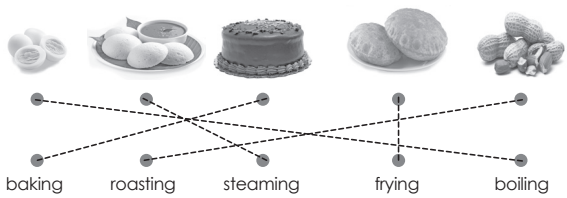
Answers

Theme 1: All About Us

Lesson 1: What Happens to the Food We Eat

Main Coursebook

I am ready



Catch Up (Page 5)

1. Stomach 2. Baking

I am a learner

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

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

C. 1. Sugar and starch.
2. Cake
3. Baking and roasting.

D. 1. The human digestive system is made of mouth, food pipe, stomach, liver, pancreas, small intestine, large intestine and anus.

Mouth: Digestion begins here. The teeth chew food and saliva mixes with it.

Food pipe: It carries the chewed food from the mouth to the stomach.

Stomach: It is a hollow bag-like structure, where the food is churned and mixed with digestive juices.

Small intestine: A long, coiled tube where food mixes with juices from the liver and pancreas. The digested food is absorbed here.

Large intestine: It absorbs water and passes the undigested food ahead.

Anus: The semi-solid undigested food is passed out of the body through the anus.

2. i. **Refrigeration:** Most food items are stored in a refrigerator at a low temperature to prevent them from spoiling.
   ii. **Boiling:** Some food items are boiled at high temperatures to kill germs.
   iii. **Salting and sugaring:** Germs cannot grow in too much salt or sugar. Therefore, some food items are treated with salt or kept in a sugar solution.
   iv. **Dehydration/air-tight containers:** Storing food items in airtight containers or removing water completely from certain food items (called dehydration) helps in preserving them.
   v. **Adding preservatives:** Sometimes, special substances called preservatives are added to food items to prevent them from spoiling. For example, jams and ketchup contain preservatives.

I am a thinker

- **Gives energy:** Rice (Carbohydrates)
- **Helps in growth and repair:** Dal & curd (Proteins)
- Keeps you healthy and protects you from **diseases:** Vegetables and salad (Vitamins, minerals and fibre)

I am all-rounder

A. **English:** Digestion; Dehydration; Congestion

B. **Maths:** ₹470

C. **Social Studies:** No. They used natural methods like drying, salting and storing in cool places.

Students' Worksheets

Worksheet 1

A. 1. Carbohydrates 2. Proteins 3. Vitamins 4. Minerals 5. Roughage

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

C. 1. → a 2. → c 3. → d 4. → e 5. → b

Worksheet 2

A. 1. MOUTH 2. FOOD PIPE 3. STOMACH 4. LARGE INTESTINE 5. SALIVA

B. 1. Digestion 2. stomach 3. small intestine 4. blood vessels 5. anus

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

Worksheet 3

A. 1. It is the process of converting the food we eat into simpler form so that it can be used by our body.

2. It is a method that uses dry heat to cook food in an oven.
3. It is a method in which the food is cooked directly over a fire. No water or oil is used.
4. It is a method in which the food is cooked in oil or ghee.
5. It is a method in which the food is cooked by boiling in water.

B. 1. baking 2. roasting 3. steaming
4. frying 5. boiling

C. 2, 5

Worksheet 4

A. 1. Steaming 2. Frying 3. Roasting
4. Boiling 5. Baking

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

C. 1. → b 2. → c 3. → d 4. → e 5. → a

Teacher's Worksheets

Worksheet 1

A. 1. CARBOHYDRATES 2. PROTEINS
3. VITAMINS 4. MINERALS
5. FATS

B. 1. rice, sugar 2. oil, ghee
3. pulses, peas 4. milk, fruits

Worksheet 2

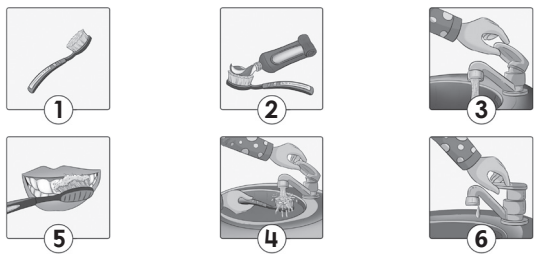
1. Boiling is a process in which germs are killed in some food items at high temperatures. For example, milk is boiled before consuming and to save it from spoiling.
2. Sometimes, artificial preservatives are added to food items to prevent them from spoiling. Jams and ketchups contain preservatives.
3. Germs are unable to grow in too much salt. Thus, some food items are treated with salting. For example, fish, meat and pickles are preserved through salting.
4. Refrigeration is a process in which most food items are stored in a refrigerator at low temperature to prevent them from spoiling.
5. Dehydration is a process in which food items are stored in airtight containers or by removing water completely to preserve them.
6. We need to cook some food items before eating. There are different methods of cooking food–baking, roasting, steaming, frying and boiling.

Answers

Theme 1: All About Us
Lesson 2: Inside Our Mouth

Main Coursebook

I am ready



Catch Up (Page 11)

1. True 2. False

Catch Up

1. Incisors, canines, premolars and molars.
2. A toothache is caused when bacteria infect the soft part (pulp) inside the tooth.

I am a learner

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

B. 1. sweet 2. three 3. Premolars
4. twice 5. dental floss

C. 1. Taste buds are located near the tip, back and sides of the tongue.
2. Incisors
3. Tooth decay occurs when bacteria attack different parts of the teeth, causing damage.

D. 1. The four different types of teeth are:
   i. **Incisors:** These are used for biting and cutting food.
   ii. **Canines:** These help in tearing food.
   iii. **Premolars:** These help in crushing food.
   iv. **Molars:** These help in grinding food.
   2. i. We should brush our teeth twice a day (morning and before bedtime).
   ii. We should use a dental floss if food is stuck between our teeth.
   iii. We should include food items rich in calcium and vitamin C in our diet.
   iv. We should visit a dentist for regular check-ups.

I am a doer

Accept all relevant responses.

I am an all-rounder

A. **English:**
   1. "I have 12 teeth in my upper jaw and 14 teeth in my lower jaw."
   2. "Brush your teeth twice a day to prevent tooth decay."

B. **Maths:** 42 minutes

C. **Social Studies:** Ancient Civilization: Indus Valley Civilization
Occupation: People were farmers, traders and craftsmen; they grew crops and made tools and pottery.

Students' Worksheets

Worksheet 1

A. 1. Tongue 2. four 3. Teeth
4. two 5. three

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

C. 1. → e 2. → d 3. → a 4. → b 5. → c

Worksheet 2

A. 1. TONGUE 2. TEETH
3. TEMPORARY SET 4. PERMANENT SET
5. CEMENTUM

B. 1. Tongue 2. sweet 3. salty
4. bitter 5. sour

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

Worksheet 3

A. 1. two 2. three 3. four
4. pain 5. dental floss

B. 1. → b 2. → a 3. → d 4. → e 5. → c

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

Worksheet 4

A. 1. CROWN 2. NECK 3. ROOT
4. ENAMEL 5. DENTINE

B. 1. No 2. Yes 3. Yes 4. Yes 5. No

C. 1. → e 2. → d 3. → c 4. → b 5. → a

Teacher's Worksheets

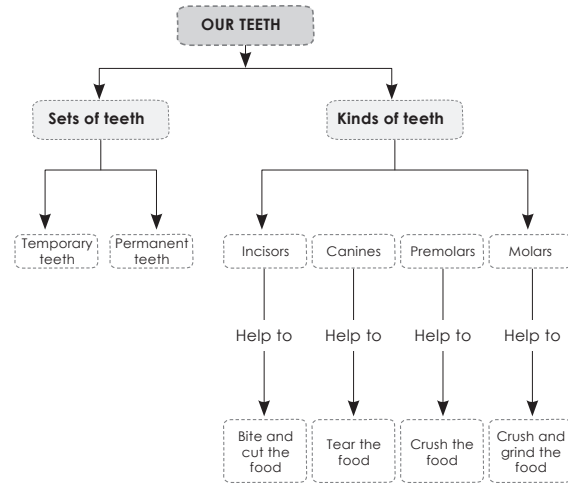
Worksheet 1

A. 1. →c 2. →a 3. →d 4. → e 5. → b

B. 1. The outermost part of the crown is called enamel. It is white and hard and forms the outer covering of the tooth.

2. Taste buds are small structures present on the tongue. These help us recognise different tastes, such as sweet, sour, bitter and salty. The taste buds for the bitter taste are present at the back of the tongue.

Worksheet 2



Answers

Theme 2: Resources We Care For
Lesson 3: From Fibre to Fabric

Main Coursebook

I am ready

Catch Up (Page 16)

1. No 2. Yes

Catch Up (Page 17)

1. True 2. False

I am a learner

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

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

C. 1. Natural fibres are materials derived from plants or animals. (Accept all relevant responses).

2. Knitting

3. In weaving, two sets of threads are intertwined with each other, either horizontally or vertically. It is done using a loom.

D. 1. Methods to convert fibres into fabric:

Spinning: Fibres are twisted to make yarn.

Weaving: Two sets of yarn are interlaced using a loom to make fabric.

Knitting: Loops of yarn are interlocked using needles to make fabric.

Bleaching & Dyeing: Fabric is treated to remove impurities and coloured as needed.

2. i. Wash clothes properly to keep them clean and free from germs and dust.

ii. Clean delicate and woollen clothes carefully, such as coats and trousers.

iii. Avoid harsh chemicals and strong detergents while washing clothes.

I am a thinker

Accept all relevant responses.

I am an all-rounder

A. **English**

i. Rehan's jacket is warmer than mine.

ii. My brother's shirts are brighter than mine.

B. **Maths:** 10 days

C. **Social Studies:** 2. Water

Students' Worksheets

Worksheet 1

A. 1. summer 2. winters
3. rainy season
4. animals 5. human-made

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

C. 1, 4

Worksheet 2

A. 1. Jute 2. Linen 3. Cotton
4. Wool 5. Silk

B. 1. → b 2. → a 3. → d 4. → e 5. → c

C. 1. natural; synthetic 2. wrinkle
3. Nylon 4. Cotton
5. stretchable

Worksheet 3

A. 1. threads 2. garments 3. intertwined
4. twisted 5. coloured

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

C. 2, 3, 5

Teacher's Worksheets

Worksheet 1

A. 1. Jute and linen.

2. Rayon and polyester.

3. In weaving, two sets of threads are intertwined with each other, either horizontally or vertically.

4. In spinning, a mass of fibres is drawn and twisted followed by the winding of the fibre into a bobbin.

5. Clothes protect us from weather and also make us look attractive.

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

Worksheet 2

A. **1.** c **2.** a **3.** a **4.** c

B. **1.** Silk and woollen clothes are very sensitive and easily attacked by insects, such as silverfish and moths.

2. We should never store any clothes without washing. Silk and woollen clothes are very sensitive and easily attacked by insects, such as silverfish and moths. We should store such clothes with some naphthalene balls or dried neem leaves in them.

3. Raincoats are made of waterproof material, and therefore, protect us from the rain.

Answers

Theme 3: We Adapt to Survive

Lesson 4: Plants – Food Preparation and Storage

Main Coursebook

I am ready

1. fruit
2. leaves
3. stem
4. stem
5. root

Catch Up (Page 22)

1. Chlorophyll
2. Starch

Catch Up (Page 23)

1. No
2. No

I am a learner

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

B. 1. → b 2. → e 3. → d 4. → c 5. → a

C. 1. Stomata are small openings or pores present on the under-side of a leaf.

2. Indoor plants

3. Energy flows from the Sun to plants and then to animals and human beings.

D. 1. During photosynthesis ('photo' means light and 'synthesis' means putting together), plants absorb sunlight using chlorophyll in their leaves. Green leaves convert air and water into food in the presence of sunlight. This food is produced in the form of simple sugar (glucose).

2. i. Plants with no leaves: Agave and cactus do not have leaves. These plants make food in their green stems.

ii. Non-green plants: These plants lack chlorophyll and cannot make their own food. They depend on dead and decaying plants or animals for food. Mushroom is one such example.

iii. Plants with dark red leaves: Some plants, such as Croton, appear dark red even though they contain chlorophyll. In such plants, a red substance hides the green colour of chlorophyll.

I am a doer: Accept all relevant responses.

I am an all-rounder

A. **English:** sunlight; night

B. **Maths:** 6 rows

C. **Social Studies:** Ashoka tree

Students' Worksheets

Worksheet 1

A. 1. Green 2. Chlorophyll 3. sunlight 4. kitchen 5. above

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

C. 1. → b 2. → e 3. → a 4. → d 5. → c

Worksheet 2

A. 1. ROOT 2. LEAVES 3. CHLOROPHYLL 4. WATER 5. SUNLIGHT

B. 1. green 2. absorption 3. Stomata 4. water, carbon dioxide 5. oxygen, water vapour

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

Worksheet 3

A. 1. Cactus and agave.

2. Non-green plants do not have chlorophyll, so they depend on dead and decaying plants and animals for their food.

3. A red pigment hides the green colour of chlorophyll, making the croton appear dark red.

4. Because it traps and eats insects to get nutrients not available from the soil.

5. Yellow rattle, dodder and broomrape.

B. 1. → e 2. → b 3. → a 4. → c 5. → d

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

Worksheet 4

A. 1. MIDRIB 2. SIDE VEINS 3. PHOTOSYNTHESIS 4. SUNLIGHT 5. GLUCOSE

B. 1. glucose 2. starch 3. oxygen 4. Plants 5. Sun, animals

C. 1. N 2. N 3. Y 4. Y 5. Y

Teacher's Worksheets

Worksheet 1

A. 1. CHLOROPHYLL 2. STOMATA 3. VEIN 4. MIDRIB 5. PORES

B. 1. CACTUS 2. AGAVE 3. CROTON 4. MUSHROOM 5. VENUS FLYTRAP 6. DODDER

Worksheet 2

A. 1. Leaf 2. Midrib 3. Croton
4. Stomata 5. Starch

B. 1. Through the stomata, leaves take in water and carbon dioxide and give out oxygen and water vapours.

2. Insectivorous plants feed on insects for their food requirements while parasitic plants depend on other plants for their food requirements. Sundew and cobra lily are insectivorous plants whereas yellow rattle and rafflesia are parasitic plants.

3. Animals exhale carbon dioxide, which is then taken up by the plants. Plants provide food and oxygen for the animals.

4. We should protect both plants and animals. We should plant more and more trees. We should protect wild animals in different sanctuaries, national parks and forest reserves.

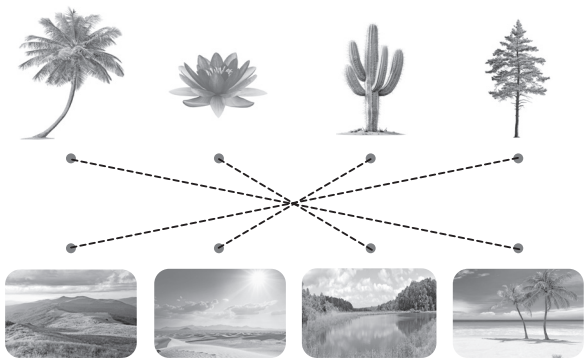
Answers

Theme 3: We Adapt to Survive

Lesson 5: Plants – Adapting and Surviving

Main Coursebook

I am ready



Catch Up (Page 28)

1. No 2. Yes

Catch Up (Page 29)

1. Lotus 2. Hydrilla

Catch Up (Page 30)

1. Agave 2. Bamboo

I am a learner

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

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

C. 1. Terrestrial plants are the plants that grow on land.

2. The roots of trees in marshy areas grow above the soil so they can get air because air cannot pass through the sticky soil.

3. i. Some grasses, such as wheat and rice, give us food.

ii. Bamboo and sugarcane are used for making furniture, paper and sugar.

D. 1. i. Trees found in hilly areas are usually straight and tall. Such trees have needle-like leaves. As the hilly areas experience snowfall, leaves of these trees let the snow slip off the trees. As the hilly areas experience snowfall, leaves of these trees let the snow slip off the trees. Trees, such as fir, pine and cedar, are some trees found in hilly areas.

ii. Trees in the plains have a lot of branches and leaves. These trees can tolerate heat and can grow in warmer climates. Examples of such trees are mango, sal and banyan.

iii. Plants that grow in hot and damp areas also have a lot of leaves to prepare food in the presence of sunlight. Examples include coffee, tea, rubber and pepper.

iv. Plants in deserts usually do not have any leaves. This helps to reduce any loss of water through them. Such plants have spines in place of leaves. Examples of such plants include cactus. Agave has thick green leaves with sharp spines.

v. Areas that are wet and humid are known as marshy areas. These areas have clayey and sticky soil. Plants that grow in such areas are called mangroves. Examples of mangroves include Indian mangrove (Avicennia) and red mangrove (Rhizophora).

2. i. **Floating plants:** These plants float on water. They are light in weight and usually small in size. Their leaves stay on the water surface. Examples include water lettuce, duckweed and water hyacinth.

ii. **Fixed plants:** These plants remain attached to the water bed. They have hollow and light stems, which help their leaves and flowers float on the water surface. Examples include water lily and lotus.

iii. **Underwater plants:** These plants are completely submerged in water. They have long, narrow, ribbon-like leaves that move easily with water currents. Examples include tape grass, pondweed and hydrilla.

I am a thinker:

Underwater plants get carbon dioxide from water and use sunlight and water to make food.

I am an all-rounder:

A. **English**

1. Jogita plants bamboo trees in the backyard of her house.
2. Rahul forgets to water the plants in his balcony.

B. **Maths:** 200 trees

C. **Social Studies:** Accept all relevant responses.

Students' Worksheets

Worksheet 1

A. 1. habitat 2. Terrestrial
3. Accept all relevant responses.
4. hilly 5. branches, leaves

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

C. 1. → e 2. → a 3. → c 4. → b 5. → d

Worksheet 2

A. 1. needle-like 2. Evergreen 3. spines
4. marshy 5. mangroves

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

C. 1. DAMP 2. PLAINS 3. TERRESTRIAL
4. DESERT 5. MARSHY

Worksheet 3

A. 1. The region or natural environment where an animal or a plant live naturally is called habitat.
2. These are the special features of a plant or an animal that help it survive and thrive in its habitat.
3. These are the plants that grow on land. For example, rubber and cotton.
4. These are the plants that float on water. For example, duckweed and water lettuce.
5. These are the plants that are completely submerged in the water. For example, tape grass and hydrilla.

B. 1. DUCKWEED 2. WATER LILY
3. LOTUS 4. TAPE GRASS
5. HYDRILLA

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

Worksheet 4

A. 1. PINE 2. BANYAN 3. PEPPER
4. CACTUS 5. SAL

B. 3.

C. 1. Y 2. N 3. Y
4. N 5. N

Teacher's Worksheets

Worksheet 1

A. 1. mango 2. pepper 3. papyrus
4. duckweed 5. tape grass

B. 1. b 2. d 3. c 4. e 5. a

C. 1. land 2. Underwater
3. needle-like 4. bamboo
5. Underwater

Worksheet 2

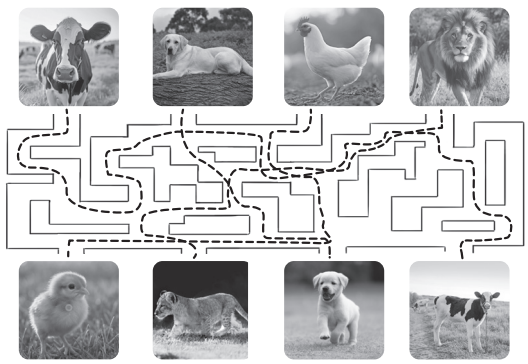
1. Floating plants float on water. They are light in weight with smaller sizes. Such plants help in protecting small water animals from the direct heat of the Sun. Examples include water lettuce and duckweed.
2. Fixed plants remain fixed to the water bed, for example, water lily and lotus. These plants have hollow and light stems, letting the leaves and flowers float on the water surface. Such floating leaves act as a nesting place for small birds.
3. Underwater plants are completely submerged in the water. Such plants have narrow, long and ribbon-like leaves. These plants remove the carbon dioxide exhaled by aquatic animals through photosynthesis, thereby helping clean the water. Examples of such plants include tape grass, pondweed and hydrilla.
4. i. Some plants of the grass family provide food for human beings and animals, such as wheat and rice.
   ii. Plants, such as bamboo, are used to make different things, such as baskets, chairs, mats and toys.
   iii. Some of the grass plants are used to make medicines, such as Bermuda grass and couch grass.
   iv. When grass is used in its dry form, it is used as a packing material.

Answers

Theme 4: Things We Need
Lesson 6: Reproduction in Animals

Main Coursebook

I am ready



Catch Up (Page 35)

1. False 2. True

Catch Up (Page 36)

1. yolk 2. tadpole

I am a learner

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

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

C. 1. Reproduction is the process by which living things produce more of their own kind.
2. To protect the inner parts of the egg.
3. Moulting is the process through which a nymph sheds its skin and grows into an adult insect.

D. 1. An egg has a thin but hard outer covering called the eggshell. Inside the eggshell, albumen is present. The albumen is a jelly-like white substance which is rich in proteins. In the centre of the albumen lies the yellow-coloured yolk. The growing baby inside an egg is called the embryo. The embryo (the growing baby) is present inside the yolk. The embryo develops inside the egg and after some time, hatches into a chick.
2. A female frogs lay eggs in large clusters, called spawns in water. Baby frogs, called tadpoles, hatch from these eggs. They have tails and swim in water. After going through a series of changes, called metamorphosis, tadpoles grow into adult frogs.

I am a doer: Accept all relevant responses.

I am an all-rounder

A. **English:** The egg of a bird has an outer hard shell, a hard jelly-like albumen and a yellow-coloured yolk.

B. **Maths:** E, O, D, U, C, T, I

C. **Social Studies:** Accept all relevant responses.

Students' Worksheets

Worksheet 1

A. 1. forever 2. lifespan 3. lifespan 4. life cycle 5. reproduction

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

C. 1. Humans 2. Birds 3. birds 4. mammals 5. Dolphin

Worksheet 2

A. 1. mammals 2. milk 3. mammals 4. enemies 5. eggs

B. 1. LIFESPAN 2. LIFE CYCLE 3. REPRODUCTION 4. EGGS 5. YOUNG ONES

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

Worksheet 3

A. 1. Fish and frogs. (Accept all relevant responses)
2. The eggshell protects the inner parts of the egg.
3. The growing baby inside an egg is called the embryo.
4. Animals that give birth to young ones and feed them milk are called mammals. Accept all relevant responses.
5 Mammals feed milk to their young ones and protect them from enemies.

B. 1. → c 2. → e 3. → b 4. → a 5. → d

C. 1. Y 2. N 3. N 4. Y 5. N

Worksheet 4

A. 1. Eggshell 2. Albumen 3. Yolk 4. Embryo 5. Chick

B. 1. EGGSHELL 2. ALBUMEN 3. YOLK 4. EMBRYO 5. CHICK

C. 1. N 2. Y 3. N 4. N 5. N

Teacher's Worksheets

Worksheet 1

A. 1. Animals that give birth to young ones are called mammals.
2. Birds reproduce by laying eggs.
3. The albumen is a jelly-like white substance and rich in proteins.
4. Female frogs also lay eggs in large clusters, called spawns, in ponds. Baby frogs, called tadpoles, hatch from these eggs. They have tails and swim under the water. After going through a series of changes, called the metamorphosis, tadpoles grow into adult frogs.
5. Moulting is the process of shedding of caterpillar's skin.

B. Accept all relevant responses.

Worksheet 2

A. 1. BUTTERFLY 2. CATERPILLAR
3. CHRYSALIS 4. TADPOLE
5. MAMMALS

B. 1. tadpole 2. yolk 3. chrysalis
4. nymph 5. eggs 6. butterfly
7. shedding 8. adult insect

C. 1. dog 2. metamorphosis
3. Cocoon

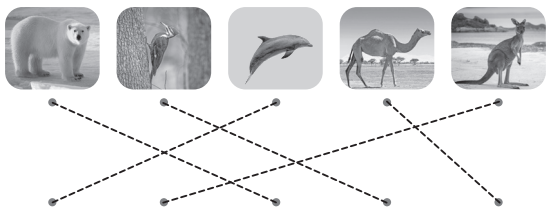
Answers

Theme 4: Things We Need

Lesson 7: Animals- Adapting and Surviving

Main Coursebook

I am ready



blows air through blowhole | pouch for baby | thick fur for snow | strong beak to peck | hump to store fat

Catch Up (Page 42)

1. False
2. True

Catch Up (Page 43)

1. Stick insect
2. Bear (Accept all relevant responses.)

I am a learner

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

B. 1. land 2. fur 3. Herbivores
4. flesh; animals 5. hibernation

C. 1. Aquatic animals are those that live in water. For example, fish, turtle and crab.
2. Squirrel
3. Aestivation is the process in which some animals go into long bouts of sleep during summer to protect themselves from heat.

D. 1. i. **Terrestrial animals:** These animals live on land. They have lungs to breathe and legs to move. Their sense organs and nervous system help them detect changes in the surroundings.

ii. **Aquatic animals:** Aquatic animals are animals that live in water. Such animals have limbs or fins that help them in swimming. Examples are fish, turtles and crabs. Animals such as fishes and crabs have gills to breathe under water.

iii. **Amphibians:** These animals can live both on land and in water. They have lungs and skin for breathing and limbs for swimming.

iv. **Aerial animals:** They have wings to fly. Aerial animals have light bodies that help them to fly easily.

v. **Arboreal animals:** These animals live mostly on trees. These animals have strong limbs that help them climb up and down trees.

2. i. **Fast movement:** Some animals move very fast to escape from enemies. Examples include, fish and houseflies.

ii. **Colour:** Many animals change their body colour to to blend with their the surroundings. Examples include, cuttlefish and chameleons.

iii. **Large size:** Some animals are so large that other animals cannot attack or eat them. Examples include, elephants and whales.

iv. **Poisonous bite:** Some animals protect themselves with their poisonous bites or stings. Examples include, spiders and snakes.

v. **Hibernation:** Some animals sleep for several months in winter to survive cold conditions. Examples include, bears and frogs.

vi. **Aestivation:** Some animals sleep during summers to avoid heat. Examples include, earthworms and reptiles.

vii. **Spines:** Some animals, such as porcupines, have sharp spines that prick and hurt attackers. Example include, porcupines.

viii. **Shells:** Some animals possess a tough and protective shell over their body. When any other animal attacks, they hide themselves inside the shell for protection. Examples include, turtles and tortoises.

I am a thinker

If animals had no adaptations, they would not be able to survive in different environments. Yes, it would affect life on Earth because many animals would die, and their numbers would decrease.

I am an all-rounder

A. **English:** a, an, the

B. **Maths:** 44

C. **Social Studies:** Accept all relevant responses.

Students' Worksheets

Worksheet 1

A. 1. Habitat 2. desert
3. penguins 4. terrestrial
5. Cat (Accept all relevant responses.)

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

C. 1. → d 2. → e 3. → a 4. → b 5. → c

Worksheet 2

A. 1. lungs 2. nervous 3. Aquatic
4. fins 5. Fishes, crabs

B. 1. ADAPTATION 2. HABITAT
3. TERRESTRIAL 4. AQUATIC
5. AMPHIBIAN

C. 5. 2000 plants

Worksheet 3

A. 1. These are the characteristics of animals that help them survive successfully in their habitats.
2. It is a place where a living thing lives and is adapted to survive.
3. These are the animals that live on land.
4. These animals have sense organs and a nervous system that help them detect changes in their surroundings.
5. These are the animals that live in water.

B. 1. cat, dog
2. fish, crab
3. frog, salamander
4. bat, sparrow
5. squirrel, monkey
(Accept all relevant responses.)

C. 1. N 2. N 3. N 4. Y 5. Y

Worksheet 4

A. 1. Lungs 2. Limbs or fins 3. Wings
4. Bat 5. Strong limbs

B. 1. TURTLE 2. CRAB 3. FINS
4. GILLS 5. SWIMMING

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

Teacher's Worksheets

Worksheet 1

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

B. 1. fast movement 2. colour
3. hibernate 4. aestivation
5. spines 6. poisonous
7. Protective

Worksheet 2

1. Arboreal animals are the animals that spend most of their time on trees. Examples of such animals are monkeys, squirrels and tree lizards.
2. Frogs have lungs for breathing. These also have limbs that help them to swim in water.
3. Spines are sharp needle-like structures present on the body of some animals. Porcupine uses spines for their protection.
4. Hibernation is a process in which some animals can sleep for several months continuously. They do so to protect themselves from the extremely cold climatic conditions. Frogs and lizards hibernate.
5. In aestivation the animals undergo bouts of sleep during summers. This is done to prevent excessive loss of water from their bodies.
6. Camouflage is the phenomenon where an animal hides itself by blending in its surroundings.

Answers

Theme 5: Our Universe
Lesson 8: Earth and Its Neighbours

Main Coursebook

I am ready

1. astronaut
2. spacecraft
3. 1969
4. Sunita Williams

Catch Up (Page 48)

1. Mercury
2. Jupiter

Catch Up (Page 49)

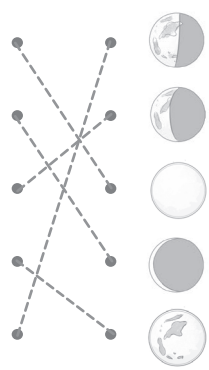
1. Moon
2. First quarter and Third quarter

I am a learner

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

B.

1. New Moon
2. Waning crescent Moon
3. Waning gibbous Moon
4. Full Moon
5. Third quarter Moon



C. 1. Eight
2. Astronomer
3. The people who study heavenly bodies such as planets, stars and moons are called astronomers.

D. 1. The solar system consists of the Sun and all the objects that move around it, including eight planets and their moons.

Mercury: It is the smallest and closest planet to the Sun.

Venus: It is the second planet from the Sun. It is almost as big as the Earth and is the hottest planet of the solar system.

Earth: It is the third planet from the Sun. It is the only planet where life exists.

Mars: It is the fourth planet from the Sun. It is called the red planet because its surface is covered with red dust.

Jupiter: It is the fifth planet from the Sun and the biggest planet in the solar system.

Saturn: It is the sixth planet from the Sun. It is the second-largest planet in the solar system and is famous for its beautiful rings.

Uranus: It is the seventh planet from the Sun. It is a cold planet.

Neptune: It is the farthest planet from the Sun. It is also a cold planet and is blue in colour.

2. The main phases of the Moon are:

New Moon: The Moon is not visible in the sky.

Waxing Crescent: A thin crescent of the Moon appears on the right side and grows each night.

First Quarter: Half of the Moon is visible ; the right half is lit.

Waxing Gibbous: More than half of the Moon is visible and keeps growing.

Full Moon: The entire face of the Moon is visible and fully bright.

Waning Gibbous: After the full moon, more than half is visible but shrinking.

Third Quarter: Half of the Moon is visible; the left half is lit.

Waning Crescent: A small crescent on the left side is visible and keeps shrinking.

I am a doer

Accept all relevant responses.

I am an all-rounder

A. **English:** She, it, them

B. **Maths:** 8, 16, 24, 32

C. **Social Studies:** Yes. Aryabhata and Bhaskara-I.

Picture Talk

1. b 2. b 3. a

Students' Worksheets

Worksheet 1

A. 1. planets 2. planet 3. Sun 4. Sun 5. light; heat

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

C. 1. → d 2. → e 3. → a 4. → c 5. → b

Worksheet 2

A. 1. eight 2. Earth 3. third 4. Mars 5. sixth

B. 1. Mercury 2. Venus 3. Jupiter 4. Saturn 5. Uranus

C. 1. Mercury 2. Venus 3. Earth
4. Jupiter 5. Neptune

Worksheet 3

A. 1. The Sun is the largest heavenly body in the solar system.
2. The Sun contains hot gases and gives out heat and light.
3. In our Solar system, there are eight planets.
4. Mars is the fourth planet from the Sun.
5. Uranus has 28 moons.

B. 1. I 2. I 3. C 4. C 5. I

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

Worksheet 4

A. 3, 4.

B. 1. The Sun and all the objects that move around it form the solar system.
2. Large celestial bodies that revolve around the Sun in a fixed path.
3. A star at the center of our solar system that gives light and heat to all the planets.
4. A natural satellite that revolves around a planet.
5. Stars are huge balls of fire and light.

C. **URANUS:** Seventh planet from the Sun; Cold planet; 28 Moons

MARS: Fourth planet from the Sun; Known as red planet

SATURN: Sixth planet from the Sun; Second largest planet; 274 Moons

Teacher's Worksheets

Worksheet 1

A. 1. a 2. c 3. c

B. 1. Constellation 2. Earth
3. Jupiter 4. Saturn
5. Uranus 6. Neptune
7. Moon 8. Star
9. Aryabhata

Worksheet 2

A. 1. Astronomy 2. Neptune

B. 1. A star is a huge ball of fire and light. But a planet is a large heavenly body that moves around a star. A planet does not have light of its own. It gets light and heat from the Sun.
2. A solar system is made up of the Sun and eight planets that move around the Sun.
3. A heavenly body that revolves around a planet is called a satellite. The Moon is the natural satellite of the earth.
4. A group of stars that form a shape in the sky is called a constellation.
5. Aryabhata was an Indian Mathematician and astronomer born in the year 476 AD. He studied planetary motion and said that the Moon does not have light of its own and shines only when it takes light from the Sun.

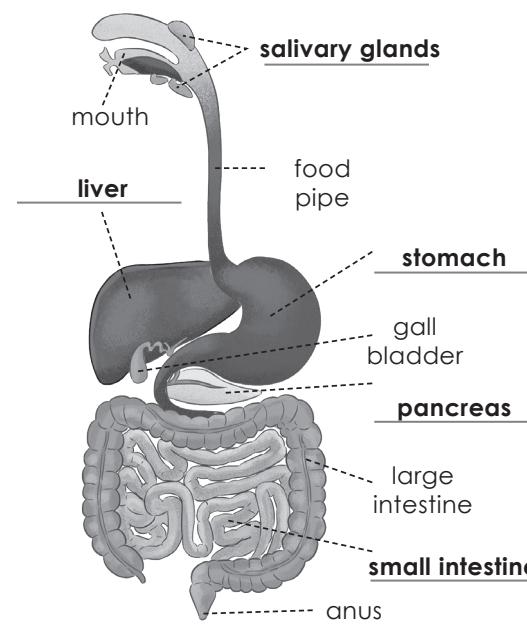
Revision Worksheet

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

B. 1. artificially 2. food 3. Jupiter
4. egg 5. strong

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

D.



E. 1. Proteins help our body grow and repair.
2. Birds lay eggs to reproduce.
3. There are eight planets in our solar system.
4. If we do not take proper care of our teeth, it results in their decay.

5. Clothes should be allowed to dry in open air.

F. 1. Incisors are used for biting and cutting the food.

2. Natural fibres are the materials that are derived from plants or animals. Examples of natural fibres include jute, linen, silk and fur.

Synthetic fibres are the materials that are artificially prepared and are not found in nature. Examples of synthetic fibres include rayon and nylon.

3. Mercury.

4. The growing baby inside an egg is called an embryo.

5. Herbivore: Cow and goat

Carnivore: Lion and tiger

Omnivore: Crow and bear

Case Studies

Theme 1: We the People

1. c

2. False

3. i. Reduces hunger among students

ii. Improves attendance and concentration in class

Theme 2: Resources We Care For

1. b

2. False

3. i. Reduces waste

ii. Provides jobs to many people

Theme 3: We Adapt to Survive

1. b

2. False

3. They catch and digest insects using their pitcher-shaped leaves to obtain nutrients like nitrogen.

Theme 4: Things We Need

1. b

2. False

3. i. Eats a lot of food before winter

ii. Stores fat in its body

Theme 5: Our Universe

1. b

2. True

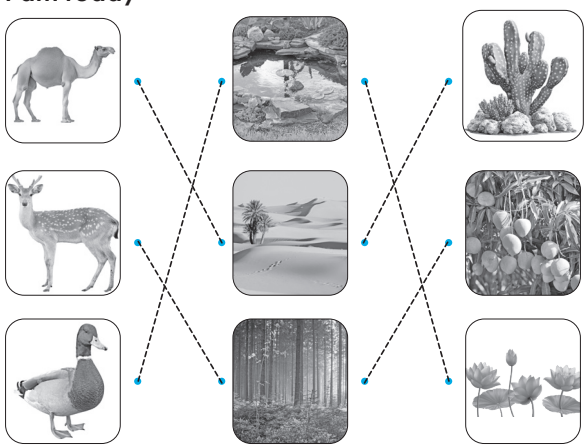
3. Mercury, Venus (Accept all relevant responses.)

Answers

Theme 6: India – Our Country
Lesson 9: Flora and Fauna of India

Main Coursebook

I am ready



Catch Up (Page 60)

1. Yes 2. Yes

Catch Up (Page 61)

1. Yes 2. No

I am a learner

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

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

C. 1. Plant life on the Earth is known as flora and animal life is known as fauna.

2. The flora of the plains is mainly made up of grasses and trees such as neem, peepal, banyan and mango and flowering plants like marigold, sunflower and aster are also commonly found. In contrast, the coastal plains have mangroves and coconut palms, along with some non-flowering plants such as ferns and mosses.

3. Indian mountains: Snow leopard
Plains: Deer
Indian waters: Whale
Deserts: Thar - Blackbuck
Ladakh - Tibetan wolf

D. 1. Flora of mountains: Trees, such as pine, spruce and deodar, are found in the mountain areas.

Flora of coastal plains: Coastal plains have mangroves and coconut palms. Some non-flowering plants, such as ferns and mosses, are also found in these areas.

2. Fauna of the deserts: India has hot and cold deserts. Hot deserts, like the Thar, have animals, such as camel, blackbuck, desert fox and gazelle. Cold deserts, like Ladakh, have animals, such as snow leopard, Tibetan wolf and kiang. Birds like falcons, harriers and vultures are also found in deserts.

Fauna of plains: Animals like the Bengal Tiger, Asiatic Lion, Indian Elephant, Gaur (Indian Bison) and different kinds of deer such as Sambar, Chital and Swamp Deer are found in Indian plains.

I am a thinker

Accept all relevant responses.

I am an all-rounder

A. **English:** cheerful, beautiful, mesmerising, expensive

B. **Maths:** 0.25

C. **Social Studies**
The cold weather protects some plants and animals and helps people adapt to the environment.

The dense forests provide shelter and food for animals and help people collect resources like wood and medicinal plants.

Picture talk

1. b 2. b 3. b

Students' Worksheets

Worksheet 1

A. 1. flora 2. fauna 3. India
4. 47,513 5. 7-8 per cent

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

C. 1. PINE 2. SPRUCE 3. ASTER
4. DEODAR 5. BANYAN

Worksheet 2

A. 1. plains 2. coastal plains
3. water; fertile 4. deserts
5. coastal plains

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

C. 1. FLORA 2. FAUNA 3. HABITATS
4. PLANT 5. SUNFLOWERS

Worksheet 3

A. 1. 1,200 2. 90,000
3. Red Panda; Snow leopard (Accept all relevant responses.)
4. Indian bison; Deer
5. Whales; Dolphins

B. 1. mountains 2. plains

3. Indian waters 4. Indian waters
5. deserts

C. 1. → c 2. → b 3. → a 4. → e 5. → d

Worksheet 4

A. 1. 2,000 2. 90,000 3. mountains
4. plains 5. Indian waters

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

C. 1. → c 2. → b 3. → a 4. → e 5. → d

Teacher's Worksheets

Worksheet 1

A. 1. Maple 2. Magnolia 3. Mosses
4. Lupine 5. Lupine

B.

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

Worksheet 2

1. Snow leopard; Bighorn sheep
2. Bison; Deer
3. Seal; Walrus
4. Blackbuck, Desert fox

Answers

Theme 7: Let Us be Aware
Lesson 10: Safety First

Main Coursebook

I am ready

Catch Up (Page 68)

1. No 2. Yes

Catch Up (Page 69)

1. False 2. False

I am a learner

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

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

C. 1. Safety rules are the rules that are followed to remain safe.

2. Allow them to lie flat on the ground for fresh air. Sprinkle some water on their face and call for help immediately.

3. After cleaning the cut properly, apply antiseptic and cover it with a bandage.

D. 1.
- Always reach on time to avoid last minute rush or delays.
- Stay alert for announcements especially those for passengers.
- Be aware of your surroundings. Do not talk to strangers.
- Avoid carrying sharp objects during the journey.

2. i. **Minor cuts:** Clean the cut properly, apply antiseptic and cover it with a bandage.

ii. **Insect bite:** Use insect repellers.

iii. **Unconsciousness:** Let the person lie flat on the ground. Should not overcrowd around the fainted person and let fresh air reach him/her. Avoid crowding around them and let fresh air reach them. Sprinkle some water on their face if necessary.

iv. **Burns:** Use cool (not cold) water to soothe the burnt area.

I am a doer

Accept all relevant responses.

I am an all-rounder

A. **English:**

1. very 2. regularly

B. **Maths:** ₹51.25

C. **Social Studies:**

Municipal Corporation (for city roads)

Students' Worksheets

Worksheet 1

A. 1. danger 2. zebra crossing 3. everywhere 4. Never 5. Never

B. 1. bandage 2. red ; swollen 3. collapse 4. cool 5. repellents

C. 1. Unsafe 2. Unsafe 3. Safe 4. Safe 5. Unsafe

Worksheet 2

A. 1. Accidents can cause pain and injury.

2. While travelling, always reach a little early to avoid last-minute rush.

3. Always avoid carrying sharp objects during a journey.

4. We should use cool water to soothe a burnt area.

5. We should follow safety rules to stay safe.

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

C. 1. FIRST AID 2. ANTISEPTIC 3. BANDAGES 4. UNCONSCIOUS 5. BURNS

Worksheet 3

A. 1. → b 2. → a 3. → d 4. → e 5. → c

B. 2, 3, 4

C. 1. We can avoid accidents by following safety rules.

2. We should a void crowded places.

3. Use cold water on burns immediately.

4. Apply antiseptic on minor cuts.

5. We can use insect repellent to prevent insect bites.

Teacher's Worksheets

Worksheet 1

A. 1. scratches; scrapes
2. pain
3. early
4. overcrowded
5. overcrowd

B. Accept all relevant responses.

Worksheet 2

1. Wash your hands frequently.
   Avoid going to overcrowded places.
2. Always reach on time to avoid last minute rush due to delay.
   Stay alert for announcements especially those that are made for passengers.
3. Clean the minor cuts properly. After which apply antiseptic and cover it with a bandage.
4. One can apply insect repellers to avoid insect bite. In case of serious symptoms seek medical assistance.
5. For fire burns, we should use cool water to soothe the burnt area and seek medical help.

Answers

Theme 7: Let Us be Aware
Lesson 11: Air and Weather

Main Coursebook

I am ready

SUMMER

SPRING

WINTER

RAINY

Catch Up (Page 74)

1. Oxygen 2. Carbon dioxide

Catch Up (Page 75)

1. True 2. True

I am a learner

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

B. 1. → c 2. → e 3. → d 4. → a 5. → b

C. 1. Air is a mixture of different gases, water vapour and dust particles.

2. Troposphere

3. The moving air is called wind.

D. 1. i. **Nitrogen:** It helps plants grow and stops fire from getting bigger.

ii. **Oxygen:** We need oxygen for breathing. It is also essential for burning.

iii. **Carbon dioxide:** Plants use it for photosynthesis. It also helps in putting out fire and thus, is used in fire extinguishers.

iv. **Argon:** Light bulbs and tube lights have argon in them.

2. i. **Wind:** It carries heat and moisture from one place to another, thereby affecting the weather.

ii. **Land breeze and sea breeze:** During the day, land heats up faster than the sea, so the hot air above the land rises and cooler air from the sea moves in, creating a sea breeze. At night, land cools faster than water, so the cooler air from land moves towards the sea, forming a land breeze.

iii. **Humidity:** When the Sun is bright, more water evaporates from the water bodies. This results in increased amount of water vapour in the air, which in turn increases the humidity. When humidity is high, the air has greater moisture content.

I am a thinker

Air pushes the candle flame away from the wax.

I am all-rounder

A. **English**

1. beautiful 2. colourful

B. **Maths:** 3600 seconds

C. **Social Studies:** By planting more trees, preventing the use of plastic bags. (Accept all relevant responses)

Students' Worksheets

Worksheet 1

A. 1. Air 2. 78 3. oxygen
4. carbon dioxide 5. argon

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

C. 1. → b 2. → c 3. → e 4. → a 5. → d

Worksheet 2

A. 1. WIND 2. NITROGEN 3. OXYGEN
4. CARBON DIOXIDE 5. ARGON

B. 1. space 2. weight 3. pressure
4. blanket 5. five

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

Worksheet 3

A. 1. Air is a mixture of different gases, water vapour and dust particles.

2. Nitrogen, oxygen, argon, carbon dioxide and other gases.

3. Air occupies space, has weight and exerts pressure.

4. The blanket of air surrounding the Earth is called atmosphere.

5. The atmosphere has five layers.

B. 1. → e 2. → b 3. → d 4. → c 5. → a

C. 1. N 2. Y 3. N 4. Y 5. N

Worksheet 4

A. 1. TROPOSPHERE 2. STRATOSPHERE

3. MESOSPHERE 4. THERMOSPHERE

5. EXOSPHERE

B. 1. wind 2. humidity

3. weather 4. land breeze

5. sea breeze

C. 1. N 2. Y 3. Y 4. Y 5. Y

Teacher's Worksheets

Worksheet 1

A.

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

B. Accept all relevant responses.

Worksheet 2

1. During the day, the land gets heated more quicker than the sea. As the air above the hot land gets heated, it rises higher. The cool air from the nearby sea rushes in to take its place. Thus, we have a sea breeze that blows from the sea towards the land during day time.

2. At night, the land cools down more quicker than the water. Thus, the air above the land is cooler as compared to that above the sea. The hot air above the sea rises and the cooler air from the land moves towards the sea to take its place. Thus, a land breeze blows from the land to the sea at night.

Answers

Theme 8: Technology and Us
Lesson 12: Force, Work and Energy

Main Coursebook

I am ready


Pull


Push


Push


Pull


Push

Catch Up (Page 81)

1. no 2. yes

Catch Up (Page 82)

1. yes 2. no

Catch Up

1. Energy 2. Geothermal energy

I am a learner

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

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

C. 1. Work is done when force is applied on an object and it moves in the direction of the applied force.
2. Muscular force
3. Energy is the capacity to do work.

D. 1. i. **Gravitational force:** Every object attracts another with a force known as the gravitational force. For example, ball thrown upwards falls back on the Earth's surface.

ii. **Mechanical force:** When there is a direct contact between two objects, mechanical force comes into play. When an object exerts force on another, the state of the latter changes. For example, cutting a piece of paper.

iii. **Frictional force:** It exists when two objects are in contact in such a way that they rub against each other. For example, walking on the floor.

iv. **Muscular force:** It is exerted by the muscles of the body. This force occurs due to the movement of body parts. For example, carrying a shoulder bag.

2. i. **Lever:** It is a rod-like simple machine used to cut things, open lids and lift weights. For example, nail clippers.

ii. **Pulley:** We can lift heavy objects with the help of a pulley. For example, fetching water from wells.

iii. **Wheel and axle:** This machine consists of a wheel attached to an axle. Examples of wheel and axle include car and bicycle wheels.

iv. **Inclined plane:** It is a flat surface with one end raised higher than the other. It helps in moving or lifting heavy objects with less effort. Examples include screws and ramps.

v. **Wedge:** It is a triangular machine with at least one inclined surface. A wedge has a sharp edge used to cut or split things. For example, knife, blade and axe.

I am a doer

Accept all relevant responses.

I am an all-rounder

A. **English:**

1. on 2. inside

B. **Maths:** Perimeter: 100 m; Area: 625 m²

C. **Social Studies**: Crane, conveyor belt and sewing machine.

Students' Worksheets

Worksheet 1

A. 1. force 2. shape; direction
3. stop 4. move 5. direction

B. 1. PUSH 2. FRICTIONAL
3. MUSCULAR 4. GRAVITATIONAL
5. MECHANICAL

C. 1. Muscular force 2. Frictional force
3. Frictional force 4. Muscular force
5. Gravitational force

Worksheet 2

A. 1. Work 2. Simple 3. reduced
4. lever 5. fulcrum

B. 1. LEVER 2. PULLEY 3. AXLE
4. INCLINED PLANE 5. WEDGE

C. 1. Wedge 2. Pulley
3. Inclined plane 4. Lever
5. Wheel and axle

Worksheet 3

A. 1. Sun 2. solar 3. Plants
4. Wind; water 5. electricity

B. 1. HEAT 2. SOUND 3. CHEMICAL
4. ATOMIC 5. GEOTHERMAL

C. 1. I 2. I 3. C 4. C 5. I

Worksheet 4

A. 1. When two bodies have different temperatures, heat flows from the hotter object to the cooler one. This transfer produces heat energy.
2. The energy generated due to vibration of matter is known as sound energy. The vibration of matter produces sound.
3. Electrical energy is produced by the movement of electrically charged particles and is used to run various devices.
4. Chemical energy is released during chemical reactions between substances. It is found in food, fuels and batteries.
5. The energy produced inside the surface of the Earth is called the geothermal energy.

B. created; destroyed; one; chemical energy; muscular energy

C. 1. sound energy
2. chemical energy
3. electrical energy
4. geothermal energy
5. heat energy

Teacher's Worksheets

Worksheet 1

A.

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

B. 1. Gravitational force
2. Frictional force
3. Frictional force
4. Mechanical force

Worksheet 2

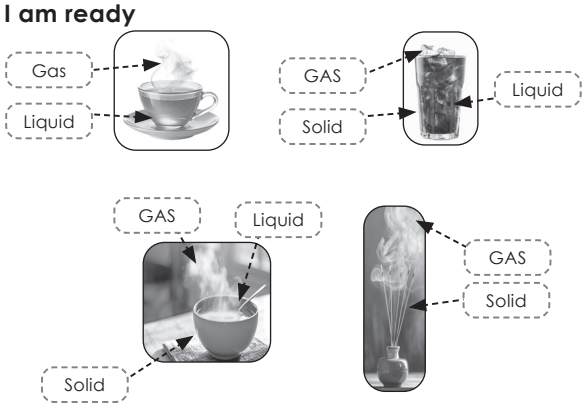
1. Gravitational force is a type of force that attracts every object towards the Earth's surface.
2. Muscular force is exerted by the muscles of the body. This force occurs due to the movement of body parts.
3. When there is a direct contact between two objects, mechanical force comes into play. When an object exerts force on another, the state of the latter changes.
4. Frictional force exists when two objects are in a contact in such a way that they rub against each other. Such two objects tend to oppose the motion of each other.
5. When force is applied, it can change the shape and direction of an object, stop a moving object, move a stationary object or change the speed of a moving object.

Answers

Theme 9: Never Give Up
Lesson 13: Matter – Solids, Liquids and Gases

Main Coursebook

I am ready



Catch Up (Page 88)

1. Three 2. Yes

Catch Up (Page 89)

1. Yes 2. No

I am a learner

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

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

C. 1. Anything around us that occupies space and has mass is called matter.

2. He should cool down the contents of the bowl.

3. A solution is a mixture of two or more substances. For example, sugar solution.

D. 1. Matter can exist in three common states – solid, liquid and gas.

Solid: In solid, the particles are very tightly packed. Therefore, solids have a definite shape and volume. Examples include desks, chairs and doors.

Liquid: The particles of liquid are not as tightly packed as solids. Liquids do not have a specific shape. But they have a fixed volume. Examples include milk, water and juices.

Gas: Gases have neither a definite shape nor a definite volume. In gases, the particles are very loosely packed and are free to move in any direction. Examples include air, oxygen and nitrogen.

2. All three states of matter can be interchanged into one another. A solid can change into a liquid by heating (melting). A liquid changes to solid on cooling (freezing). Water changes into steam or water vapour on heating (boiling). Water vapour change into water on cooling (condensation).

I am a thinker

Evaporation, because water in the clothes changes into vapour and escapes into the air, resulting in the clothes drying.

I am an all-rounder

A. **English**

1. Rupali went to the market to buy fruits, but she forgot to bring her purse.

2. Teena boarded the bus first, so she got a good seat.

B. **Maths:** Accept all relevant responses.

C. **Social Studies:** Steel; cement

Students' Worksheets

Worksheet 1

A. 1. ice 2. water 3. water 4. tightly 5. loosely

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

C. 1, 2, 5

Worksheet 2

A.

i**c**e
w**a**t**e**r
me**l**t**i**n**g**
v**a**p**o**u**r**
fr**e**ez**i**n**g**

t	f	r	e	e	z	i	n	g	n
h	o	c	n	a	n	i	b	d	w
a	P	s	y	r	e	e	d	l	v
i	t	L	d	q	h	h	z	x	a
c	m	s	e	u	p	r	j	g	p
e	s	w	a	t	e	r	l	r	o
o	n	k	e	l	r	k	x	a	u
n	E	t	d	v	d	r	o	n	r
c	d	w	o	n	k	r	p	t	i
l	m	e	l	t	i	n	g	r	z

B. 1. can change 2. container
3. fluids 4. free
5. steam

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

Worksheet 3

A.

s**o**lu**t** **i**o**n**
in**s**o**l**u**b**le
s**o**l**u**b**l**e
s**a**lt
s**u** **g**a**r**

s	b	f	u	c	a	t	i	o	s	c	x
o	q	c	e	a	n	i	b	d	u	s	r
l	o	r	s	e	i	p	i	l	g	e	e
u	t	l	d	s	a	l	t	r	a	s	l
t	m	s	e	u	p	r	j	g	r	c	i
i	s	x	u	e	b	t	l	r	n	k	t
o	n	k	e	l	r	k	x	a	x	s	i
n	e	t	d	i	d	r	o	n	w	n	o
c	o	s	o	l	u	b	l	e	i	o	n
q	s	e	F	y	r	j	W	r	z	s	A
v	r	j	u	n	d	w	o	n	k	r	p
o	p	s	i	n	s	o	l	u	b	l	e

B. 1, 4

C. 1. SOLIDS 2. DOORS 3. LIQUIDS
4. WATER 5. OXYGEN

Worksheet 4

A. 1. interchanged 2. solid
3. liquid 4. gas
5. liquid

B. 3, 5

C. 2, 4, 5

Teacher's Worksheets

Worksheet 1

A. **Solids:** Ball; Eraser; Pencil

Liquids: Juice; Milk; Water

Gases: Steam from boiling water; Air; Steam from hot tea

Worksheet 2

1. Solute is a component that is present in a smaller quantity. A solvent is a component that is present in a larger quantity.
2. Solution is a mixture of two or more substances. For example, salt is added to water to make the salt solution.
3. Anything around us that occupies space and has some mass is called matter.
4. Gases have neither a definite shape nor a definite volume. In gases, the particles are very loosely packed and are free to move in any direction.

Answers

Theme 9: Never Give Up
Lesson 14: A Clean Environment

Main Coursebook

I am ready

Reduce

Reuse & Recycle

Reduce

Reuse & Recycle

Reuse

Catch Up (Page 95)

1. No
2. Yes

I am a learner

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

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

C. 1. Natural resources are materials that occur naturally on Earth. Examples include water, soil, plants and animals.

2. Reuse

3. Air pollution is the decrease in the purity of air caused by harmful substances.

D. 1. **Biodegradable wastes**

Wastes that can decompose easily and mix with the soil are called biodegradable wastes. Such wastes do not remain in the environment for long periods of time.

For example, vegetable peels, fruit peels and newspapers are biodegradable wastes.

Non-biodegradable wastes

Wastes that cannot decompose and mix with the soil are called non-biodegradable wastes. Such wastes remain in the environment for long periods of time.
For example, plastic, glass and rubber are non-biodegradable wastes.

2. **Reduce:** This R means using less. If we use anything in less amount, it will create less waste. For example, we can reduce the use of plastic bags and use cloth bags instead.

Reuse: This R means using things again. For example, we can use empty shampoo bottles and cans for storing things at home.

Recycle: This R means making new things from old or used things. For example, we can recycle old newspapers and make paper from them.

Refuse: This R means saying no to things we do not really need. For example, we can refuse to take plastic straws or disposable cups when we go out. We can also refuse free plastic bags and carry our own cloth bag instead.

Repurpose: This R means finding a new use for old things. For example, we can use an old jar as a flower vase. We can also turn old tyres into garden pots or make a bird feeder from a plastic bottle.

I am a doer: Accept all relevant responses.

I am an all-rounder

A. **English**

1. because 2. and

B. **Maths:** Accept all relevant responses.

C. **Social Studies:** Biodegradable: roots of living trees.

Students' Worksheets

Worksheet 1

A. 1. naturally 2. natural resource
3. Renewable 4. Non-renewable
5. Pollution

B. 1. Natural resources are materials that occur naturally on Earth and are used by humans.

2. Soil, water, fossil fuels, plants and animals.

3. Renewable resources are available in unlimited amounts that do not deplete and can be used again and again.

4. Non-renewable resources are the resources that are available in limited amounts. Such resources deplete with time.

5. Pollution is the addition of harmful substances to the air, water or land, which decreases the purity of the environment.

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

Worksheet 2

A. 1, 2, 5

B. 3, 4, 5

C. 1. → b 2. → a 3. → e 4. → c 5. → d

Worksheet 3

A. 1. The decrease in the purity of the air is called air pollution.

2. Water pollution is the contamination of water bodies like rivers, lakes and ponds by harmful substances.

3. Land pollution is the decrease in soil quality due to the addition of harmful materials like plastics, chemicals and garbage.

4. Biodegradable wastes are wastes that can decompose easily and mix with the soil.

5. Non-biodegradable wastes are the wastes that do not decompose easily and remain in the environment for a long time, like plastic, glass and metal.

B. 1. air 2. water
3. Harmful 4. Biodegradable
5. Non-biodegradable

C. 1. AIR 2. SOIL 3. WATER
4. NATURAL 5. RENEWABLE

Worksheet 4

A. 1. Polluted 2. typhoid; diarrhoea
3. mix 4. remain
5. reduce; reuse; recycle; refuse; repurpose

B. 2, 5

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

Teacher's Worksheets

Worksheet 1

1. The decrease in the purity of the air is called air pollution. It occurs because of the burning of coal, diesel, petrol in vehicles and factories. When these substances burn, they release smoke in the air that pollutes the air. Polluted air is unfit for breathing.
2. The decrease in the purity of water is called water pollution. It occurs due to washing of clothes and utensils in the rivers or lakes. During heavy rain or flood, chemicals, such as fertilisers and other factory wastes, enter the nearby water bodies and pollute them. Polluted water affects fishes and other aquatic life. Drinking polluted water also affects us as it causes diseases, such as typhoid and diarrhoea.
3. When some harmful substances mix with soil and decrease its purity, it causes land and soil pollution. This type of pollution can occur due to agricultural (fertilisers), industrial (colouring of fabric) and domestic wastes (garbage).

Worksheet 2

1. Air pollution
2. Land pollution
3. Water pollution

Revision Worksheet

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

B. 1. Lever 2. Pollution 3. burn
4. plains 5. Liquids

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

D. 1. axe 2. solar system
3. fossil fuels 4. solid
5. weather

E. 1. Humidity is the amount of water vapour present in air at any particular time and place.

2. At night, land breeze blows from the land to the sea while sea breeze blows from the sea towards the land during day time.

3. Substances that do not dissolve in water completely are known as insoluble substances. For example, sand in a glass of water.

4. Marine animals have blubber in their body under their skin to enable their survival in the cold water.

5. Unconsciousness is a condition in which a person may collapse.

Case Studies

Theme 6: India – Our Country

1. c
2. False
3. Accept all relevant responses.

Theme 7: Let Us Be Aware

1. b
2. True
3. i. Keep emergency items like food, water, torch, and first-aid ready.
   ii. Stay indoors and listen to news updates.
   iii. Move to a safe place or shelter if advised.

Theme 8: Technology and Us

1. b
2. False
3. i. It saves time and effort.
   ii. It helps farmers use water carefully and efficiently.

Theme 9: Never Give Up

1. b
2. True
3. Accept all relevant responses.

F. 1. We should not overcrowd around the fainted person.
2. We need oxygen for breathing.
3. Knife is an example of a wedge.
4. Atomic energy is present in an atom.
5. A solid can change into liquid on melting.