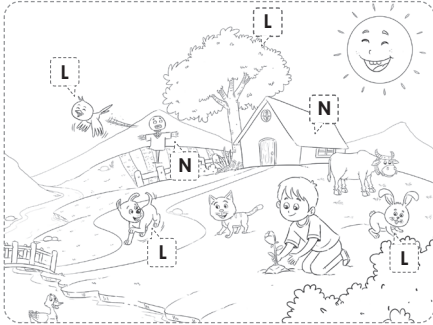


Answers

Theme 7: What Keeps Us Going Chapter 9: Our Environment

Main Coursebook

I am ready



Icebreaker

bicycle, public transport, trees

In-text Question

1. Air, water and temperature.
2. Plants, animals and human beings.

In-text Question

1. False
2. False

I am a learner

- A. 1. c 2. c 3. b 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. Land pollution
3. Land pollution is caused by throwing garbage in open spaces.
- 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, household wastes mixes into river and pollutes it. However, in villages water from the fields that contains chemical fertilisers mixes into river and pollutes it.
2. The three R's stand for Reduce, Reuse and Recycle.
Reduce-We should only buy what we really need. We should use utensils made of

steel or ceramic so that we can reduce the amount of paper trash.

Reuse-Reuse means to use things again. We should always try to find new ways to use things before throwing them away. We can reuse newspaper for packing gifts.

Recycle-Recycle means to make useful things out of things that we do not use any longer. We should sort dry waste into separate groups, such as paper, glass, plastic and metals. Then, we should send these things to recycling plants for making new useful things.

I am a thinker

Accept all relevant responses.

I am an all-rounder

A. English

1. rich
2. lunch

B. Maths: 21st August

C. Social Studies

Suggestions:

We can avoid throwing waste here and there, instead use dustbins.

We should carry cloth bags whenever we go for shopping.

Students' Worksheets

Worksheet 1

- A. 3, 4
- B. 1. Air, water and temperature.
2. The living and non-living things around us form 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, 2, 4, 5
- B. 1. water 2. air 3. Land
4. Reuse 5. Recycle
- C. 1. AIR 2. SOIL 3. WATER
4. SUNLIGHT 5. TEMPERATURE

Worksheet 3

- 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 make useful things out of things that we do not use any longer.
- B. 1. diseases 2. polluted 3. land
4. garbage 5. fuels
- C. 1. True 2. True 3. True
4. False 5. False

Worksheet 4

- A. 1. airtight 2. dry 3. compost
4. plants 5. biodegradable
- B. 1. When dirty and harmful things are added to the environment, it is called 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.

Teacher's Worksheets

Worksheet 1

- A. 1. c 2. c
B. 1, 2, 3, 4
C. 1. reduce 2. reduce 3. reuse
4. recycle 5. recycle

Worksheet 2

- A. 1, 8, 9 (Accept all relevant responses).
B. 1. N 2. Y 3. Y
4. Y 5. N 6. Y

Theme 7: What Keeps Us Going

Chapter 10: Air and Water

Main Coursebook

I am ready

Accept all relevant responses.

Icebreaker: Cloud

In-text Question

1. Atmosphere
2. Nitrogen, oxygen, carbon dioxide and some other gases.

In-text Question

1. False
2. True

I am a learner

- A. 1. a 2. a 3. c 4. b 5. b
B. rain, plants, lake, river and sea
C. 1. We need air to breathe and stay alive.
2. Freezing
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 vapour cools down, it changes back into water droplets. This is called condensation.

When the 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 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.

I am a doer

Suggestions:

Turn off taps while brushing your teeth.

Use less or optimum water for household chores.

Turn off the taps when they are not in use.

I am an all-rounder

A. English

1. knob
2. plumber

B. Maths: ₹15.50

C. Social studies: Ship

Students' Worksheets

Worksheet 1

- A. 1. air 2. mixture 3. light
4. rain 5. three
- B. water vapour from river; water vapour from sea
- C. 1. False 2. True 3. False
4. True 5. False

Worksheet 2

- 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.

Worksheet 3

- 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 4

- 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

Teacher's Worksheets

Worksheet 1

- 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. 1. rain
2. groundwater
3. ice, water, water vapour
4. condensation
5. melting

Worksheet 2

1. ice, water and water vapour.
2. Rains, ponds, lakes, rivers, seas, well, tube wells.
3. Atmosphere is a blanket of air that surrounds the Earth.
4. A natural process through which water recycles itself is called water cycle.
5. 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.
6. The Sun

Theme 8: Our Adventures Chapter 11: How the Earth Moves

Main Coursebook

I am ready

Accept all relevant responses.

Icebreaker: EARTH

In-text Question:

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

I am a learner

- A. 1. a 2. a 3. b 4. b 5. c
- B. 1. tilted 2. rotation 3. day; night
4. oval 5. daytime
- C. 1. Rotation and revolution.
2. In the absence of Earth's rotation, one part of Earth will have day and other part of the Earth will have night, only.
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 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 has daytime. The other half of the Earth has night. Thus, rotation of the Earth causes day and night.

I am a thinker:

These extra six hours of the four years collectively results in a leap year. A leap year has 366 days instead of 365 days.

I am an all-rounder

A. English

1. under
2. in

B. Maths

1. 200 cm
2. 100 cm

C. Social studies

2. ball

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.

Worksheet 3

- A. 1. Ro 2. Ro 3. Ro 4. Re 5. Re
B. 3
C. 1. false 2. false 3. true
4. false 5. true

Teacher's Worksheets

Worksheet 1

A.



Revolution



Rotation

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

Worksheet 2

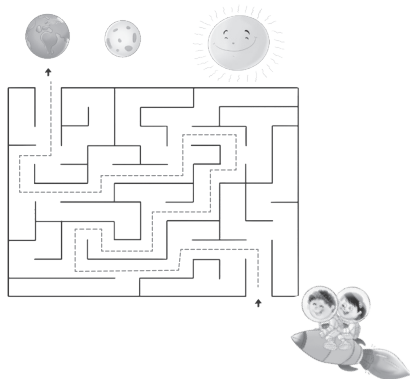
- A. 1. The movement of the Earth on its axis is called rotation.
2. The movement of the Earth around the Sun is called revolution.
3. Earth moves around the Sun in a fixed path. This path is called orbit.
4. An axis is an imaginary line around which an object spins or turns.
- B. 1. Day and night.
2. The day and night form due to rotation of the Earth.

Theme 8: Our Adventures

Chapter 12: Going into Space

Main Coursebook

I am ready



Icebreaker: I AM AN ASTRONAUT

In-text Question

1. Gravity 2. Craters

I am a learner

- 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 astronauts protect them from harmful rays and also have a supply of oxygen.
2. Sunita Williams
3. The potholes on the Moon are called craters.
- 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.

I am a doer

Accept all relevant responses.

I am an all-rounder

- A. English

1. live 2. above, wave and love

B. Maths: 0.5 kg

C. Social Studies

1. KALPANA CHAWLA
2. SUNITA WILLIAMS

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

Worksheet 3

- A. 1. Chandrayaan is a series of space program carried out by Indian Space Research Organisation (ISRO).
2. The Moon does not have water and an atmosphere for life to exist.
3. Astronauts wear special suits that have provisions to store oxygen.
4. Chandrayaan-2 was headed by two women scientists, Vanitha Muthayya and Ritu Karidhal.
5. Sunita Williams is a woman of Indian origin to go into space.
- B. 1. C 2. I 3. I 4. C 5. I
- C. 1. true 2. true 3. false
4. true 5. true

Teacher's Worksheets

Worksheet 1

- A. 1. 1969
2. Neil Armstrong

3. Edwin Aldrin; Michael Collins
 4. craters
 5. Rakesh Sharma
- B.
1. A spacecraft is a rocket in which astronauts go into space.
 2. Astronaut is a person who travels and works in a spacecraft.
 3. Space is the region that is present outside the Earth.
 4. Gravity is a force that pulls two objects towards each other.

Worksheet 2

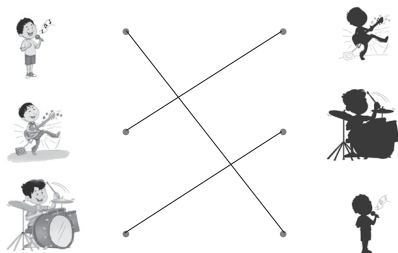
1. Gravity is a force that pulls two objects towards each other.
2. Craters are the huge potholes on the Moon's surface.
3. Special suits of astronauts contain a supply of oxygen. These suits also protect them from harmful rays of the Sun.
4. Moon lacks air and water. So, animals, plants and humans cannot survive there.
5. Astronauts conduct experiments inside the spacecraft. Sometimes, astronauts even have to repair the spacecraft while in space.
6. 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.

Theme 9: We Keep Clean, Safe and Healthy

Chapter 13: Light, Sound and Force

Main Coursebook

I am ready



Icebreaker

There are five sense organs in our body. Eyes help us sense light and ears help us sense sound.

In-text Question

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

I am a learner

- A. 1. b 2. a 3. b 4. b 5. b
- B. 1. → c 2. → b 3. → d
4. → e 5. → a
- C. 1. Candles and electric bulbs.
2. Solar eclipse
3. It is a push or pull that is used to move an object from its original position.
- D. 1. Pleasant sounds are chirping of birds, a lullaby and sound from a musical instrument. Unpleasant sound is also called noise. Examples include the sound of a horn and loud music.
2. When the shadow of one heavenly body falls on another heavenly body, an eclipse occurs.

I am a thinker

Accept all relevant responses.

I am an all-rounder

- A. **English**
1. or 2. but
- B. **Maths:** Accept all relevant responses.
- C. **Social Studies:** push

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

humus. Loamy soil is best for growing crops such as wheat, sugarcane and cotton.

I am a doer

Accept all relevant responses.

I am an all-rounder

- A. **English:** or; and; and
B. **Maths:** Accept all relevant responses.
C. **Social Studies:** Floods occur mostly when rivers overflow after heavy rainfall. The overflowing water often removes the soil from one place and deposits it in another place.

Students' Worksheets

Worksheet 1

- A. 1. rocks 2. living 3. the
4. air 5. loamy
B. 1. e 2. a 3. d 4. b 5. c
C. 1. l 2. C 3. C 4. l 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. clayey soil

Worksheet 3

- A. 1. upper 2. also 3. less
4. light 5. good
B. 1. e 2. d 3. b 4. a 5. c
C. 1. rocks 2. smooth 3. good
4. light brown 5. less

Worksheet 4

- A. 1. air
2. higher
3. different crops growing properties
4. loamy
5. cooling
B. 1. false 2. false 3. true
4. true 5. false

- C. 1. thousands 2. tiny 3. clayey
4. loamy 5. humus

Teacher's Worksheets

Worksheet 1

- A. 1. c 2. a 3. b
B. 1. T 2. F 3. T
C. 1. Humus 2. Clay 3. Sand 4. Stone

Worksheet 2

1. Rotten parts of dead plants and insects float on top. This is called humus.
2. The four main types of soil: sandy, silt, clayey and loamy.
3. Loamy soil
4. Pots and toys are made from clayey soil.
5. Sandy soil is used to grow plants, such as cactus and aloe vera.
6. Soil is used for growing plants and making clay pots.
7. Loamy soil
8. Clayey soil. This soil is used for making pots and toys.

Revision Worksheet

- A. 1. b 2. b 3. c
B. 1. light 2. 1969 3. Loamy
C. 1. false 2. true 3. false
D.



Evaporation



Condensation



Freezing



Melting