

DETAILED CONTENTS

Each chapter of the book consists of exercises in various forms

BE PROMPT

- Filling in the blanks
- True or False
- Multiple choice questions (MCQs)
- Identifying the error(s) in the given statements

SHORT AND PRECISE

- Flowcharts
- Giving reasons
- Short answer questions

AT LENGTH

- Explaining the terms
- Differentiating between concepts
- Long answer questions
- Identifying the error(s)

Chapter Name	Details of Contents	Activities	Some More Assessment Tools
1. Tissue	<p>PLANT TISSUES</p> <ul style="list-style-type: none"> • Meristematic Tissue • Permanent Tissue <p>ANIMAL TISSUES</p> <ul style="list-style-type: none"> • Epithelial Tissue • Connective Tissue • Muscular Tissue • Nervous Tissue 	<p>1.1 To study permanent slides of plant tissues</p> <p>1.2 To prove that water is conducted through xylem in a plant body</p> <p>1.3 To show that phloem transports food material</p> <p>1.4 To study permanent slides of animal tissues</p>	<ul style="list-style-type: none"> • Observe and perform: Identify the diagram and label it. • Apply your learning: 1. Do you think lymph can function as blood and blood can function as lymph? 2. Make a list of voluntary and involuntary functions performed by your body. • Life skills: Take care of the greenery around you. • Integrate your learning: Integrate with history—Make a report on the discovery of different types of tissues. • Projects and activities: 1. Prepare a chart on animal tissues. 2. Prepare a PowerPoint presentation on plant tissue culture. • Review Your Learning: Worksheet
2. Kingdom Classification	<p>SYSTEMS OF CLASSIFICATION</p> <ul style="list-style-type: none"> • Artificial System • Natural System <p>KINGDOM MONERA</p> <ul style="list-style-type: none"> • Useful Bacteria • Harmful Bacteria <p>KINGDOM PROTISTA</p> <ul style="list-style-type: none"> • <i>Amoeba</i> <p>KINGDOM FUNGI</p> <ul style="list-style-type: none"> • Useful Fungi • Harmful Fungi <p>KINGDOM PLANTAE</p> <p>KINGDOM ANIMALIA</p> <p>INVERTEBRATES</p> <ul style="list-style-type: none"> • Porifera (porous animals) • Coelenterata or Cnidaria (hollow animals) • Platyhelminthes (flatworms) • Nematelminthes or Nematoda (roundworms) • Annelida (segmented worms) • Arthropoda (animals with jointed legs) • Molluscs (animals with shells and soft bodies) • Echinodermata (animals with spiny skin) <p>VERTEBRATES</p> <ul style="list-style-type: none"> • Pisces (fish) • Amphibia (animals that live on land and in water) • Reptilia (animals that creep or crawl) • Aves (animals with feathers) • Mammalia (animals that produce milk) 	<p>2.1 To observe the growth of bread mould</p> <p>2.2 To study fungus on a piece of chapati</p> <p>2.3 To make a presentation on invertebrates</p> <p>2.4 To study the characteristic features of birds and reptiles</p> <p>2.5 To study the characteristic features of some common animals</p>	<ul style="list-style-type: none"> • Observe and perform: Identify the figures and answer the questions based on them. • Apply your learning: 1. We feel hot in summers and cold in winters. Explain. 2. Discuss the differences in reproduction in unicellular and multicellular organisms. • Life skills: Visit a place where you can see a variety of life. Discuss your experience in class. • Integrate your learning: Integrate with geography—learn about the native animals of any two countries. • Projects and activities: 1. Make a project report on kingdom Animalia. 2. Make a model of binary and multiple. • Review Your Learning: Worksheet

Chapter Name	Details of Contents	Activities	Some More Assessment Tools
3. Plant Life	PHOTOSYNTHESIS <ul style="list-style-type: none"> • Site of Photosynthesis • Factors Affecting Photosynthesis • Significance of Photosynthesis TRANSPORT OF FOOD IN PLANTS <p>WHY DO LIVING ORGANISMS RESPIRE?</p> TYPES OF RESPIRATION <ul style="list-style-type: none"> • Aerobic Respiration • Anaerobic Respiration RESPIRATION IN PLANTS	3.1 To show that carbon dioxide is necessary for photosynthesis 3.2 To show that green plants produce oxygen during photosynthesis 3.3 To show that light is necessary for photosynthesis 3.4 To test the presence of starch in a leaf 3.5 To show that chlorophyll is necessary for photosynthesis 3.6 To show that germinating seeds respire 3.7 To show that heat is released during respiration 3.8 To show that plants take in oxygen during respiration	<ul style="list-style-type: none"> • Observe and perform: Identify the part of the leaf and label its parts. • Apply your learning: 1. Why photosynthesis does not take place at night? 2. Discuss the similarities between respiration in plants and animals. • Life Skills: Organise a tree planting camp. • Integrate your learning: Integrate with research—identify any five useful plants in your region and discuss their importance in class. • Projects and activities: 1. Visit a nursery and find out about the plants with colourful leaves. 2. Observe the permanent slides of epidermal cells of different leaves and draw their diagrams. • Review Your Learning: Worksheet
4. Human Body	EXCRETORY SYSTEM <ul style="list-style-type: none"> • Excretory Substances • Renal Excretory System • Formation of Urine in Nephron • Common Disorders of the Urinary System OTHER EXCRETORY ORGANS <p>NERVOUS SYSTEM</p> <ul style="list-style-type: none"> • Brain • Spinal Cord • Nerves • Actions of the Body 	4.1 To study the model of the human excretory system 4.2 To study the model of the human nervous system	<ul style="list-style-type: none"> • Observe and perform: Identify the diagrams and label their various parts. • Apply your learning: 1. What can be the health effects of drinking less water? 2. Think of any five involuntary actions performed by your body. • Life skills: Learn about stress and depression, and discuss them in class. • Integrate your learning: Integrate with health and physical education—learn about the exercises that help strengthen the brain. • Projects and activities: 1. Make a PowerPoint presentation on common disorders of urinary system. 2. Make a model. • Review Your Learning: Worksheet
5. Health and Hygiene	CONCEPT OF ALLERGY <p>ALLERGENS</p> <ul style="list-style-type: none"> • Types of Allergen • Mode of Entry of Allergens • Reaction of Body to an Allergen SYMPTOMS OF ALLERGIES <p>TYPES OF ALLERGIES</p> <ul style="list-style-type: none"> • Seasonal Allergies • Perennial Allergies PREVENTION OF ALLERGY <ul style="list-style-type: none"> • Dust Allergens • Food Allergens • Mold Spores ALLERGY TESTING <ul style="list-style-type: none"> • Treatment 	5.1 To learn about immune system 5.2 To observe permanent slides of allergens	<ul style="list-style-type: none"> • Observe and perform: Identify the diseases based on the symptoms shown in the pictures. • Apply your learning: Is lactose intolerance an allergy? Give reason to justify your answer. • Life skills: Create awareness about dust allergy. • Integrate your learning: Integrate with physical education—find out about the role of physical activity in curing allergy. • Projects and activities: 1. On the visit of your school physician, organise a group discussion on the concept of allergy. Prepare a report on the discussion. 2. Prepare a chart on ways to stay healthy and safe. • Review Your Learning: Worksheet