Chapter 4: Getting to Know Plants

CONTENTS 15 exercises · 26 questions

4.1	So Many Kinds of Plants	1 Q
4.2	Shrubs	2 Q
4.3	Herbs and Grasses	1 Q
4.4	Climbers and Creepers	4 Q
4.5	Activity 1 — Spot Plants Around School	1 Q
4.6	Activity 2 — Make Friends with a Plant	1 Q
4.7	Activity 3 — Observe Your Plant Friend Over Time	4 Q
4.8	Activity 4 — Observe Leaves	1 Q
4.9	Activity 5 — Blindfold Smell Experiment	1 Q
4.10	Parts of a Plant	1 Q
4.11	Activity 6 — Get to Know Barks	1 Q
4.12	Let us Reflect — A. Discuss	3 Q
4.13	Let us Reflect — B. Write	3 Q
4.14	Let us Reflect — C. Draw	1 Q
4.15	Let us Reflect — D. Make a Rangoli	1 Q

4.1 So Many Kinds of Plants

Q1 Write the names of trees that you can recognise. Try to remember where you have seen these trees. Which of these trees have you seen near your home or on your way to school?

Sample answer: Trees I recognise include mango, neem, coconut and banyan. I have seen a mango tree near my home and a neem tree on my way to school.

4.2 Shrubs

Q1 Write the names of some shrubs. Have you seen any of the shrubs shown in the pictures?

Sample answer: Some shrubs are hibiscus, rose, tulsi and curry leaf. I have seen a rose shrub in my garden and a tulsi plant at home.

Q2 Do you know what the shrubs are called in your mother tongue?

Sample answer: In Hindi, hibiscus is called 'gudhal', rose is called 'gulab', and tulsi is called 'tulsi'. Names differ by language — ask an elder at home for the names in your mother tongue.

4.3 Herbs and Grasses

Q1 Write the names of some herbs that you have seen and where you have seen them.

Sample answer: Mint and coriander grow in pots on our terrace. I have also seen mustard plants in a field near school. Tomato plants grow in many home gardens.

4.4 Climbers and Creepers

Q1 Guess — Is the snake gourd a creeper or a climber?

Snake gourd is a climber. It uses its thin, flexible stem to climb on fences or other supports. If no support is available, it can also creep along the ground.

Q2 What do you call the snake gourd in your language?

Sample answer: Snake gourd is called 'chichinda' in Hindi and 'padavalanga' in Malayalam. Ask an elder at home what it is called in your language.

Q3 Write the names of some climbers or creepers that you have seen and where you have seen them. Are any of them in the pictures given on page 53? What are they called in your language?

Sample answer: I have seen money plant climbing a wall at home. Pumpkin creeps along the ground in our neighbour's garden. Bottle gourd and jasmine from the pictures grow in gardens nearby. Money plant is called 'money plant' or 'pothos' in most Indian languages too.

Q4 Name the following plants in your language. Say if they are a tree, shrub, climber or creeper. (Marigold / Banthi in Telugu; Neem / Bevugida in Kannada; Jujube or ber / Boroi in Manipuri)

Marigold is a herb (or small shrub). Neem is a tree. Jujube (ber) is a small tree or large shrub. Sample answer for names: Marigold — 'genda phool' in Hindi; Neem — 'neem' in Hindi; Jujube — 'ber' in Hindi.

4.5 Activity 1 — Spot Plants Around School

Q1 Stand next to any tree or shrub in or near your school. Look around as far as you can see — down near your feet too. How many kinds of trees, shrubs, herbs, grasses, climbers or creepers can you spot?

Sample answer: Near our school I spotted two large trees (neem and peepal), a rose shrub, grass on the ground, a mint herb in a pot, and a money plant climbing the fence. Look carefully — small plants near your feet are often herbs or grasses.

4.6 Activity 2 — Make Friends with a Plant

Q1 Choose one plant to make friends with. Observe its leaves, flowers and fruits. Fill in the observation table: How many leaves, flowers and fruits does it have? What are their colours and shapes?

Sample answer: I chose a hibiscus shrub. It has many dark-green oval leaves. It has a few red flowers with five petals each. I could not see any fruit. Water your plant friend every day and note how it changes over time.

4.7 Activity 3 — Observe Your Plant Friend Over Time

Q1 Do you find new leaves growing on the plant? Do the colours of the leaves change as they grow larger?

Sample answer: Yes, new leaves grow at the tips of the branches. New leaves are often lighter or more yellowish-green, and they turn darker green as they grow larger and older.

Q2 Do the old brown leaves fall to the ground?

Yes, old leaves turn yellow or brown and then fall to the ground. This is normal — the plant sheds old leaves and grows new ones.

Q3 Do you find flowers appearing or notice any fruit?

Sample answer: After a few days, small buds appeared on my hibiscus plant and then opened into flowers. After the flower fell, a small fruit began to grow in its place.

Q4 What are other observations you have? Write about your plant in your notebook.

Sample answer: I noticed small ants and a butterfly visiting the flowers. The plant grew slightly taller after two weeks. Write whatever you observe — even small changes are interesting!

4.8 Activity 4 — Observe Leaves

Q1 Observe the leaves in your surroundings. Draw, colour and label them in your notebook. Describe their colour, shape, size, texture and smell to a friend. What statements can we make about leaves after doing this activity?

Sample answer: Leaves come in many different colours (dark green, light green, reddish), shapes (oval, round, long and thin), sizes, and textures (smooth, rough, waxy). Some leaves like tulsi and mint have a pleasant smell, while others are odourless. We can say: all leaves are different from each other in at least some way.

4.9 Activity 5 — Blindfold Smell Experiment

Q1 Blindfold yourself while your friend gradually brings a fruit close to you. From how far can you recognise the fruit with your eyes closed? Was it easier to recognise cut fruit by smell rather than whole fruit? Which fruit could you smell from farthest away?

Sample answer: I could smell a ripe mango from about half a metre away. Cut fruit was easier to recognise than whole fruit because cutting releases more of the smell. Mango and pineapple could be smelled from the farthest away.

4.10 Parts of a Plant

Q1 What are the parts of a plant? Mark different parts of the plant and label them. (Tomato plant picture)

The tomato plant has six parts labelled in the picture: roots (the branching structure underground that absorbs water and holds the plant in the soil), stem (the main upright stalk that supports the plant), leaf (the flat green structures growing along the stem), flower (the small yellow blossoms at the top of the plant), fruit (the red tomatoes growing in clusters), and seed (the tiny seeds visible inside a cut tomato, shown at the bottom right).

4.11 Activity 6 — Get to Know Barks

Q1 Touch and look carefully at the bark of a tree. Make a bark rubbing with paper and a crayon. What do you see? Did you notice any other animals, birds and insects on the plant? What were they doing?

Sample answer: The bark of our school's neem tree felt rough and had deep ridges. The bark rubbing showed a criss-cross pattern of lines. I noticed small ants crawling along the bark and a lizard sitting on it, probably looking for insects to eat.

4.12 Let us Reflect — A. Discuss

Q1 What would happen if there were no plants?

Without plants, there would be no food for animals or humans because we eat plants or animals that eat plants. There would be no clean air, no shade and no wood. Life on Earth could not survive without plants.

Q2 How does the root help a plant to grow?

Roots hold the plant firmly in the soil so it does not fall over. They also absorb water and nutrients from the soil, which the plant needs to grow and make food.

Q3 What is the role of the stem?

The stem holds the plant upright and supports its leaves, flowers and fruits. It also carries water and nutrients from the roots up to the leaves, and food made by the leaves down to the rest of the plant.

4.13 Let us Reflect — B. Write

Q1 List the names of plants that you have seen in your school, park or near your home. Identify what types of plants they are — tree, shrub, herb, grass, climber or creeper.

Sample answer: Neem — tree; Rose — shrub; Tulsi — shrub; Mint — herb; Grass on the lawn — grass; Money plant — climber; Pumpkin — creeper. Look around you and add more plants that you recognise.

Q2 Which particular part of the plant helped you to identify the type of the plant?

The stem helped the most. Trees have a thick, woody trunk; shrubs have several thin woody stems; herbs have soft green stems; grasses have hollow stems; climbers and creepers have thin, flexible stems. The overall size and shape of the plant also helped.

Q3 Describe your favourite plant. Why is it your favourite?

Sample answer: My favourite plant is the mango tree. It has a thick brown trunk, broad green leaves and sweet yellow fruits. I love to sit in its shade and eat its delicious mangoes in summer.

4.14 Let us Reflect — C. Draw

Q1 Draw different types of leaves you have seen around you.

This is a drawing activity. Draw at least four leaves you have seen — try to show their different shapes, sizes and edges (smooth, jagged or lobed). Label each leaf with the name of the plant it came from.

4.15 Let us Reflect — D. Make a Rangoli

Q1 Collect leaves and flowers fallen on the ground. Arrange them in patterns to make a rangoli. You may also create different animal shapes using the collected leaves.

This is a creative activity. Collect only fallen leaves and flowers — do not pluck them. Arrange them in circles or other patterns on the floor to make a colourful rangoli. You can also place leaves together to form the shape of a butterfly, fish or bird.