



Year 7 Biology
Curriculum



Year 7 Biology Curriculum -

Introduction

In Year 7 biology lessons, students embark on a journey of discovery, exploring the world of living things. Students will develop an understanding of the characteristics of life, the diversity of organisms, and the interdependence of living things. They will learn about cells, tissues, organs, and systems, as well as the basic needs of all living organisms. By the end of the year, students will have a solid foundation in biology and a newfound appreciation for the natural world.

Learning Objectives:

1. Cells and Organisms:

Organisms:

- Classification of organisms into kingdoms (animals, plants, fungi, bacteria, protists).
- Characteristics of different kingdoms.

Cells:

- What cells are and their basic structure (nucleus, cytoplasm, cell membrane).
- Plant and animal cells : Comparing their structures and functions.
- Specialised cells (e.g., nerve cells, muscle cells, red blood cells).

Tissues:

- Types of tissues (epithelial, connective, muscular, nervous).
- Functions of each tissue type.
- Organs and organ systems.

2. Human

Skeletal System:

- Structure and types of bones.
- Functions of the skeletal system.
- Joints.

Muscular System:

- Types of muscles.
- Movement.
- Antagonistic muscles.



3. Health and Disease

Health:

- Definition of health.
- Factors affecting health (diet, exercise, smoking, alcohol, drugs).
- Healthy lifestyles.

4. Plants

Plant Reproduction:

- Sexual and asexual reproduction in plants.
- Pollination and fertilisation.
- Seed dispersal.

Photosynthesis:

- The process of photosynthesis.
- Importance of photosynthesis for plants and animals.

5. Animals

Animal Behaviour:

- Innate and learned behaviours.
- Examples of animal behaviours (e.g., migration, courtship, territorial behaviour).

Adaptions:

- How animals adapt to their environments (e.g., camouflage, hibernation, migration).

6. Ecosystem

- Food chains and food webs.
- Producers, consumers, and decomposers.

Evaluation and Review

The curriculum will be reviewed annually to ensure its effectiveness. Feedback from students, teachers, and parents will be considered in the review process.

Updated August 2024

Next review: August 2025