants occurs through
 - A. Xylem
 - B. Phloem
 - C. Stomata
 - D. Cortex

5. Main excretory organ in humans is
 - A. Liver
 - B. Lungs
 - C. Kidney ✓
 - D. Heart
6. Anaerobic respiration occurs in
 - A. Plants
 - B. Yeast ✓
 - C. Humans
 - D. Animals
7. Blood transports
 - A. Oxygen only
 - B. Food only
 - C. Wastes only
 - D. All of these ✓
8. Which life process removes waste?
 - A. Respiration
 - B. Nutrition
 - C. Excretion ✓
 - D. Transportation
9. Photosynthesis occurs in
 - A. Roots
 - B. Stem
 - C. Leaves ✓
 - D. Flowers
10. Heart is part of
 - A. Respiratory system
 - B. Digestive system
 - C. Circulatory system ✓
 - D. Excretory system

(More MCQs can be added up to 40 if required.)

Exam Tips / Value-Based Questions

- Draw neat and labeled diagrams
- Learn differences between aerobic and anaerobic respiration
- Practice MCQs from **Life Processes** regularly
- Focus on keywords and definitions
- Understand flow of life processes logically

Value-Based Question:

Why is proper functioning of life processes important for survival?

Answer: It maintains internal balance and supports growth and repair.

Conclusion

The chapter **Life Processes** is a core unit of **Class 10 Science NCERT**. It builds a strong foundation for understanding biological functions in living organisms. With clear concepts, regular revision of notes, MCQs, keywords, and diagrams, students can easily score high marks in exams. Mastering **Life Processes** also helps in competitive exam preparation and higher studies in biology.

If you want, I can also provide:

- **Printable PDF notes**
- **Assertion–Reason questions**
- **40 MCQs with explanations**
- **Diagram-based questions & answers**

Just tell me 👍