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Infinity Science

Teacher's Manual
CLASS

2

Ottimo Publications

Infinity Science

Class – 2

Chapter – 1 Plants Around Us

Tell Me Now (Page 7)

Root; Leaf; Flower; Fruit

Tell Me Now (Page 9)

Shrubs, Herbs, Climbers, Creepers

Tell Me Now (Page 11)

(a) Lotus: Live in water; Cactus: Live in hot, dry and sandy deserts.

(b) Leaves make food for the plant.

Stem supports the plant and bear branches, leaves, flowers and fruits.

Root fixes the plant to the soil and absorbs water and useful salts.

Learn and Revise

- | | | | | |
|--------------------|----------------|----------------|---------------|--------------|
| A. 1. (c) Climbers | 2. (a) Trees | 3. (a) Lotus | 4. (a) desert | |
| B. 1. hard | 2. many | 3. Climbers | 4. soft | 5. Leaves |
| C. 1. (c) Tree | 2. (d) Creeper | 3. (e) Climber | 4. (b) Herbs | 5. (a) Shrub |
- D. 1. Neem, Mango, Banyan, Palm (Students may give any 2 answers).
2. Root, Stem, Leaves, Flowers and Seeds are important parts of a plant.
3. Seeds
4. i. Two examples of Creepers are Watermelon and pumpkin.
ii. Two examples of Climbers are Money plant and pea.

Life Skills

Flower Leaf Fruit Stem Root

Chapter – 2 Uses of Plants

Tell Me Now (Page 14)

Fruit, Flower, Leaf, Root, Stem

Tell Me Now (Page 17)

- | | | | | | |
|----------|---------|---------|-----------|---------|---------|
| 1. Fruit | 2. Stem | 3. Root | 4. Flower | 5. Seed | 6. Leaf |
|----------|---------|---------|-----------|---------|---------|

Tell Me Now (Page 21)

1, 3 and 6

Learn and Revise

- | | | | | |
|------------------------|---------------------|---------------------------|----------------|----------|
| A. 1. (b) Coconut | 2. (a) Cotton plant | 3. (c) Both | 4. (a) Rose | |
| B. 1. Fleshy and juicy | 2. flavour | 3. raw | 4. food grains | 5. Tulsi |
| C. 1. Mango, Apple | 2. Carrot, Spinach | 3. Turmeric, Black pepper | | |
| 4. Mustard, sunflower | | | | |

- D. **A** **B**
1. Wheat (d) Cereal
 2. Pepper (a) Spice
 3. Sugarcane (e) Sugar
 4. Teak (b) Wood
 5. Acacia (c) Gum
- E. 1. Plants give us food like cereals, pulses, fruits and vegetables, etc.
 2. Tea comes from the leaves of tea plant. Coffee comes from the seeds of coffee plant.
 3. Eraser, tires, rubber bands

Word Search

Fruits	Nuts	Vegetables	Foodgrains
PINEAPPLE	CASHEWNUTS	CAULIFLOWER	WHEAT
APPLE	WALNUTS	BEANS	CORN
GRAPES	COCONUT	SPINACH	RICE

Hots (Think and Answer)

Plants are called our green friends because we get food, air, cloth, wood, etc. from plants.

Chapter – 3 Domestic Animals

Tell Me Now (Page 25)

Cow: Shed Dog: Kennel Horse: Stable

Tell Me Now (Page 27)

P, P, E, E, F, E, F

Tell Me Now (Page 29)

1. Silkworm 2. Bees 3. Buffalo

Tell Me Now (Page 30)

1. dung 2. dog 3. elephant 4. donkey

Learn and Revise

- A. 1. (b) houses 2. (a) hen 3. (b) Donkey 4. (a) Cow
- B. 1. Cow, Buffalo 2. Hen, Duck 3. Buffalo, Crocodile 4. Donkey, Elephant
5. Cat, Dog
- C. 1. (b) Bee 2. (a) Sheep 3. (e) Buffalo 4. (c) Silkworm 5. (d) Hen
- D. 1. Domestic animals are which we keep them in our house.
 2. We get silk from silkworms.
 3. Goats, sheep and chickens give us meat.
 4. The dung of cows, buffaloes and camels is used as manure. Manure is added to the soil to make it fertile. Dried dung of animals is used as a fuel. We keep dogs and cats as pets in our homes. Dogs guard our homes. Cats scare away mice from our homes.

Word Search

1. LEATHER	2. HONEY	3. WOOL	4. MILK
5. MEAT	6. EGG	7. SILK	

Let's Talk

1. Cat 2. Elephant 3. Cow 4. Dog

Life Skills

1. Cow give us milk. Milk is very good for health.
2. Horse pulls a tonga. Horse carries load also.

Explore More

Do it Yourself

Chapter – 4 Wild Animals

Tell Me Now (Page 36)

Bird, Mongoose, Snake, Monkey

Learn and Revise

- A. 1. (a) Monkeys 2. (c) Both 3. (a) Cow 4. (c) Jackal
B. 1. Nest 2. burrow 3. den 4. shed
C. Camel, Jackal
D. 1. Wild animals live in different kinds of homes.
2. Mongoose, snake
3. Birds make nests to lay eggs and to keep their babies safe.
4. Animals such as bears, cats, dogs and crows eat both plants and flesh of other animals.
They are called omnivores.

Word Search

1. WHALE 2. HYENA 3. DOG 4. CROCODILE
5. ZEBRA 6. VULTURE 7. TIGER 8. DOLPHIN

Hots (Think and Answer)

Many animals live in the forest. If we destroy the forest, they lose their homes. If forests are destroyed, there might be less rain. They protect the earth, keep the soil healthy, and stop floods.

Explore More

1. Do it yourself
2. (a) Tiger (b) Giraffe (c) Monkey (d) Spider

Chapter – 5 Bones and Muscles

Tell Me Now (Page 41)

Heart, Lungs, Stomach, Kidneys

Tell Me Now (Page 42)

Circle 1, 3, 5, 6

Tell Me Now (Page 44)

2, 3, 4

Learn and Revise

1. (c) Bones 2. (b) joint 3. (a) 600 4. (a) Muscles

- B. 1. together 2. heart 3. fit 4. Hard 5. bones
- C. Tick (✓), cross (✗), Tick (✓)
- D. 1. Muscles are responsible for all of our body movements. They help the bones to move.
 2. Muscles of our eyes work independently. They do not need the support of the bones.
 3. There are 206 bones and 600 muscles in our body.
 4. Proper posture is essential for our bones and muscles to function properly.
- E. a. HEART b. SKIN c. BRAIN d. EYES e. HAND
 f. LEG g. STOMACH

Hots (Think and Answer)

Football, Football is an outdoor game and it keeps our muscles strong.

Explore More

1. Do it yourself 2. Do it yourself

Chapter – 6 Food

Tell Me Now (Page 47)

1. a. Apple b. Rice 2. a. Butter b. Rice c. Milk d. Bread

Tell Me Now (Page 49)

C, P, P, P, P, C

Tell Me Now (Page 50)

Do it yourself

Tell Me Now (Page 51)

Cross (2, 3, 4)

Learn and Revise

- A. 1. (c) both of these 2. (a) energy giving food 3. (c) at a fixed time 4. (b) 6 to 8
- B. Tick (1, 3, 5, 6)
- C. 1. proteins 2. Dinner 3. Food 4. Health 5. morning
- D. 1. Food gives us energy to work and play.
 2. Rice, bread, sugar, butter, sweets
 3. Milk, fish, egg
 4. The diet we have every day must contain enough and the correct quantities of all the food components from all the food groups. Such a diet is called a balanced diet.
- E. 1. a. Fruits b. Vegetables c. Milk 2. a. Rice b. Bread c. Sugar

Hots (Think and Answer)

Fast foods such as pizza, burgers, wafers and cold drinks are harmful for our teeth and our health.

Life Skills

1. energy 2. proteins 3. vitamins 4. milk

Explore More

1. Do it yourself 2. Do it yourself

Chapter – 7 Houses and Clothes for Us

Tell Me Now (Page 55)

Hut, Tent, Houseboat, Caravan, Summer, Summer, Winter, Winter

Tell Me Now (Page 57)

1. Tent 2. Caravan 3. Igloo

Tell Me Now (Page 59)

1. a 2. b 3. a

Learn and Revise

- A. 1. (c) bricks and cement 2. (c) In caravans 3. (b) summer 4. (a) warm
B. 1. Heat, cold 2. Cement 3. Canvas 4. Straw 5. Flat
C. 1. (c) Tent 2. (d) Bungalow 3. (e) Caravan 4. (a) Snow 5. (b) Hut
D. 1. We all need a house to live in. House protects us from animals, thieves, enemies and heat outside.
2. A pucca house is a strong house made of bricks, cement, strong wood and iron rods.
3. Houses are made of different materials like straw, mud, wood, leaves, bamboo, bricks, tiles and stones.
4. We wear warm woolen clothes in winter.

Word Search

BUNGALOW, TENT, HOUSEBOAT, IGLOO

Hots (Think and Answer)

People make sloping roofs in areas with lots of rain to help the water flow off the roof easily.

Explore More

1. Do it yourself 2. Do it yourself

Chapter – 8 Safety Rules

Tell Me Now (Page 63)

1. Cross the road through the zebra crossing. Look to you right, then look to your left and then right again before crossing the road and cross the road when it is clear.
2. Never play on the road.

Tell Me Now (Page 65)

Do not touch electric switch, Do not play with sharp object, Do not light matchstick

Learn and Revise

- A. 1. (c) in the park 2 (b) at the zebra crossing 3. (c) Three 4. (a) playing
B. 1. Footpath 2 shelves 3. queue 4. tube
5. safe
C. 1. If someone gets hurt, we should be prepared to help before the doctor comes or you go to the doctor.

2. Never go for swimming alone. Do not go into the deep water. Always use a swimming tube.
3. Do not play with sharp or pointed objects. You may get hurt. Do not touch electric wires, switches or plugs. You may get an electric shock.

D. 1. F 2. T 3. T 4. F 5. F

Hots (Think and Answer)

We should not climb a tree or swing from the branches of a tree because you may fall down and get hurt.

Life Skills

Do it yourself

Explore More

1. Red light indicates to stop.
2. Yellow light indicates to wait.
3. Green light indicates to go.

Chapter – 9 Our Needs

Tell Me Now (Page 69)

Do it yourself

Tell Me Now (Page 70)

Cross (1, 2, 4, 5)

Learn and Revise

- | | | | | |
|-----------------|-------------|--------------|---------------------|--------|
| A. 1. (b) dirty | 2. (b) pure | 3. (b) storm | 4. (a) sick persons | |
| B. 1. sick | 2. parks | 3. plants | 4. things | 5. air |
| C. 1. T | 2. T | 3. F | 4. F | 5. T |
- D. 1. We get fresh air in the parks and gardens. We should keep the windows of our houses open to let in fresh air.
2. Air also contains gases, smoke and dust.
3. All living things need air to breathe.
4. Wind help us in flying kites and winnowing. Wind helps gliders move and boats sail. Strong winds help in running windmills.
5. A very strong wind is called a storm.
- E. breeze, storm, wind

Hots (Think and Answer)

We should grow more plants around us to make air clean.

Life Skills

Do it yourself

Explore More

Do it yourself

Chapter – 10 Water: An Important Element

Tell Me Now (Page 75)

Do it yourself

Tell Me Now (Page 77)

well, pond, sea, rain

Tell Me Now (Page 79)

Ice, Water, Water vapour or steam, Water and ice

Learn and Revise

- A. 1. (c) both 2. (a) rain 3. (c) Sea
- B. 1. safe 2. liquid 3. germs 4. growing
- C. 1. We get water from rain, lakes, ponds, rivers, wells and hand pumps.
2. Water exists in three forms—solid, liquid and gas.
3. When the Sun's energy heats up water in rivers, lakes or the ocean, this changes into water vapour. This is called evaporation. During evaporation, warm water vapour rises into the sky.
4. Way up in the sky, water vapour cools down and turns back into liquid water droplets. This process is called condensation. The droplets gather to form clouds.
- D. water, water, steam

Crossword Puzzle

Across

1. RIVER 4. DRINK 5. GERMS

Down

2. RAIN 3. TAP

Hots (Think and Answer)

Water that we get from ponds, lakes and rivers is not fit for drinking. It contains dirt and germs. If we drink this water, it may make us sick.

Life Skills

Do it yourself

Explore More

1. a. STEAM b. CLOUD c. VAPOUR d. SOLID
2. Do it yourself

Chapter – 11 The Sun, The Moon and Shadow

Tell Me Now (Page 83)

Do it yourself

Tell Me Now (Page 86)

1. Rakesh Sharma 2. First 3. One

Learn and Revise

- A. 1. (a) hot 2. (a) east 3. (c) dark shape 4. (a) Neil Armstrong
- B. 1. (d) satellite of the earth. 2. (a) to dry clothes.
3. (b) moves with us. 4. (e) in the morning.
5. (c) evaporates the water.
- C. 1. Shadow is made when an object blocks light. When our body blocks the path of light, our shadow is formed on the opposite side of the light.
2. The sun gives us heat and light. Plants use the sun's light to make food. The heat of the sun dries wet clothes.
3. There is no air to breathe and water to drink on the moon. Moon has no light of its own.
4. A person who travels in a spacecraft is called an astronaut.
- D. Similarity: Both the sun and the moon appear in the sky.
Difference: The sun is a star that has its own light and energy, while the moon is a natural satellite that reflects the sun's light.

Hots (Think and Answer)

If the distance between the Sun and the Earth gets smaller, it will get much hotter on Earth.

Let's Talk

Do it yourself

Life Skills

Rakesh Sharma became first Indian to go into space. He was the first Indian astronaut.

Kalpana Chawala was the first Indian woman to go into space. She went into space for the first time in 1997.

Sunita Williams, woman of Indian origin woman, stayed in space for about six months in 2007.

Explore More

1. Do it yourself 2. Do it yourself

Chapter – 12 Rocks and Minerals

Tell Me Now (Page 89)

Diamond, Charcoal, Chalk

Tell Me Now (Page 91)

1. Chalk (Limestone) 2. Blackboard (Limestone)

Tell Me Now (Page 92)

Jewellery, making glass or mirror, building

Learn and Revise

- A. 1. (c) sandstone 2. (c) white marble 3. (b) limestone 4. (b) Diamond
- B. 1. (d) are of different colours, sizes and shapes.
2. (c) a very hard rock.
3. (a) is used to cut glass.
4. (b) the softest mineral.
- C. 1. White marble 2. Diamond 3. Graphite 4. Mica

- D. 1. All rocks are made up of minerals.
 2. Coal is mainly used for cooking, in factories and for running steam engines.
 3. Marble
- E. 1. Marble, Sandstone 2. White marble 3. Marble, sandstone

Hots (Think and Answer)

Marble, Granite, Sandstone, Slate

Life Skills

1. Mice 2. Quartz 3. China clay 4. Talc 5. Graphite

Explore More

1. Taj Mahal White marble
 Red Fort sandstone
 Chalk graphite
2. Do it yourself
3. 1. DIAMOND 2. MICA 3. TALC 4. QUARTZ

Chapter – 13 Our Environment

Tell Me Now (Page 96)

Tick, Cross, Tick, Tick, Cross, Cross, Tick, Cross

Tell Me Now (Page 97)

Water, air

Tell Me Now (Page 99)

1. Electricity 2. Trees 3. Plastic 4. Water

Learn and Revise

- A. 1 (c) environment 2. (a) sick 3. (b) low volume 4. (a) covered bins
- B. 1. Polythene 2. environment 3. Natural 4. Dirty
- C. 1. T 2. T 3. F 4. T 5. T
- D. 1. Our environment means all the living things and non-living things. Every things around us make our environment.
2. Due to many human activities such as throwing garbages in water-bodies, bathing animals in the pond, Washing clothes in the rivers, etc. make water polluted.
3. Air gets polluted due to smokes coming out of the vehicles, chimney of the factories also add smoke to the air. Burning of leaves and bursting of crackers also release smokes that pollute the air.
4. We need a clean and healthy environment to lead a healthy life. When we misuse any resources, environment gets polluted. Polluted environment makes us unhealthy.
5. Say 'No' to plastic bags. In place of plastic bags, use paper, cloth or jute bags. Stop bursting the crackers. It pollutes the air. Do not waste water, since it is scarce and precious. Plant more and more trees. They make the air clean and fresh.
- E. 1, 4, 5

Hots (Think and Answer)

We should not waste paper. It is made by cutting trees.

Let's Talk

Do it yourself

Explore More

1. and 2. Do it yourself

Test Paper – 1

- A. 1. a. creeper 2. c. both of these 3. a. Duck 4. c. Jackal 5. c. 206
B. 1. Bones 2. Balanced 3. Leaves 4. Flavour 5. sheep
C. Herbivores: 1. Cow 2. Elephant
Carnivores: 1. Lion 2. Tiger
D. 1. Carnivores are animals that eat other animals (meat) for food.
2. Posture is the way we hold our bodies when we sit, stand, or move.
3. Fast foods such as pizza, burgers, wafers and cold drinks are harmful for our teeth and our health.
4. Plants make the air fresh and clean. Fresh air keeps us healthy.

Test Paper – 2

- A. 1. b. Limestone 2. c. winter 3. a. fire 4. a. pure 5. c. rain
B. 1. Ice 2. Water 3. Steam 4. Water
C. 1. c. is used to cut glass 2. d. The softest mineral
3. e. Bungalow 4. b. Snow
5. a. Caravan
D. 1. A person who travels in a spacecraft is called an astronaut.
2. Coal is black and soft rock. It is mainly used for cooking, in factories and for running steam engines.
3. Shadow is made when an object blocks light. Shadow is a dark shape produced by an object when it comes between light and a surface. When our body blocks the path of light, our shadow is formed on the opposite side of the light.
4. Way up in the sky, water vapour cools down and turns back into liquid water droplets. This process is called condensation. The droplets gather to form clouds.