

# Answers

## Theme 1: What Is Life? Chapter 1: Living and Non-living Things

### Main Coursebook

#### Re-KAP

**Kinesthetic:** Accept all relevant answers.

#### Pictorial:

1. Children and parrot
2. Children
3. Plants, children and parrot
4. Parrot and kite

**Interacting better:** Accept all relevant responses.

#### Understanding better (Page no. 7)

1. Stars and Clouds (Accept all relevant responses).
2. Buildings and Roads (Accept all relevant responses).

#### Understanding better (Page no. 8)

1. False
2. False

#### Learning better:

- A. 1. a    2. c    3. b    4. c    5. c
- B. 1. False    2. True    3. True    4. True    5. False
- C. 1. Different animals move by walking.  
2. Cloud is a natural thing while car is a human-made thing.  
3. Living things breathe through lungs, gills or air holes.
- D. 1. Characteristics of non-living things are as follows:  
(i) They do not move.  
(ii) They do not need food.  
(iii) They do not breathe.  
(iv) They do not reproduce.  
(v) They do not grow.
2. Difference between living and non-living things are as follows:

| Living things            | Non-living things                   |
|--------------------------|-------------------------------------|
| Living things move       | Non-living things do not move.      |
| Living things need food. | Non-living things do not need food. |
| Living things grow.      | Non-living things do not grow.      |
| Living things breathe.   | Non-living things do not breathe.   |

Living things can reproduce.

Non-living things cannot reproduce.

#### Creating better:

Accept all relevant responses.

#### Thinking better:

Living things depend on non-living things in their environment for many different needs, like food, water, air, shelter and sunlight.

For example, a fish lives in water and depends on it for oxygen, food and to keep its body at the right temperature.

#### Choosing better:

2. In an area with proper sunlight, water and air.

### Students' Worksheets

#### Worksheet 1

- A. 1. natural    2. human-made  
3. living    4. non-living  
5. grow
- B. 1. natural things    2. human-made things  
3. living things    4. breathing  
5. air
- C. 1. True    2. True    3. True  
4. False    5. False

#### Worksheet 2

- A. 1. H    2. N    3. H  
4. N    5. N
- B. 1, 2, 4
- C. 1. STARS    2. ROCKS    3. PLANTS  
4. CLOUDS    5. ANIMALS

### Book of Holistic Teaching

#### Developing better

##### A. English:

1. My mother takes care of all the plants in our garden.
2. My dog, Victor, loves to be around humans.

##### B. Maths:

1. 916; Nine hundred six
2. 513; Five hundred three

##### C. Social Studies:

The tools made by early humans using wood and stone are different from each other.

As early human beings used stone tools for cutting and making various things. The stone tools were also used as weapons for hunting and protecting the humans from wild animals. Whereas wood was often used to make things like spears, sticks and handles for tools because it's easier to carve and shape.

## Book of Project Ideas

### Making better

Accept all relevant responses.

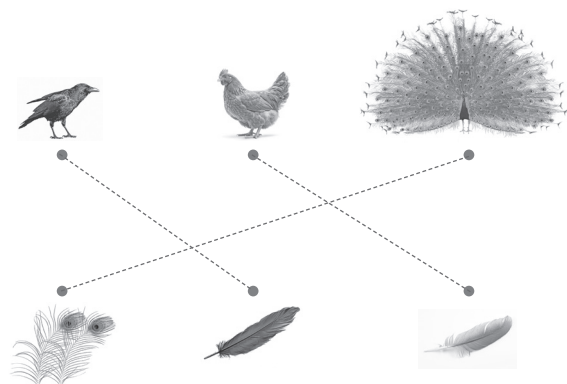
## Chapter – 2: All About Birds

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant answers.

#### Pictorial



**Interacting better:** Peacock is the national bird of India. Some characteristics of Peacock are as follows:

1. Habitat: Peacocks are found in forests and grasslands of India.
2. Sounds: Peacocks make loud sounds like 'mee-ow' or 'a-ow'.
3. Symbol of beauty: A peacock symbolizes beauty, grace and elegance.
4. Feathers: Peacocks are famous for their bright and colourful feathers having beautiful patterns.

#### Understanding better (Page 14)

1. Eagle (accept all relevant responses).
2. Duck (accept all relevant responses).

#### Understanding better (Page 16)

1. Sparrow (accept all relevant answers).
2. Crane (accept all relevant answers).

#### Understanding better (Page 17)

1. No
2. Yes

#### Learning better:

- A. 1. b    2. b    3. b    4. b    5. a
- B. 1. curved    2. four    3. Body
4. Penguin    5. A weaver bird
- C. 1. Sparrows, pigeons and peacocks.
2. Climbing feet means feet which help a bird climb tree and hold on to the trunks and branches with these toes. A webbed feet means having each foot of a bird has three toes in front and one toe at the back.
- D. 1. Birds fly with the help of their wings. Their body structure helps them fly. As birds have a light body, their bones are hollow from inside. The body of birds is shaped like a boat. This helps them move easily through the air. Their tail acts like the rudder of a boat. It helps them change their direction while flying. The feathers of their wings help them fly.
2. When the wings of birds move upwards and backwards, this movement is called upstroke. Similarly, when the wings move downwards and forwards, the movement is known as downstroke.

**Creating better:** Accept all relevant responses.

#### Thinking better

1. If there were no birds in our environment, it would have a big impact on nature and the balance of life.
  - a. No pollination: Some birds, like hummingbirds, help pollinate plants. Without birds, many plants wouldn't be able to produce fruits or seeds as easily.
  - b. Increased insects: Birds eat a lot of insects, like mosquitoes, flies and beetles. If there were no birds, these insects would multiply very quickly.
  - c. Disruption of the food chain: Birds eat smaller animals, like insects and sometimes are eaten by larger animals. If no birds are there then these insects would multiply very quickly.
2. Ducks and hawks have very different types of feet because they live in different places and do different things. The webbed feet help ducks swim easily in the water. When a duck pushes its feet back, the webbing acts like a paddle, allowing the duck to move smoothly through the water.

Hawks have sharp, strong claws instead of webbed feet. These claws are curved and pointed. The hawk's strong claws help it catch and hold onto prey. Hawks are birds of prey, which means they hunt other animals, like small mammals or birds. Their sharp and strong claws can grab and hold onto animals tightly, so they don't escape.

### Choosing better

2. Call an adult to help the bird.

## Students' Worksheets

### Worksheet 1

- A. 1. tailor bird                      2. woodpecker  
3. humming bird                      4. duck  
5. parakeet
- B. 1. False                      2. True                      3. False  
4. False                      5. True
- C. 1. → c                      2. → d                      3. → e                      4. → a                      5. → b

### Worksheet 2

- A. 1. Crow                      2. Eagle                      3. Hen  
4. Penguin                      5. Duck
- B. 1. True                      2. False                      3. False  
4. True                      5. False
- C. 1. → d                      2. → a                      3. → b                      4. → e                      5. → c

## Book of Holistic Teaching

### Developing better

#### A. English:

1. A bird's body is covered with feathers.
2. A parakeet's beak helps crack open nuts and hard fruits.

#### B. Maths:

There are in total 228 bird species in the sanctuary.

#### C. Social Studies:

Earth is home to different birds because of its special features. The Earth is enclosed by the atmosphere. One-quarter of the Earth's surface is covered by land. About three-quarters of it is covered by water. The Earth has the right temperature for plants, animals and human beings to live.

## Book of Project Ideas

### Making better

Accept all relevant responses.

## Chapter – 3: All About Animals

## Main Coursebook

### Re-KAP

**Kinaesthetic:** Accept all relevant responses.

### Pictorial



D



W



W



D



D



W



D



W

**Interacting better :** Accept all relevant responses.

### Understanding better (Page 24)

1. Antennae
2. Insects reproduce by laying eggs.

### Understanding better (Page 25)

1. Butterfly
2. Spider

### Learning better:

- A. 1. c                      2. a                      3. a                      4. b                      5. c
- B. 1. wild                      2. pet                      3. 6 – 8  
4. antennae                      5. eggs
- C. 1. Head, thorax and abdomen  
2. The waxy outer shell of cockroaches' aids protection to internal organs.  
3. Beehives are large nests made by honeybees. Beehives can be seen hanging on the branches of trees.
- D. 1. Honeybees have small bodies, covered with hair. They have a pair of short antennae and three pairs of legs. They also have two pairs of wings. Honeybees have five eyes – two large eyes and three small eyes. A female bee has a stinger.  
2. Cockroaches have a flattened and reddish-brown body. They have large eyes, a pair of long antennae and a mouth under the side of their head. Cockroaches have waxy outer shells to help them stay safe and healthy. They also have a pair of wings that help them fly.

**Creating better:** Accept all relevant responses.

**Thinking better:** Accept all relevant responses.

**Choosing better**

2. Seek help from adults for first aid.

### Students' Worksheets

#### Worksheet 1

- A. 2, 4, 5
- B. 1. → d      2. → e      3. → a  
4. → b      5. → c
- C. 1. False      2. False      3. False  
4. True      5. True

#### Worksheet 2

- A. 2, 3, 4
- B. 1. Earthworm      2. Cockroach  
3. Lizard      4. Spider  
5. Ant
- C. 1. large      2. three  
3. warm      4. small  
5. grasshopper

### Book of Holistic Teaching

#### Developing better

##### A. English

1. animals; P
2. grasshopper; N

##### B. Maths:

There are total 200 ants.

##### C. Social Studies:

Yes, I have seen a beehive. A beehive has several hexagonal shapes which are collectively called honeycombs. No, the shape of Earth and beehive are not identical.

### Book of Project Ideas

#### Making better

Accept all relevant responses.

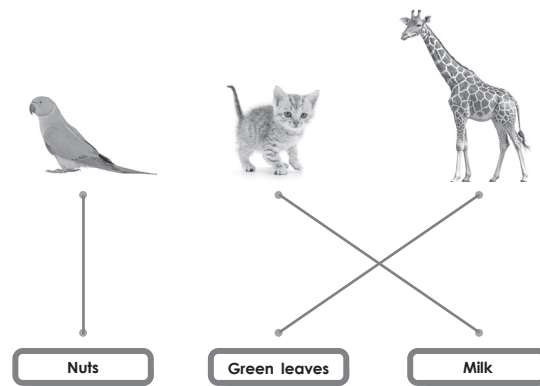
### Chapter – 4: Food and Feeding Habits of Animals

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant responses.

**Pictorial**



**Interacting better:** Accept all relevant responses.

#### Understanding better (Page 31)

1. True
2. False

#### Understanding better (Page 33)

1. Snakes and frogs
2. Rabbits and rats

#### Learning better:

- A. 1. b      2. b      3. b      4. b      5. a  
B. 1. d      2. a      3. e      4. c      5. b
- C. 1. Animals need food for energy, growth and to stay healthy.  
2. Oilseed cakes are energy-giving and milk producing foods.  
3. Some grass-eating animals, such as cows and buffaloes first swallow the grass without chewing it. Then, bring it back into their mouth and chew it with their grinding teeth. This is called chewing cud.
- D. 1. The difference between herbivores, carnivores and omnivores are as follows.

| Herbivores  | Carnivores   | Omnivores   |
|---|--|---|
| Herbivores or plant-eating animals are the animals which eat grass or green plants. | Carnivores are the animals that eat other animals. | Animals which eat both plants and other animals are called omnivores. |
| For example, goats, cows, elephants etc.  | For example, lions, tigers, leopards, etc.         | For example, crows, dogs and bears.                                   |

2. Food is any substance which when consumed gives us energy to do work. It provides us essential nutrients like carbohydrates, fats, proteins, vitamins and minerals. Some flesh-eating animals, such as snakes and frogs, swallow their food whole. They do not bite or chew their food.

#### Creating better:

Accept all relevant responses.

#### Thinking better:

Accept all relevant responses.






#### Choosing better:

2. Ask your parents to feed biscuit to the dog.

### Students' Worksheets

#### Worksheet 1

A. 1, 3

- B. 1.  H 2.  H 3.  O
4.  S 5.  O

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

#### Worksheet 2

A. 2, 3, 5

- B. 1. grow 2. herbivores  
3. tongue 4. Gnaw  
5. lap

- C. 1. → a 2. → e 3. → b  
4. → c 5. → d

#### Worksheet 3

- A. 1. Domestic animals  
2. Snakes and frogs  
3. Cud is the food that animals bring back up from their stomach into the mouth for chewing again.  
4. An earthworm swallows soil that contains bits of dead plants and animals in it.  
5. A butterfly uses its long sucking tube to suck nectar from flowers.

B. 4, 5

- C. 1. snakes, frogs  
2. Accept all relevant responses.

3. Accept all relevant responses.  
4. cows, buffaloes  
5. cats, dogs

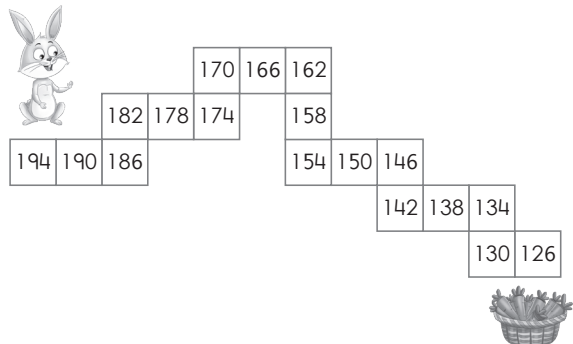
### Book of Holistic Teaching

#### Developing better

##### A. English

1. earthworm 2. plant-eaters

B.



- C. The most common animal found in Rajasthan is a camel. Camels are herbivores, which means they only eat plants. Camels also help carrying loads. So, they are given energy-giving food, such as grains, dates, etc.

### Book of Project Ideas

#### Making better

Accept all relevant responses.

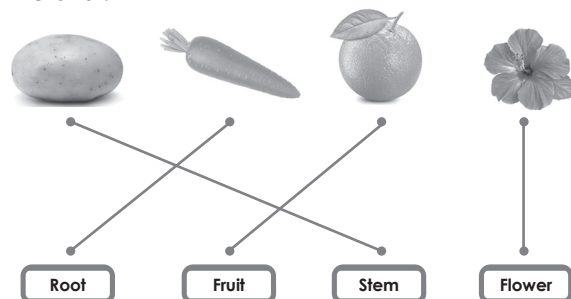
## Chapter – 5: All About Plants

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant responses.

#### Pictorial:



#### Interacting better:

Sunlight, air and water (Accept all relevant responses).

### Understanding better (Page 39)

1. Tap root
2. Leaves

### Understanding better (Page 41)

1. True
2. False

### Learning better:

- 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, leaves are called the kitchen of the plant.  
3. The functions of stem are as follows:  
a. It keeps the plant upright. But few plants need extra support other than the stem.  
b. It carries water from the roots to the leaves and other parts of the plant.
- D. 1. Roots grow under the ground. There are two types of roots – tap root and fibrous root. A tap root has one thick main 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 round-shaped, while some are heart-shaped. They may have smooth or uneven edges. The lamina of some leaves is waxy, while some other leaves have hairy lamina. This wide variation in the appearance of leaves is known as leaf diversity.

**Creating better:** Accept all relevant responses.

### Thinking better:

Yes, the statement is true. Plants are very important for life on Earth. This is because plants make oxygen due to which living beings can survive, they provide food for animals and humans. Plants also provide shelter for animals.

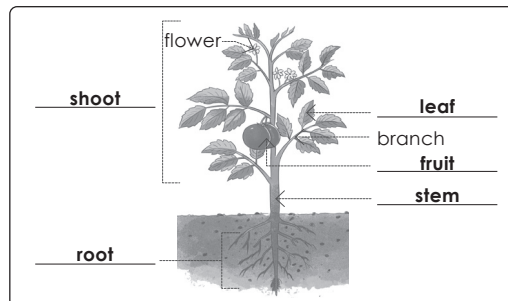
### Choosing better:

2. Plant new trees

## 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. 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 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



## Book of Holistic Teaching

### Developing better

#### A. English:

1. Flour
2. Bough

#### B. Maths:

The farmer grew 250 crops in total.

#### C. Social Studies:

Rice is the main food item for the people living in Tamil Nadu, West Bengal and Assam.

## Book of Project Ideas

### Making better

Accept all relevant responses.

## Chapter – 6: Our Scientists

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant answers.

#### Pictorial

- |              |           |
|--------------|-----------|
| 1. Aloe vera | 2. Cactus |
| 3. Rose      | 4. Mint   |

**Interacting better:** Accept all relevant answers.

#### Understanding better (Page 46)

Dr Vikram Sarabhai

#### Learning better:

- A. 1. c    2. b    3. a    4. c    5. c
- B. 1. 30 November 1858  
2. epilepsy  
3. father of the Indian Space Research  
4. Har Gobind Khorana  
5. 15 October 1931
- C. 1. Prafulla Chandra Ray is known as the Father of Indian Chemistry. He founded India's first chemical factory.  
2. Asima Chatterjee is known for her work in studying plants. She successfully developed many medicines from plants.  
3. Dr APJ Abdul Kalam served as the President of India from 2002 to 2007. He is also known as the 'Missile Man of India' as he successfully headed a programme that produced several missiles for our defence forces.
- D. 1. Sir Jagadish Chandra Bose was a scientist in the field of plants. He was the first

person to prove that, like animals and humans, plants can feel things too.

2. Dr Vikram Ambalal Sarabhai is the founder of the Indian Space Research Organisation (ISRO). He founded 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.

**Creating better:** Accept all relevant responses.

#### Thinking better :

If India did not have so many great scientists, it would have been harder for the country to grow as fast. For example, scientists have helped India in making important medicines, build rockets to send satellites into space, and create technology that helps people in their daily lives. Without these scientists, we might not have all the things that make our lives better today.

#### Choosing better

1. Help your classmate fix the statue.

## Students' Worksheets

### Worksheet 1

- 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 2

- A. 1. missiles    2. chemical    3. Thumba  
4. medicine    5. astronomer
- B. 1. 30 November 1858  
2. 12 August 1919  
3. 15 October 1931  
4. 21 September 1917  
5. 2 August 1861
- C. 1. →d    2. →e    3. →a  
4. →c    5. →b

## Book of Holistic Teaching

### Developing better

#### A. English:

1. He; Dr Vikram Sarabhai
2. She; Asima Chatterjee

#### B. Maths:

The cost of one toy rocket is ₹10.

#### C. Social Studies:

Ferdinand Magellan, is the explorer who discovered a passage between the Atlantic and the Pacific Oceans.

## Book of Project Ideas

### Making better

Accept all relevant responses.

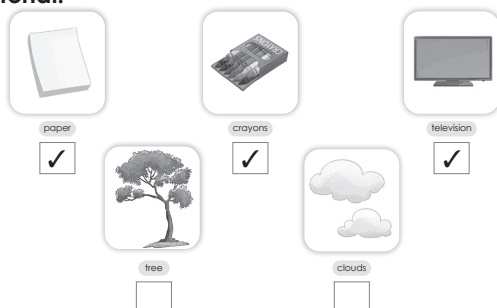
## Chapter – 7: Yoga and Ayurveda

## Main Coursebook

### Re-KAP

**Kinaesthetic:** Accept all relevant responses.

### Pictorial:



**Interacting better:** Accept all relevant responses.

### Understanding better (Page 52)

1. Charaka Samhita
2. Charaka and Sushruta

### Learning better:

- A. 1. c    2. b    3. a    4. b    5. c
- B. 1. body  
2. prevention of diseases  
3. 5,000  
4. Spinning  
5. spin
- C. 1. Yoga strengthens our body. Yoga also relaxes our mind.  
2. We should practice yoga regularly to keep ourselves healthy and fit.

3. Ayurveda focuses on prevention of diseases by maintaining a healthy lifestyle. It can be practiced by sleeping and waking up early. Also, by eating fresh and healthy food.

(Accept all relevant responses)

- D. 1. Yoga is one of the most accepted forms of exercise around the world. Yoga originated in India around 5,000 years ago. Various Indian sages 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 the spinning wheel, invented around 500 AD, is another scientific invention of ancient India. The spinning wheel was used to spin animal or plant fibres, such as wool or cotton, into thread or yarn.

### Creating better:

Accept all relevant responses.

### Thinking better:

Yoga is a kind of exercise that focuses on stretching, breathing and holding different poses. It helps make your muscles stronger and your mind feel calm and peaceful. Sports, on the other hand, are activities where you usually play games like soccer, basketball or swimming. Sports often involve running, jumping, and working as a team. Sports help you stay active, improve your strength and make you feel excited and happy with friends. (Accept all relevant responses)

### Choosing better

1. exercise regularly

## Students' Worksheets

### Worksheet 1

- A. 1. False    2. True    3. False  
4. True    5. False
- B. 1. Sushruta    2. 6,000    3. clothes  
4. Charkha    5. Mahatma Gandhi
- C. 1. d    2. e    3. b    4. c    5. a

### Worksheet 2

- 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 3

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

### Book of Holistic Teaching

#### Developing better

A. English:

1. unique                      2. Due

B. Maths:

The man practises yoga for 20 minutes daily.

C. Social Studies

Vasco da Gama was the first to reach the Cape of Good Hope in South Africa.

### Book of Project Ideas

#### Making better

Accept all relevant responses.

## Chapter - 8: Safety Habits

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant responses

**Pictorial:** a pair of gloves, bandages, medical tape, medical scissors, cotton, thermometer, antiseptic

**Interacting better:** Accept all relevant responses

#### Understanding better (Page 57)

1. Yes                      2. Yes

#### Learning better:

- 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 the safety rules.  
    2. First aid is the first medical treatment that an injured person receives.  
    3. Two ways to be safe at home are:  
        (i) Keep the main entrance of the house closed.  
        (ii) Stay away from the kitchen stove or hot objects.  
D. 1. The steps to be followed when a person gets injured are as follows:  
    (i) Clean the blood with cotton.  
    (ii) Apply an antiseptic and keep the

wounded part open for some time.  
(iii) Tie a clean cloth or bandage over the wound.

2. The safety measures to be followed when you are at school are as follows:

- (i) Do not climb on the desk and benches.  
(ii) Do not throw things at anyone.

**Creating Better:** Accept all relevant responses

**Thinking Better:** House number 2 is a good house because it has windows for proper air ventilation. However, house number 1 does not have any windows. In house number 2, the garbage is properly disposed of in a dustbin, but in house number 1, the garbage is scattered around the dustbin.

#### Choosing Better

1. Offer food and sweets to the kids.

### Students' Worksheets

#### Worksheet 1

- 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 2

- 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

### Book of Holistic Teaching

#### Developing better

A. English

Prasanth is celebrating his fourth birthday.

B. Maths:

Divya left with  $\frac{1}{2}$  of the bandages.

### C. Social Studies:

State government looks after the needs and requirements of the people of the state.

### Book of Project Ideas

#### Making better

Accept all relevant responses.

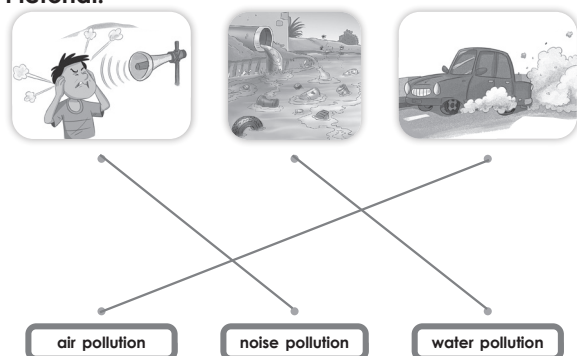
## Chapter - 9: Our Environment

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant responses

**Pictorial:**



**Interacting better:** Accept all relevant responses

#### Understanding better (Page 63)

1. Air, water and soil.
2. Plants, animals and humans.

#### Understanding better (Page 64)

1. False
2. False

#### Learning better:

- A. 1. c    2. c    3. a    4. c    5. a
- B. 1. environment    2. biotic
3. pollution    4. Polluted
5. Reduce
- C. 1. An ecosystem consists of both living and non-living things that interact with each other.
2. Smoke from cars, buses, trucks and factories pollutes the air which causes air pollution.
3. Land pollution
- D. 1. The water in rivers, lakes, oceans and seas become polluted when waste water from our homes, streets and factories flow into it. This is called water pollution. In cities water of various factories,

households wastes mixes into river and pollutes it.

However, in villages water from the fields that contain chemical fertilisers mixes into river and pollutes it.

2. The 3Rs stands for Reduce, Reduce and Recycle.

**Reduce:** Reduce means to minimise the use of certain materials, such as plastic, glass, etc.

**Reuse:** Reuse means to use the items, which we are already using, again for different purposes. For example, we can use glass bottles or pots for plants or holding stationery items.

**Recycle:** Recycle means to convert an item, which has already been used, into something new. By doing this, the already used item can be used again. For example, glass bottles and jars can be crushed, melted and changed into new glass products.

**Creating Better:** Accept all relevant responses

**Thinking Better:** If we did not have clean water, it would cause many problems:

1. People could get sick from drinking dirty water.
2. Animals and fish could die, affecting the balance of nature.
3. Plants and crops would not grow properly, leading to less food.

**Choosing Better:** 1

### Students' Worksheets

#### Worksheet 1

- A. 3, 4
- B. 1. Air, water and temperature.
2. The living and non-living things around us forms the environment.
3. An ecosystem consists of both living and non-living things that interact with each other.
4. All living things in an ecosystem are called biotic components.
5. The non-living things are called abiotic components.
- C. 1. False    2. False    3. True
4. True    5. False

## Worksheet 2

- A. 1. Bathing and washing.  
2. Reduce, Reuse and Recycle.  
3. Reduce means to buy what we really need.  
4. Reuse means to use things again.  
5. Recycle means to convert an item, which has already been used, into something new.
- B. 1. diseases      2. polluted      3. land  
4. garbage      5. fuels
- C. 1. True      2. True      3. True  
4. False      5. False

## Worksheet 3

- A. 1. airtight      2. dry      3. compost  
4. plants      5. biodegradable
- B. 1. When there are too many loud and unpleasant sounds around us, such as car horns, loud music or construction noises, it is called noise pollution.  
2. When the smoke from cars, buses, trucks and factories pollutes the air in the city, it is called air pollution.  
3. When garbage is thrown in open spaces, it is called land pollution.  
4. When the water in rivers, lakes, oceans and seas becomes polluted by throwing wastewater from our homes, streets and factories, it is called water pollution.  
5. In cities, the water is cleaned and made potable by water treatment plant.
- C. Smoke from cars, buses, trucks and factories pollutes the air in the city.

## Book of Holistic Teaching

### Developing better

#### A. English:

1. India has a rich cultural heritage.  
2. I will eat lunch after the game of chess.

#### B. Maths:

Rishi will observe the sapling on August 21st.

#### C. Social Studies:

1. Bicycle ☐      2. Car ☒  
3. Bullock cart ☐

## Book of Project Ideas

**Making better:** Accept all relevant responses.

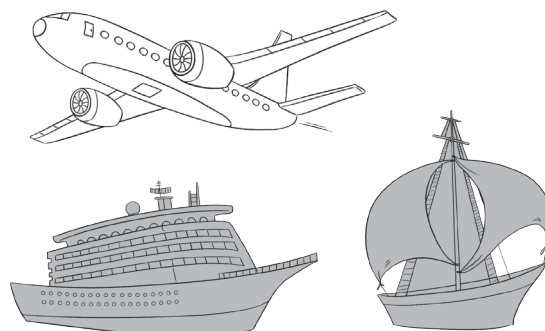
## Chapter - 10: Water and Air

### Main Coursebook

#### Re-KAP

**Kinaesthetic:** Accept all relevant responses

**Pictorial:**



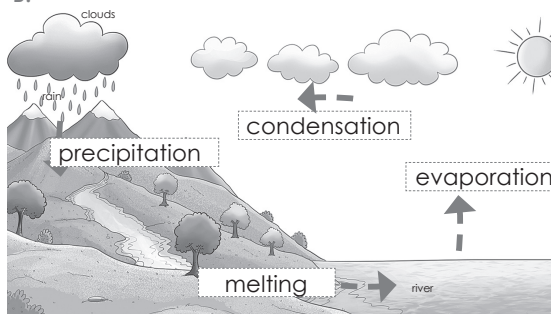
**Interacting better:** Accept all relevant responses.

#### Understanding better (Page 70)

1. true      2. true

#### Learning better:

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



- C. 1. We need air to breathe and stay alive.  
2. When water vapour cools down, it changes back into water droplets. This is called condensation.  
3. Ice, water and water vapour
- D. 1. Water exists in three forms: ice, water and water vapour.  
When water is boiled, it changes into water vapour. This process is called evaporation.  
When water vapours cools down, it changes back into water droplets. This is called water droplets.  
When water cools down further, it changes into ice. This process is called freezing.  
When ice starts to change back into

water, the process is called melting. Melting occurs with rise in heat or temperature.

2. The steps to be followed for water conservation are as follows:
  1. use water that was used to wash vegetables or fruits to water your plants
  2. turning off the taps after use
  3. using a bucket and mug to bathe instead of taking a shower
  4. fixing leaking pipes

**Creating Better:** Accept all relevant responses

**Thinking Better:** If we did not have clean air and water, people, plants, and animals would struggle to live because of sickness and pollution. To keep them clean, we can plant more trees, avoid littering, and use less plastic.

**Choosing Better:** 2. Close the tap properly.

### Students' Worksheets

#### Worksheet 1

- A. 1. three      2. pipes      3. taps  
4. cools      5. heat or temperature
- B. fresh; water; groundwater; impurities; salts
- C. 1. boiling  
2. condensation  
3. freezing  
4. melting  
5. rainwater harvesting

#### Worksheet 2

- A. 1. atmosphere      2. food  
3. clouds      4. wells  
5. boiled
- B. 1. Nitrogen, oxygen, carbon dioxide and some other gases.  
2. Bathing and drinking.  
3. Rainwater that seeps into the ground is called groundwater.  
4. Ice, water and water vapour.  
5. When water vapour cools down, they change back into water droplets. This is called condensation.
- C. Rainwater harvesting is a simple method of saving rainwater for later use. In this method, people collect rainwater in big containers, drums or storage tanks. This water is then filtered and used for bathing, washing and watering plants.

#### Worksheet 3

- A. 1. All living things need air to breathe and stay alive.  
2. Plants need air to make their own food.  
3. Birds, aeroplanes, hot-air balloons and parachutes need air to fly.  
4. Air is filled in balloons, tyres and footballs.  
5. Air is needed to light a fire.
- B. When the Sun shines, water from rivers, ponds, lakes and seas heats up and changes to water vapour.  
This water vapour goes up into the sky with the air. High up in the sky, the water vapour cools down to form tiny drops of water. These tiny drops come together to form clouds and fall down as rain. The rainwater flows back to the rivers, ponds, lakes and seas. This cycle of change in the form of water is called the water cycle.
- C. The shortage of water is known as water scarcity. Sometimes, there is not enough rainfall in some areas. Rivers and ponds dry up, causing shortage of water.

### Book of Holistic Teaching

#### Developing better

**A. English:**

1. I saw a big, colourful fish in the pond.
2. Kamal will finish his homework before going outside to play.

**B. Maths:**

Rahat paid a total amount of ₹15.50.

**C. Social Studies:**

Aeroplane is a means of air transport which the people use to go from one city to another.

### Book of Project Ideas

#### Making better

Accept all relevant responses.

## Chapter - 11: Movement of the Earth

### Main Coursebook

**Re-KAP**

**Kinaesthetic:** Accept all relevant responses

### Pictorial

1. land and water
2. air
3. Land
4. Water

### Interacting better

Accept all relevant responses.

### Understanding better (Page 76)

1. Revolution
2. Rotation
3. 365 days and 6 hours

### Learning better:

- A. 1. a    2. a    3. b    4. b    5. c
- B. 1. tilted    2. rotation
3. day, night    4. hot
5. daytime
- C. 1. Rotation and revolution
2. An orbit is the path an object follows as it moves around another object. For example, Earth moves around Sun in a fixed path and this is known as revolution.
3. Rotation and revolution of Earth around the Sun causes different seasons.
- D. 1. An axis is an imaginary line around which an object spins or turns. It passes through the centre of an object. The Earth also has an axis. It passes through the North Pole and the South Pole. The axis of the Earth is slightly tilted.
2. The movement of the Earth on its axis is called rotation. The Earth completes one rotation in 24 hours. This is the duration of a single day. As the Earth rotates, the part of the Earth that faces the Sun gets light. And therefore, experiences daytime. The other half of the Earth does not get light and experiences night.

**Creating Better:** Accept all relevant responses

**Thinking Better:** The extra 6 hours are added up every year. After 4 years, they make 24 hours, which is 1 extra day. That's why we have a leap year with 366 days every 4 years.

**Choosing Better:** 1. doing yoga

## Students' Worksheets

### Worksheet 1

- A. 1. Axis    2. North pole
3. Rotation    4. Revolution
5. Seasons

- B. 1. b    2. a    3. d    4. e    5. c
- C. 1. True    2. False    3. True
4. False    5. False

### Worksheet 2

- A. 1. axis    2. North pole    3. rotation
4. 365 days and 6 hours    5. oval
- B. 1. AXIS    2. TOP    3. ROTATION
4. SUN    5. REVOLUTION
- C. 1. An axis is an imaginary line on which Earth rotates.
2. The movement of the Earth on its axis is called rotation.
3. Rotation causes day and night.
4. 24 hours.
5. The movement of the Earth around the Sun is called revolution.

## Book of Holistic Teaching

### Developing better

#### A. English:

1. in    2. Around

#### B. Maths:

Raima's poster is 20,000 centimetre square bigger in size.

#### C. Social Studies:

lattu

## Book of Project Ideas

### Making better

Accept all relevant responses.

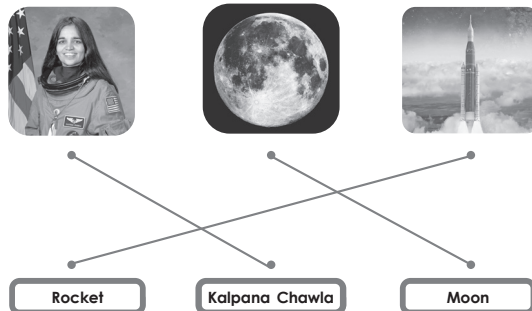
## Chapter - 12 Going into Space

## Main Coursebook

### Re-KAP

**Kinaesthetic:** Accept all relevant responses

### Pictorial:



**Interacting better:** Accept all relevant responses.

**Understanding better (Page 82)**

1. Force of gravity
2. Craters

**Learning better:**

- A. 1. b      2. c      3. a      4. c      5. b
- B. 1. Astronauts      2. spacecraft  
3. 1969      4. Moon  
5. Indian
- C. 1. The suits of the astronauts protect them from harmful rays and also have a supply of oxygen.  
2. The surface of the Moon is not smooth. It has huge spots. These spots are called craters.  
3. Sunita Williams
- D. 1. We may travel anywhere on the Earth, but it is not easy to travel into space. Throw a stone up in the air, it will always fall back to the ground. This pull or force of attraction is called the force of gravity. It is not easy to get out of the Earth's pull and escape into space. A space rocket is used to carry a spacecraft into space.  
2. Kalpana Chawla was the first woman of Indian origin to go into space. She went in the space shuttle, Columbia in 1997. She went into space again in January 2003.

**Creating Better:** Accept all relevant responses

**Thinking Better:** Yes, Neil Armstrong's footprints would still be on the Moon because there is no wind or rain to erase them. The Moon doesn't have air like Earth, so the footprints can stay for a very long time.

**Choosing Better:** 1. Share ideas with her friends.

**Students' Worksheets**

**Worksheet 1**

- A. 1. air      2. space      3. twinkle  
4. Sputnik 1      5. water
- B. 1. true      2. false      3. false  
4. true      5. false
- C. 1. d      2. c      3. a      4. e      5. b

**Worksheet 2**

- A. 1. downwards      2. A spacecraft  
3. Rakesh Sharma      4. can  
5. air

- B. 1. Earth      2. vehicle  
3. Moon      4. Chandrayaan-1  
5. Rakesh Sharma
- C. 1. gravity      2. Neil Armstrong  
3. Sunita Williams      4. craters  
5. Kalpana Chawla

**Book of Holistic Teaching**

**Developing better**

**A. English:**

1. Rihani asks Sujal, "Do you want to live on the Moon?"
2. Sujal says, "Yes Rihani, I would love to! I could wave to you from above!"

**B. Maths**

750 grams is equal to 0.75 kilograms.

**C. Social Studies:**

1. Chess ☐      2. Football ☒
3. Boxing ☐

**Book of Project Ideas**

**Making better**

Accept all relevant responses.

**Chapter – 13: Light, Sound and Force**

**Main Coursebook**

**Re-KAP**

**Kinaesthetic:** Accept all relevant responses.

**Pictorial:**



**Interacting better**

Accept all relevant responses.

**Understanding better (Page 89)**

1. Lamps and Stars.
2. Chirping of birds and a lullaby.



**Learning better:**

- A. 1. b      2. a      3. b      4. b      5. b  
 B. 1. b      2. d      3. a      4. e      5. c  
 C. 1. Candle and electric bulb.  
 2. Solar eclipse.  
 3. It is a push or pull that is used to move an object from its original position.  
 D. 1. Sound is anything that we can hear. A sound can be pleasant or unpleasant. Unpleasant sound is also called noise. Some examples of pleasant sounds are the chirping of birds, a song or a sound from a musical instrument. The sound of a horn or loud music are examples of unpleasant sounds.  
 2. When the shadow of one heavenly body falls on another heavenly body, an eclipse occurs.

**Creating better:** Accept all relevant responses.**Thinking better:** Accept all relevant responses.**Choosing better:**

1. Tell the kids not to do it.

**Students' Worksheets****Worksheet 1**

- A. 1. light                      2. luminous  
 3. non-luminous          4. sound  
 5. Sound  
 B. 1, 2, 4  
 C. 1. False                  2. True                  3. True  
 4. False                  5. False

**Worksheet 2**

- A. 1, 4  
 B. 1. P      2. U      3. U      4. P      5. P  
 C. 1. False    2. True    3. True    4. False    5. False






**Worksheet 3**


- A. 1. eyes                      2. luminous  
 3. give                      4. non-luminous  
 5. Push or pull  
 B. table lamp    bonfire    candle    pen  
flower vase    lantern    book    water bottle  
 C. 1. U      2. P      3. P      4. U      5. P

**Book of Holistic Teaching****Developing better****A. English:**

1. or                      2. but

**B. Maths:**

| Days      | Number of activities completed  |
|-----------|---|
| Monday    |  |
| Tuesday   |  |
| Wednesday |  |
| Thursday  |  |
| Friday    |  |

**Note:** Each  denotes a listening activity.**C. Social Studies:**

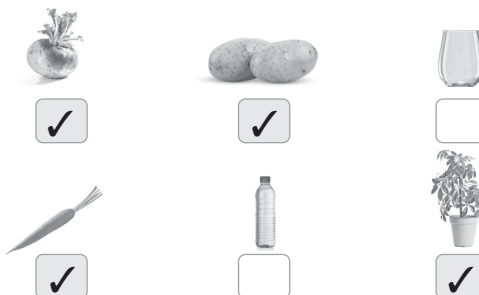
An earthquake is a sudden shaking of the ground over a large area. It is caused by movements under the surface of the Earth. There is often loss of life and property during an earthquake.

**Book of Project Ideas****Making better**

Accept all relevant responses.

**Chapter – 14: About Soil****Main Coursebook****Re-KAP**

**Kinaesthetic:** If there was no soil, it would be very hard for most plants to grow. Plants usually need soil because it gives them the nutrients (food) and support they need to grow tall and strong. But, even without soil, plants can still grow in some special ways! For example, some plants can grow in water, like water lilies or lotus flowers. These plants can get nutrients from the water instead of soil. (Accept all relevant responses)

**Pictorial**

### Interacting better:

Plants that grow in water:

1. Water lilies
2. Lotus flowers
3. Watercress

Plants that grow in soil:

1. Sunflowers
2. Carrots
3. Apple trees

### Understanding better (Page 96)

1. Living and non-living components.
2. Sandy soil.

### Understanding better (Page 97)

1. Sandy soil.
2. Sandy soil, silt soil, clayey soil and loamy soil.
3. Loamy soil.

### Learning better:

- A. 1. a      2. c      3. b      4. b      5. b
- B. 1. rocks      2. Humus      3. Soil  
4. Loamy      5. Sandy
- C. 1. Thousands of years ago, the Earth was covered with big, hard rocks. With time, these rocks broke down into small pieces due to sunlight, heavy rains and high-speed winds. After a few years, with water and wind, these rocks further broke down into smaller and smaller pieces. These very small pieces of rock became particles of soil.
2. Clayey soil.
3. Broccoli and cabbage
- D. 1. Sandy soil, silt soil, clayey soil and loamy soil.

**Sandy soil** – Sandy soil contains very large quantities of sand particles. The particles are coarse and rough. Sandy soil cannot hold water, so it is best for plants like cactus, watermelon, etc., as they do not require much water.

**Clayey soil** – Clayey soil feels sticky when wet and hard when dry. The particle size of clayey soil is very small, and these particles stick together. It holds water for a longer time. It is best for growing rice, since rice requires a lot of water.

2. Loamy soil is the best soil for growing plants. This is because loamy soil is a mixture of sandy, silt and clayey soil. The particle size of loamy soil is medium as compared to other soils. It is neither too rough nor too smooth on touching. It holds the right amount of water.

**Creating better:** Accept all relevant responses.

### Thinking better:

Clayey soil can be a bit difficult for growing vegetables because it holds a lot of water and can become very sticky and hard when it's wet. This makes it harder for the plant roots to grow and get enough air. So, plants may not grow very well in clayey soil on their own. But Jai can make his clayey soil better by adding a few things such as compost, sand, etc.

### Choosing better

2. Swim while being supervised by a trainer.

## Students' Worksheets

### Worksheet 1

- A. 1. rocks      2. living      3. sand  
4. small      5. loamy
- B. 1. e      2. c      3. d  
4. b      5. a
- C. 1. I      2. C      3. C  
4. I      5. C

### Worksheet 2

- A. 1. False      2. False      3. False  
4. False      5. True
- B. 1. Loamy      2. Humus      3. poor  
4. clayey      5. suitable
- C. 1. Earth      2. humus  
3. loamy soil      4. sandy soil  
5. Loamy soil

### Worksheet 3






- A. 1. air  
2. higher  
3. crops growing properties  
4. loamy  
5. cooling
- B. 1. False      2. False  
3. True      4. True  
5. True
- C. 1. thousands      2. tiny  
3. clayey      4. loamy  
5. humus

## Book of Holistic Teaching

### Developing better

- A. **English:**  
or, and

**B. Maths:**

| Flowers   | Number of saplings  |
|-----------|---|
| Rose      |  |
| Jasmine   |  |
| Marigold  |  |
| Sunflower |  |
| Tulip     |  |

**Note:** Each flower represents a number

**C. Social Studies:**

Floods occur mostly when rivers overflow after heavy rainfall. Floods affect the soil by washing away the top layer of soil which is rich in nutrients. Floods will also lead to soil erosion.

**Book of Project Ideas****Making better**

Accept all relevant responses.