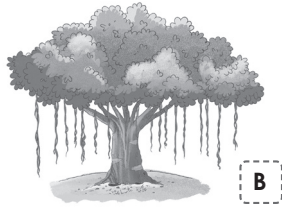
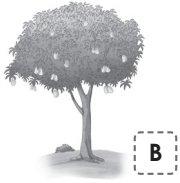


Answers

Theme 4: How We Live Chapter 5: Plants

Main Coursebook

I am ready



Icebreaker

Flower. Accept all relevant responses.

In-text Question:

1. Tap root
2. leaves

In-text Question:

1. True
2. False

I am a learner

- A. 1. c 2. b 3. b 4. b 5. b

- B. 1. True 2. False 3. True
4. False 5. False

- C. 1. Stem, branches, leaves, buds, flowers and fruits.
2. The leaves make food for the plant by photosynthesis. Therefore, leaf is called the kitchen of the plant.
3. Two functions of stem are as follows.
i. It hold the plant upright.
ii. it transports water from roots to other parts of the plant.
- D. 1. The root grows under the ground. There are two types of roots – tap roots and fibrous roots.

A tap root has one thick root. Many smaller roots grow from the main root. Plants, such as carrot, radish, turnip, bean and mustard, have tap roots.

A fibrous root has a number of roots that grow from the end of the stem. It does not have a main root. Plants, such as grass, wheat, rice, onion and banana, have fibrous roots.

2. Leaves of different plants have different shapes, sizes and colours. Some leaves are oval-shaped, while some are heart-shaped. They may have smooth or uneven edges. Lamina of some leaves is waxy, while some other leaves have hairy lamina. This wide variation in appearance of leaves is known as leaf diversity.

I am a thinker

Yes. This statement is true because animals depend on plants. If plants are removed, then all the animals would die.

I am an all-rounder

A. English:

1. flour
2. saw

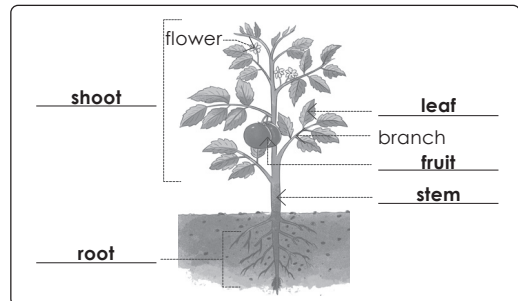
B. Maths: 250

C. Social Studies: Rice

Students' Worksheets

Worksheet 1

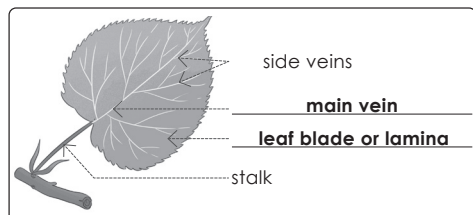
A.



- B. 1. shoot 2. root 3. leaves
4. lamina 5. flower
- C. 1. ROOT 2. STEM 3. LEAF
4. FLOWER 5. FRUIT

Worksheet 2

A.



- B. 1. round-shaped leaf
2. hand-shaped leaf
3. spear-shaped leaf
4. heart-shaped leaf

5. needle-shaped leaf

C. 1. False 2. True 3. False 4. False 5. True

Worksheet 3

- A.
1. Tap root and fibrous root.
 2. Accept all relevant responses.
 3. It is a flat and broad part of the leaf.
 4. It is a process by which the plant's green leaves make food with the help of air, water and sunlight.
 5. A young flower is called a bud.

B.

plants	animals
1. They can make their own food.	1. They eat plants and other animals.
2. They cannot move from one place to another.	2. They can move from one place to another.
3. They breathe through tiny pores on their leaves called stomata.	3. They breathe through lungs, gills or air holes.
4. They reproduce by seeds.	4. They reproduce by laying eggs or giving birth to their young ones.
5. They do not have sense organs.	5. They have sense organs.

C. 1. True 2. True 3. False
4. False 5. True

Worksheet 4

- A. The part of the plant that grows above the ground is stem. (Accept all relevant responses.)

Functions of the stem

A stem has the following functions:

- It keeps the plant upright.
- It provides support to the branches.
- It carries water from the roots to the leaves and other parts of the plant.
- In some plants, stems store the extra food. Examples of such plants are potato, ginger and sugarcane.

- B. The part of the plant that grows under the ground is roots. (Accept all relevant responses.)

Functions of the root

Roots have the following functions:

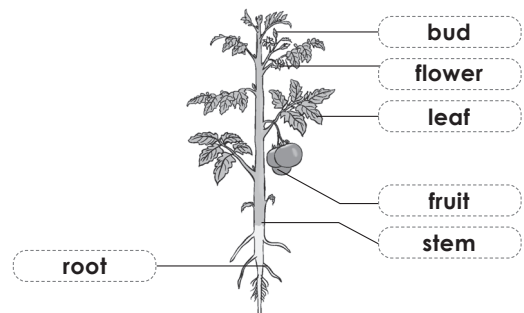
- They fix the plant to the soil.
- They absorb water and nutrients from the soil for the plant.
- Some of these also store food for plants. Examples of such roots are carrots and turnip.

C. 1. Stems 2. Roots 3. Leaves
4. Leaves 5. Stems

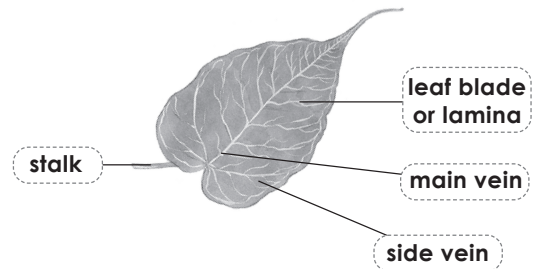
Teacher's Worksheets

Worksheet 1

A.



B.



Worksheet 2

1. The root of a plant grows below the ground. There are two types of roots – tap roots and fibrous roots. But the shoot grows above the ground and it has stems, branches, leaves, buds, flowers and fruits.
2. The stem keeps the plant upright. It provides support to the branches. It carries water from the roots to the leaves and other parts of the plant.
3. When the same type of plant is grown in a large area, it is called a crop. For example, corn, wheat and rice.
4. The green leaves of the plant make food with the help of air, water and sunlight by the process called photosynthesis.
5. Tap root: Carrot, radish and turnip
Fibrous root: Wheat, rice and onion

Theme 5: Our Solar System
Chapter 6: Pride of India: The
Indian Scientist

Main Coursebook

I am ready

National Science Day - 28th February

Earth Day - 22nd April

World Environment Day - 5th June

Icebreaker: EXPERIMENT

In-text Question:

1. Prafulla Chandra Ray
2. Dr Vikram Sarabhai

I am a learner

A. 1. c 2. b 3. a 4. c 5. c

- B. a. botanist; physicist b. epilepsy
c. astronomer d. chemistry
e. India

- C. 1. Prafulla Chandra Ray is known as the Father of Indian chemistry. He founded India's first chemical factory.
2. A P J Abdul Kalam known as the Missile Man of India as he successfully headed a programme that produced a number of missiles for our defence forces.
3. Asima Chatterjee is highly recognised for her work in the fields of medicine and chemistry.
- D. 1. Dr Vikram Ambalal Sarabhai was a physicist and an astronomer (space scientist). He founded the Indian Space Research Organisation (ISRO) in 1969. He is globally known as the Father of the Indian Space Programme. He also set up India's first rocket-launching station at Thumba near Thiruvananthapuram.
2. Sir Jagadish Chandra Bose was a botanist (scientist of plants) and a physicist (scientist of physics). He was the first person to prove that, like animals and humans, plants also can feel.

I am a doer

Accept all relevant responses.

I am an all-rounder

A. **English:**

1. He
2. She

B. **Maths:** 10

C. **Social studies:** Ferdinand Magellan

Students' Worksheets

Worksheet 1

- A. 1. botanist
2. Chemistry
3. rocket
4. A P J Abdul Kalam
5. genetics
- B. 1. Sir J C Bose
2. Prafulla Chandra Ray
3. Dr Vikram Sarabhai
4. A P J Abdul Kalam
5. Har Gobind Khorana
- C. 1. False 2. True 3. True
4. False 5. False

Worksheet 2

- A. 1. Sir J C Bose
2. Asima Chatterjee
3. Har Gobind Khorana
4. Prafulla Chandra Ray
5. Dr Vikram Sarabhai
- B. 1. Chemistry 2. Chemistry
3. Botany and Physics
4. Physics
5. Medicine and Chemistry
- C. 1. C 2. I 3. I 4. I 5. C

Worksheet 3

- A. 1. missiles 2. chemical 3. Thumba
4. medicine 5. astronomer
- B. 1. PHYSICIST 2. CHEMIST
3. ASTRONOMER 4. BOTANIST
5. SCIENTIST
- C. 1. →d 2. →e 3. →a
4. →c 5. →b

Worksheet 4

- A. Accept all relevant responses.
- B. 1. Crescograph is used to measure the growth of plants.
2. Dr Vikram Ambalal Sarabhai was a renowned astronomer.
3. Dr A P J Abdul Kalam served as President of India.
4. Asima Chatterjee developed medicine for malaria and epilepsy.
5. Prafulla Chandra Ray founded the first chemical factory.
- C. 1. True 2. True 3. False
4. False 5. True

Teacher's Worksheets

Worksheet 1

- A. 1. →c 2. →e 3. →b 4. →a 5. →d
- B. 1. Sir J C Bose was a botanist and a physicist. He was the first person to prove that plants also can feel, just like animals and humans.
2. Har Gobind Khorana was a scientist of chemistry of living organisms.
3. A P J Abdul Kalam is known as the Missile Man of India as he successfully headed a programme that produced a number of missiles for our defence forces.

Worksheet 2

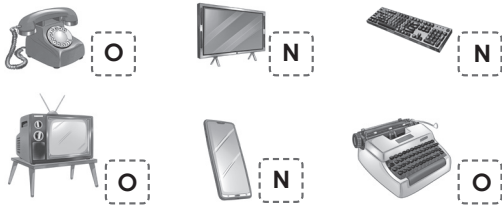
- A. 1. Sir J C Bose
2. Prafulla Chandra Ray
3. medicine
4. Medicine
5. A P J Abdul Kalam
6. space
- B. 1. F 2. T 3. F
4. T 5. F 6. F
7. F

Theme 5: Our Solar System

Chapter 7: Ancient Scientific Inventions of India

Main Coursebook

I am ready



Icebreaker:

1. LUDO 2. CHESS

In-text Question:

1. Charaka Samhita 2. Patanjali

I am a learner

- A. 1. c 2. b 3. a 4. b 5. b
- B. 1. inventions 2. prevention
3. 5,000 4. spinning
5. weave

- C. 1. Experiments by scientists leading to new findings are called inventions.
2. We should practise yoga regularly to keep ourselves healthy and fit.
3. Ayurveda can be practised by the following ways.
- Sleeping and waking up early.
 - Eating fresh and healthy food.
- (Accept all relevant responses)
- D. 1. Practising yoga strengthens our body and relaxes our mind. It is one of the most accepted forms of exercise around the world. Yoga originated in India around 5,000 years ago. The great Indian yogic sage, Patanjali, wrote different 'sutras' (ancient Indian books) on Yoga. These sutras were later developed by other practitioners of yoga and taken to all corners of the world.
2. Charkha or spinning wheel, invented around 500 AD, is scientific invention of ancient India. The spinning wheel was used to spin the animal or plant fibres, such as wool or cotton, into thread or yarn. Many studies suggest that ancient Indians were the first to spin and weave cotton into clothes.

I am a thinker

Yes. Usually, people invent things when they are in dire need of it.

I am an all-rounder

- A. **English:**
1. unique 2. Due
- B. **Maths:** 20 minutes
- C. **Social studies:** Vasco Da Gama

Students' Worksheets

Worksheet 1

- A. 1. False 2. True 3. False
4. True 5. False
- B. 1. Sushruta 2. yogic 3. clothes
4. Charkha 5. Mahatma Gandhi
- C. 1. d 2. e 3. b 4. c 5. a

Worksheet 2

- A. 1. Charaka was a great Indian physician.
2. We should eat fresh food to remain healthy.
3. Patanjali is a yogic sage.
4. Indians were first to use the spinning wheel to weave clothes.

5. Mahatma Gandhi reintroduced the use of charkha.

- B. 1. sutras 2. ayurveda
 3. yoga 4. charkha
 5. Patanjali
- C. 1. False 2. True 3. True
 4. False 5. False

Worksheet 3

- A. 1. several 2. written 3. home
 4. Yoga 5. fibres
- B. 1. sick 2. fresh 3. Herbs
 4. most 5. spinning
- C. 2, 3, 5

Worksheet 4

- A. 3, 5
- B. 1. No 2. Yes 3. No
 4. No 5. Yes
- C. 1, 2, 3

Teacher's Worksheets

Worksheet 1

A.

P	T	Y	U	I	O	O	Y	E
A	H	J	K	L	E	M	O	T
T	A	Z	X	C	V	E	G	H
A	Y	U	R	V	E	D	A	E
N	E	R	T	Y	U	I	N	S
J	E	D	Q	Z	T	C	X	Z
A	C	V	H	J	K	I	M	X
L	Q	W	E	H	J	N	J	C
I	K	L	O	N	S	E	K	V
Z	E	X	E	R	C	I	S	E

- B. 1. Ayurveda is one of the oldest systems of medicine that originated in India about 6,000 years ago.
2. Yoga is one of the most accepted forms of exercise around the world. Practising yoga strengthens our body and relaxes our mind.
3. Charaka wrote *Charaka Samhita*.

Worksheet 2

- A. 1. Ayurveda 2. Sushruta 3. healthy
 4. 5,000 5. Patanjali
- B. 1. F 2. T 3. F
 4. T 5. T 6. T

Theme 6: Our Country and Culture

Chapter 8: Safety and Home

Main Coursebook

I am ready



STOP



READY



GO

Icebreaker:

stairs; benches

In-text Question:

1. Yes 2. No

I am a learner

- A. 1. a 2. a 3. c 4. c 5. b
- B. 1. Unsafe 2. Unsafe 3. Safe
 4. Unsafe 5. Safe
- C. 1. We can avoid accidents by following safety rules.
2. Red
3. Keep the main entrance of the house closed and always light matches away from the body.
- D. 1. A good house should be spacious, ventilated and well lit.
2. i. Toilets, washrooms and drains should be regularly cleaned.
 ii. The kitchen and washroom drains should be covered and regularly checked for any leakages.
 iii. One should use covered dustbins in the kitchen and washrooms.
 iv. Garbage should be disposed off properly.

I am a doer

Accept all relevant responses.

I am an all-rounder

- A. **English:** Kirath; fourth

B. Maths: $\frac{1}{2}$




C. Social Studies:

Ministry of Road Transport & Highways

Students' Worksheets

Worksheet 1

- A. 1. anywhere 2. desk 3. push
4. closed 5. zebra
- B. 1. False 2. True 3. True
4. True 5. True

- C. 1.  2.  3. 
4.  5. 

Worksheet 2

- A. 1. everywhere 2. danger
3. zebra crossing 4. pavement
5. Never
- B. 1. closed 2. stones 3. cotton
4. dry 5. doctor
- C. 1. Unsafe 2. Unsafe 3. Safe
4. Safe 5. Safe

Worksheet 3

- A. 1. Do not throw dusters at others in the classroom.
2. In the playground, never push others.
3. Always walk on the pavement of the busy road.
4. Take an injured person to the clinic.
5. Tie a clean cloth over the wound.
- B. 1. False 2. True 3. True
4. True 5. False
- C. 1. C 2. I 3. I 4. C 5. C

Teacher's Worksheets

Worksheet 1

- A. 1. b 2. a 3. d 4. e 5. c
- B. 1. School 2. First aid 3. House

- C. 1. zebra 2. door 3. antiseptic
D. 1. Always 2. zebra 3. subway

Worksheet 2

- A. 1. ✓ 2. ✗ 3. ✓
4. ✗ 5. ✓
- B. 1. away 2. playground
3. clean 4. separate
5. clinic
- C. 1. a 2. c 3. a

Revision Worksheet

- A. 1. a 2. a 3. a 4. a 5. b
- B. 1. two 2. flower 3. Sir J C Bose
4. 6,000 5. exercise
- C. 1. →b 2. →e 3. →a
4. →c 5. →d
- D. 1. stem shoot root
2. mango peach watermelon
3. croton coleus corn
4. midrib main vein lamina
5. carrot radish banana

- E. 1. The root grows under the ground. There are two types of roots – tap roots and fibrous roots.

Tap root

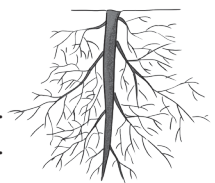
A tap root has one thick root. Many smaller roots grow from the main root. Plants, such as carrot, radish, turnip, bean and mustard, have tap roots.

Fibrous root

A fibrous root has a number of roots that grow from the end of the stem. It does not have a main root. Plants, such as grass, wheat, rice, onion and banana, have fibrous roots.

2. The three features of a house are:

- It should be well lit.
- It should be spacious.
- It should be ventilated.



tap root

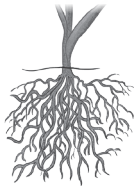
3. Most plants make their own food whereas animals cannot make their own food.

Animals can move from one place to other, whereas plants cannot do so.

4. Har Gobind Khorana was a scientist of chemistry of living fibrous root organisms. He received the Nobel Prize for Medicine in 1968.

5. Ayurveda focusses on prevention of diseases by maintaining a healthy lifestyle. It can be practiced by:

- Sleeping and waking up early



F.

