

# Interactive **SCIENCE**

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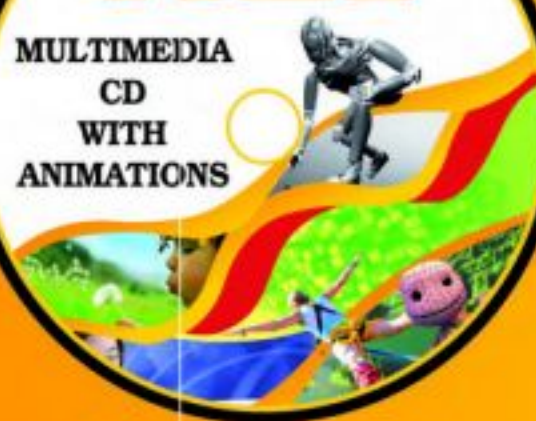


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# Interactive Science

## 2



**Jhara Roy**

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# Key features

This book provides ample material needed for learning various aspects of science. This includes Study Tools, Assessment and Fun Activities.

## Study Tools



Set of well-thought tools which aid the students in absorbing and retaining the vital concepts of science.

### Chapter-starting Illustration

A single page, in cartoon format, providing a fun element to the learning process, at the start of each chapter, which provides an idea of the topic, about to be taught in the chapter.

### Amazing Fact

Surprising facts related to the topics are discussed.

### Fun to Learn

Facts that add to the general knowledge of the students.

### Word Bee

A small exercise at the end of each chapter, which acts as a vocabulary builder, by asking the students to read and write bold words.

### Now I Know

Encapsulates the basic idea of the topic taught in the lesson.





## Assessment

This assessment reinforces learning, usually through a variety of pen-and-paper tests, such as MCQs, Descriptive, etc.

### Conceptual Canvass

A set of short questions in the middle of the chapter for self-assessment and revision.

### Exercises

A set of questions, including MCQs, Fill in the Blanks, Oral Questions, Match the Columns, Short Questions, Long Questions, so as to test the grasping ability of the students.

### HOTS Questions

Questions that invoke the thinking skills of the students, including problem solving, decision making and creative thinking, i.e., applying the learned concepts to practical problem solving.

## Fun Activities



Encompass activities, life skills and fun time.

### Activities

Aid in learning of the students by encouraging them to indulge in practical activities using material that is easily available, and role play, etc.

### Life Skills

Give directions for activities that will help the students to become successful in living a productive life.

### Subject Link

Asks short questions to the students which are related to the topic taught in the chapter.

### Fun Time

Suggests for activities, inside and outside the home, which provide a practical edge to theoretical learning.



# Preface

Science is a fascinating subject which is omnipresent in the world we live in, as it intrudes into the cause and effect, besides the reasons. Thus, it is of extreme importance to initiate a scientific temperament into children as early as possible. Science becomes fun and interesting to a child when it is taught in an interactive manner and is related to his/her surroundings.

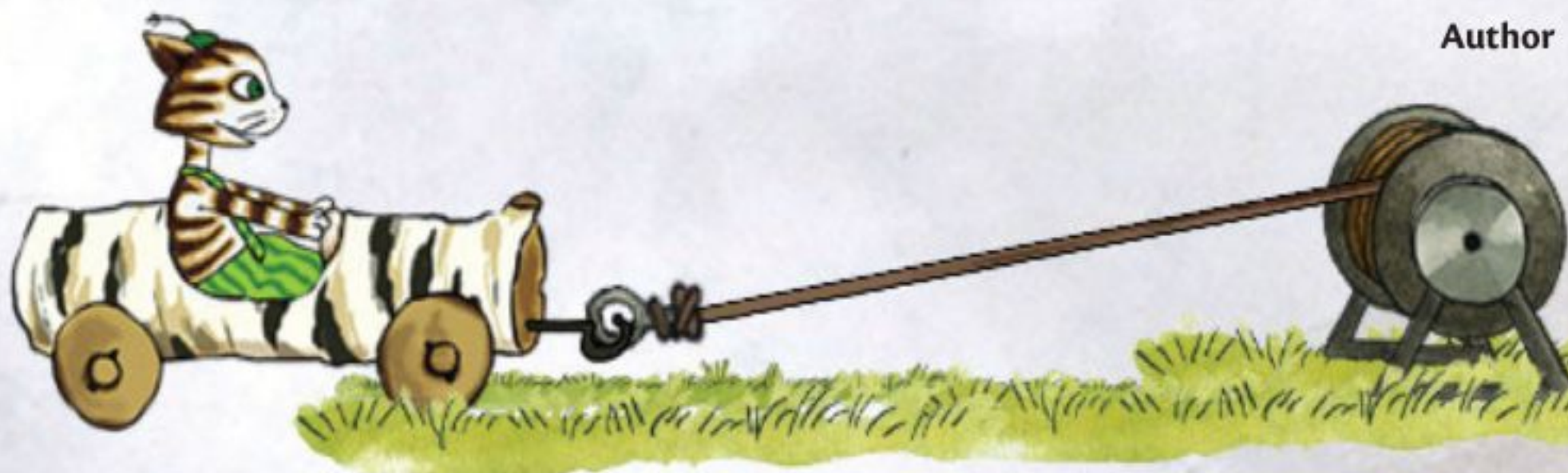
Children are naturally curious and a healthy scientific inquiry forms a part of their behaviour, right from their birth. They gain knowledge about themselves and the world around them by observing and experimenting. This natural spark should be kept alive and encouraged to blossom.

The present edition of **Interactive Science** is a set of eight books, which have been divided into two sub-groups— the first one consists of books for classes 1 to 5, and the second one consists of books for classes 6, 7 and 8. The series confirms to the vision of **National Curriculum Framework, 2005**, which states that “*the child should be engaged in joyfully exploring the world around him and harmonizing with it*”. Thus, the series is designed according to the new NCERT upper primary syllabus, 2005, as a live body of knowledge rather than an overload of information. The books emphasize meaningful learning for the overall development of children rather than learning by rote. **Interactive Science** introduces young students to the world of science in a simple and child-friendly language. The books are graded to the cognitive levels of the students and comprehensively cover areas such as Study Tools, Assessment and Fun Activities. These features focus the students’ attention on the everyday science-related activities, making them more aware of their immediate environment.

Special attention has been paid to develop analytical skills by including Higher Order Thinking Skills (HOTS) Questions in the exercises at the end of each chapter. These questions encourage the students to gain conceptual clarity about the effects and applications of scientific facts, besides encouraging them to use those facts for solving everyday problems.

This being the first edition of the series, some inadvertent mistakes might have crept in. The editor and the publisher tender unconditional apology for the same. Constructive criticism and suggestions from our esteemed readers are most welcome and shall be incorporated in the subsequent editions.

Author





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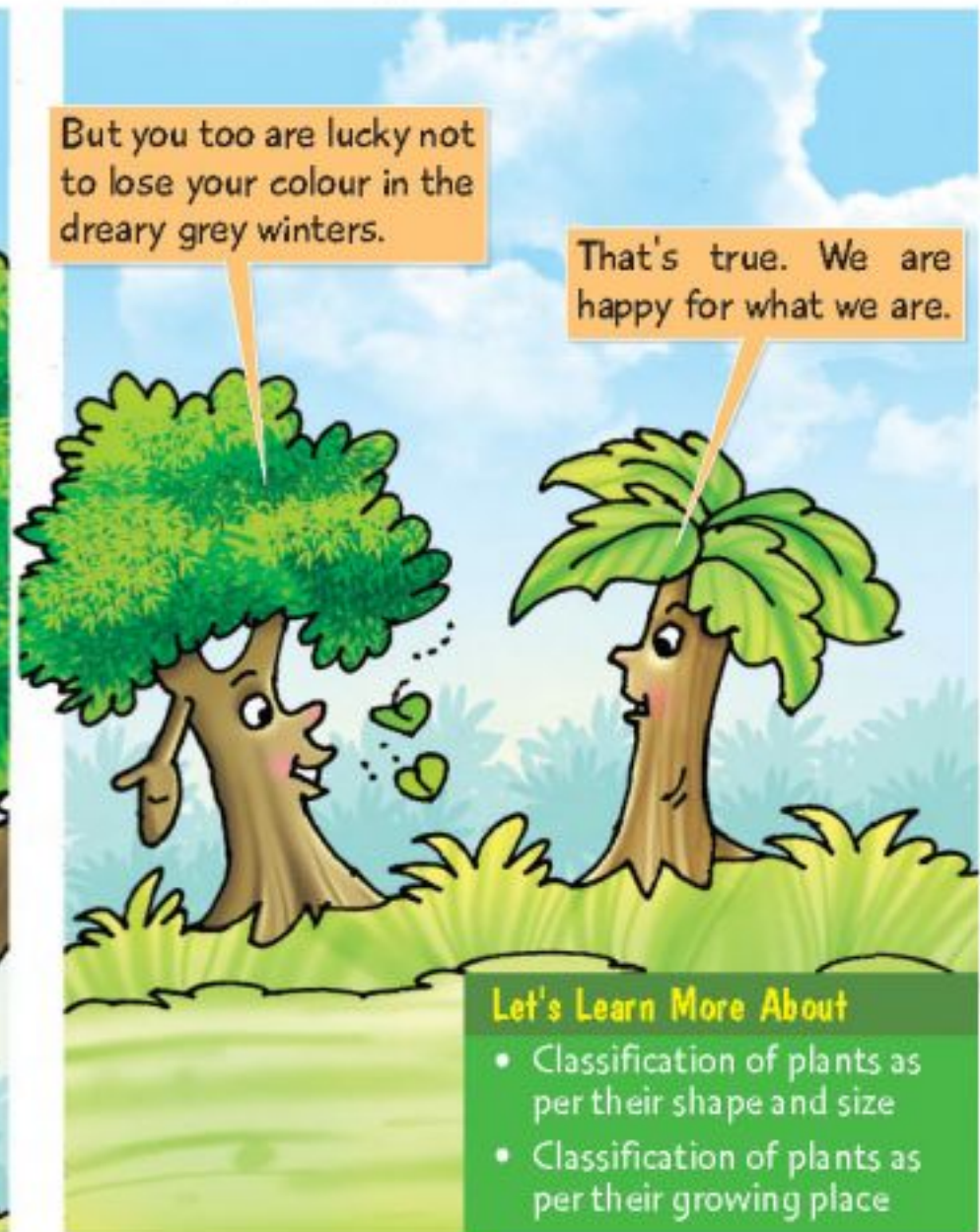
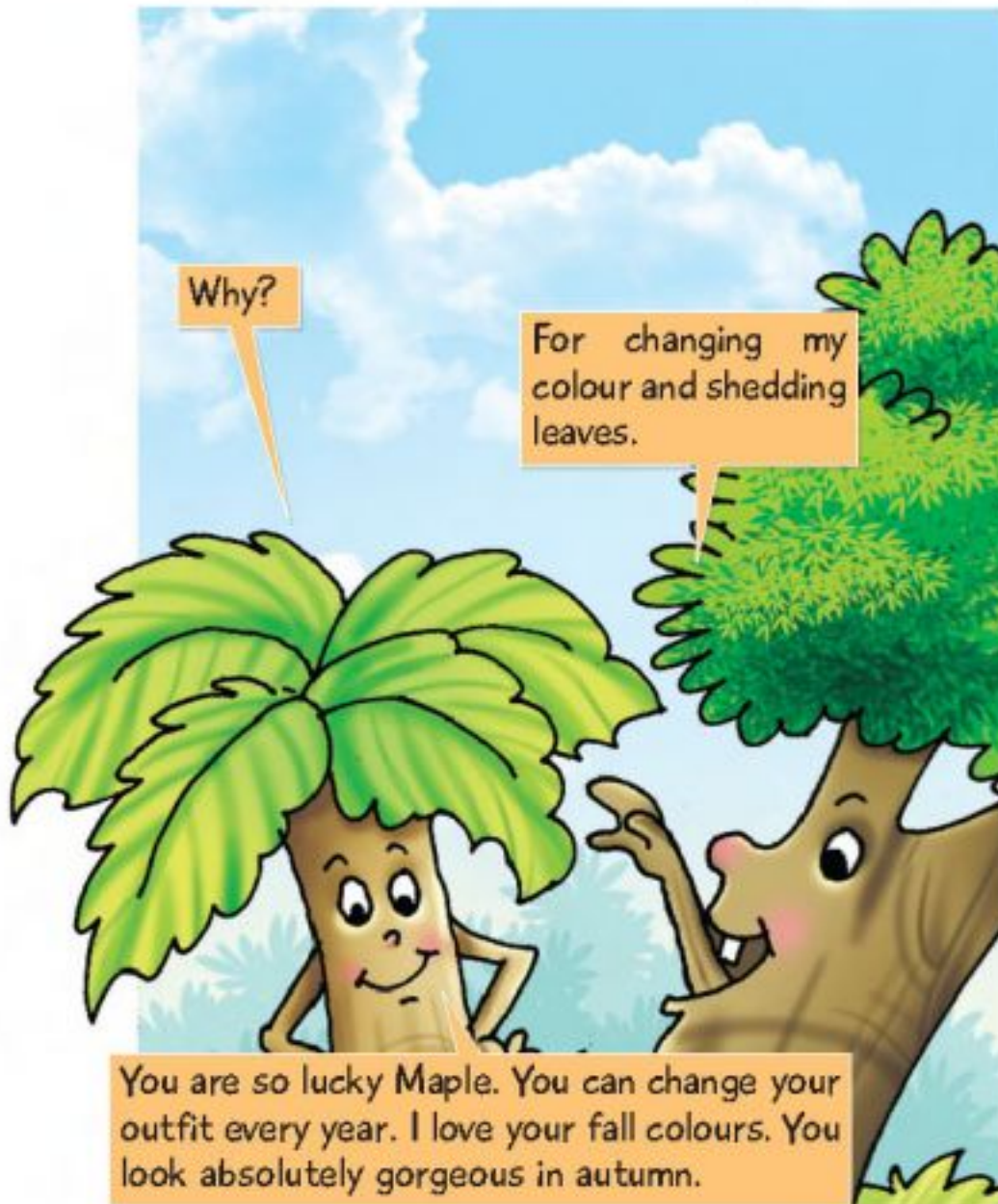
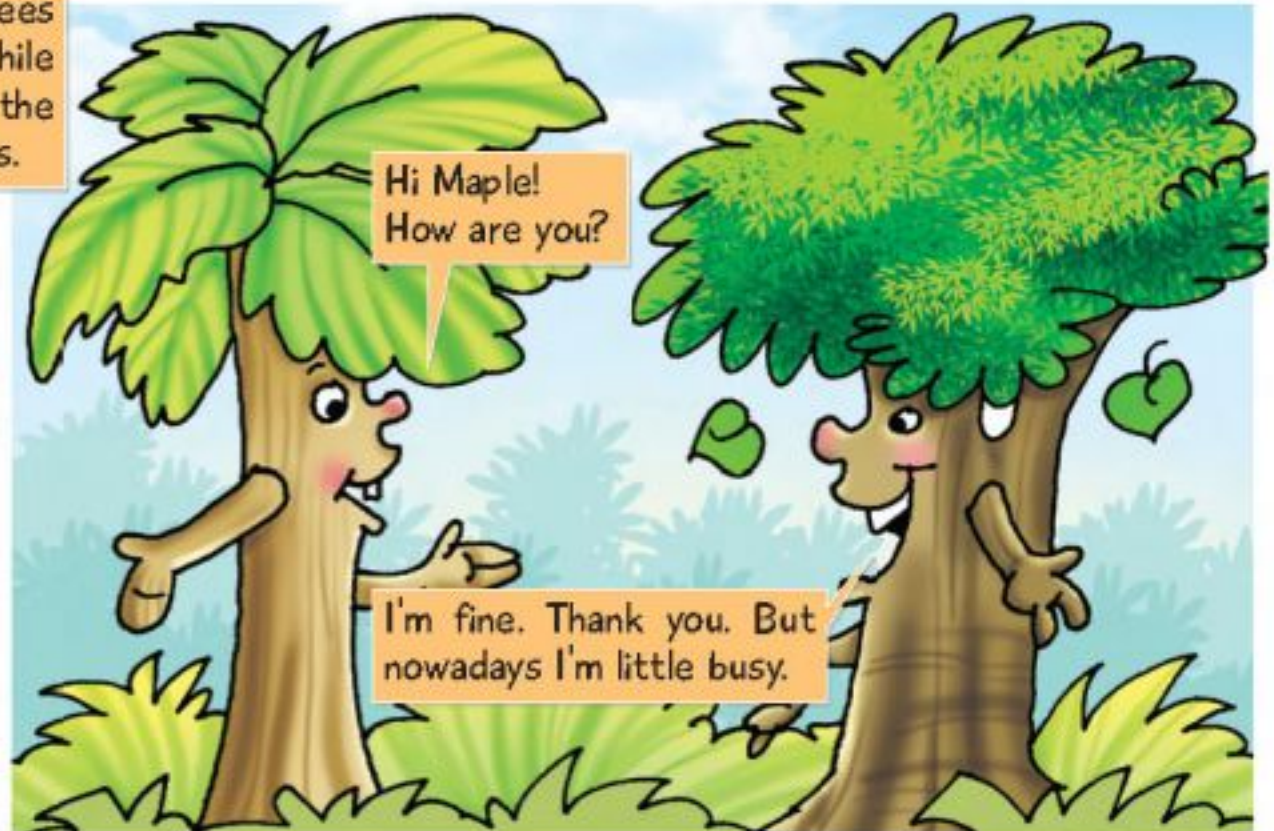




# 1

## Plant Kingdom

Children, did you know some trees shed their leaves once in a year while others do not? Let us now listen to the conversation between two such trees.





We see different kinds of plants around us. They are of different shapes and sizes. Some plants grow on land and some others grow in water.

Some plants grow in very cold places, and some others grow in hot and dry places. Some plants live only for a few months. Some live for hundreds of years.

## Classification of plants as per their shape and size

### Trees

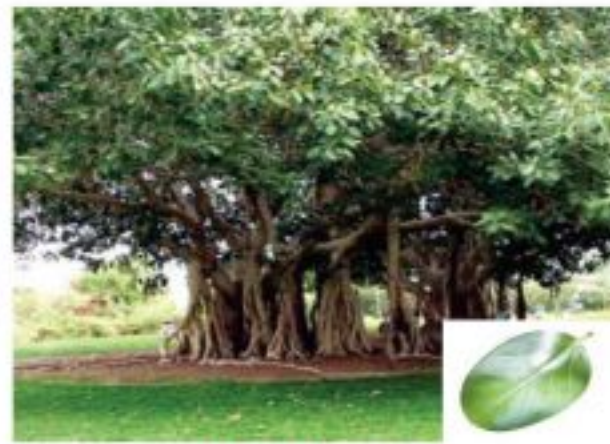
Some plants are very tall. These tall plants are called **trees**. They have hard, strong and thick stems called **trunk**. Trees live for many years. For example, mango, banyan, peepal, apple, coconut and bamboo.



Mango



Peepal



Banyan



Apple

### Shrubs

Some plants are smaller than trees. They have hard stems with many branches. Such plants are called **shrubs**. They live for a few years.

China rose (hibiscus), cotton, rose and *tulsi* (basil) are some examples of shrubs.

#### AMAZING FACT

There are around 2000 different plant types that humans use to cultivate food.



Hibiscus



Cotton



Rose



Basil

### Herbs

Some plants are very small. They have thin, soft stems. They live for one season or for a few months. Such plants are called **herbs**. For example, grass, mint, spinach, coriander, rice and wheat.





Grass



Mint



Spinach



Rice

## Climbers

Some plants cannot stand erect. They have weak stems. They need support to climb up. Such plants are called **climbers**. Money plant, bitter gourd, grapevine and pea plant are a few examples of climbers. Climbers generally live for a few months but some may live for years.



Bitter gourd



Money plant



Grapevine



Pea plant

## Creepers

Some plants have weak stems. They grow along the ground. Such plants are called **creepers**. Pumpkin, watermelon and cucumber are a few examples of creepers.

### CONCEPTUAL CANVASS

1. What are herbs?
2. Which lives longer—a cotton plant or a mango plant?
3. Write a difference between a climber and a creeper.



Pumpkin



Watermelon



Cucumber

## Classification of plants as per their growing place

Plants grow on land, on mountains, on hills, in deserts and in water.



## Land plants

Plants that you see in your garden are **land plants**. For example, rose, jasmine, *tulsi* and mango.



Rose



Jasmine



Tulsi

## Water plants

Plants such as lotus, water lily and hydrilla grow in water. They are called **water plants** or **aquatic plants**.



Lotus



Water lily



Hydrilla

## Desert plants

Plants like acacia and cactus grow in deserts and dry areas. They are called **desert plants** or **xerophytes**.



Acacia



Cactus

### AMAZING FACT

Some plants live for hundreds of years. Banyan trees and Redwood trees may live for more than 500 years!

## Mountain plants

Plants like deodar and pine grow on mountains. They are called **mountain plants**.



Deodar



Pine



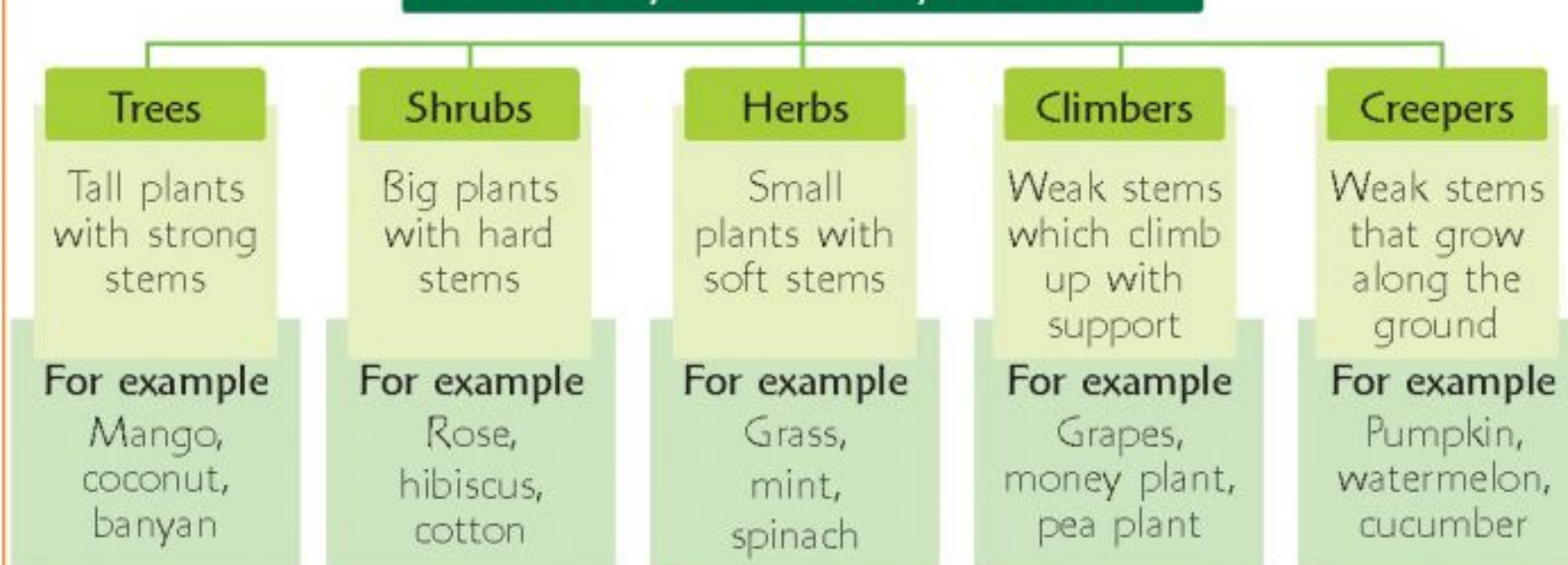


## Now I Know...

1. Plants vary in shape and size.

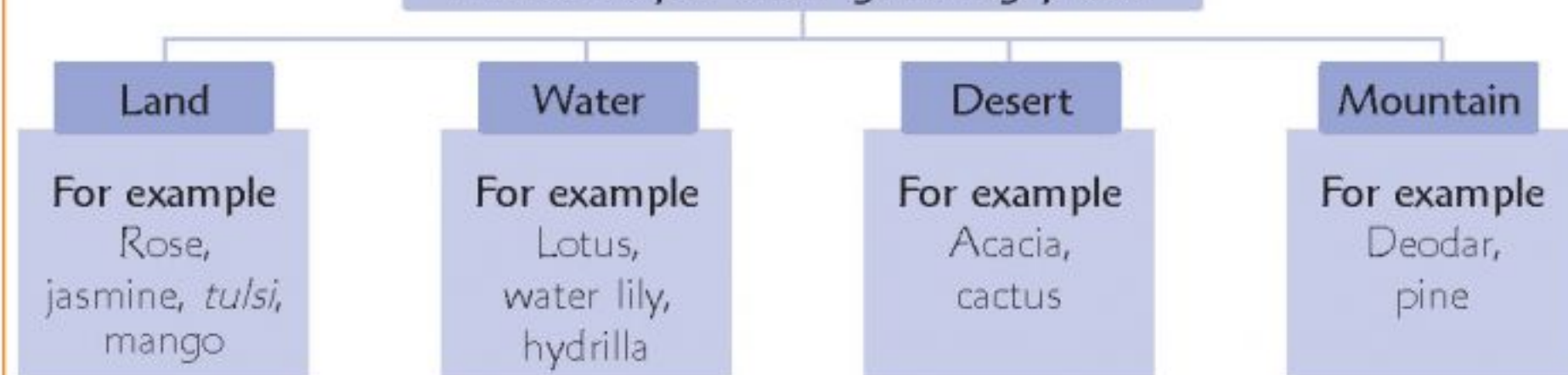
2.

### Plants as per their shape and size



3.

### Plants as per their growing place



### WORD BEE

Find bold words from the lesson, read them aloud and write them below.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



## EXERCISES

### A. Tick (✓) the correct option.

- Very small plants that have soft stems are  
(a) herbs (b) shrubs (c) trees (d) climbers
- This plant creeps on the ground.  
(a) Jackfruit (b) Watermelon (c) Rose (d) Pineapple
- This plant takes support from other plants or sticks to climb up.  
(a) Money plant (b) Peepal (c) Grass (d) Mint
- Cotton plant is a  
(a) herb (b) shrub (c) tree (d) none of these
- This plant lives for a season.  
(a) Mango (b) Guava (c) Rubber plant (d) Rice

### B. Fill in the blanks with the words given in the brackets.

- Big plants that live for many years are called \_\_\_\_\_. (shrubs/trees)
- Spinach plant is a \_\_\_\_\_. (herb/shrub)
- Mango plant is a \_\_\_\_\_. (tree/shrub)
- Hydrilla plant grows in \_\_\_\_\_. (water/land)
- \_\_\_\_\_ is a creeper. (Watermelon/Grapevine)

### C. Match the following.

- |                |                    |
|----------------|--------------------|
| 1. Lotus       | (a) Climber        |
| 2. Banyan      | (b) Herbs          |
| 3. Money plant | (c) Water plant    |
| 4. Grass       | (d) Tree           |
| 5. Cactus      | (e) Mountain plant |
| 6. Pine        | (f) Desert plant   |

### D. Write 'T' for true and 'F' for false in the boxes given against the statements.

- A *tulsi* plant is a climber.
- Most plants are green in colour.
- We eat various parts of a plant.
- Creepers grow taking the support of other plants.
- Water hyacinth grows in water.




**E. Answer the following questions in one word or a sentence.**

1. Name any two herbs.
2. Which is taller—a wheat plant or a banana plant?
3. Name any two climbers.
4. Name any two creepers.
5. Where do we find pine trees?
6. Where does a hydrilla plant grow?



**ACTIVITIES**

**ACTIVITY 1**

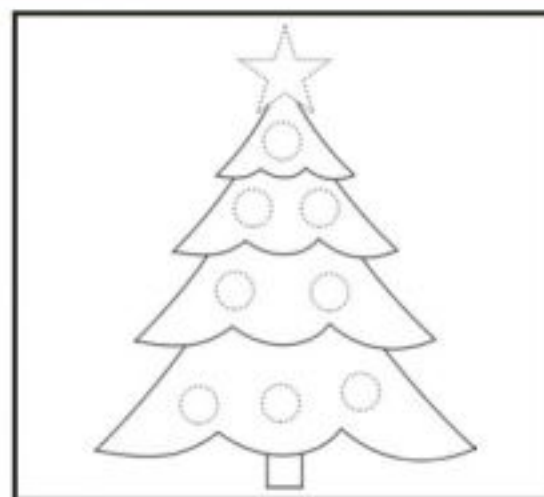
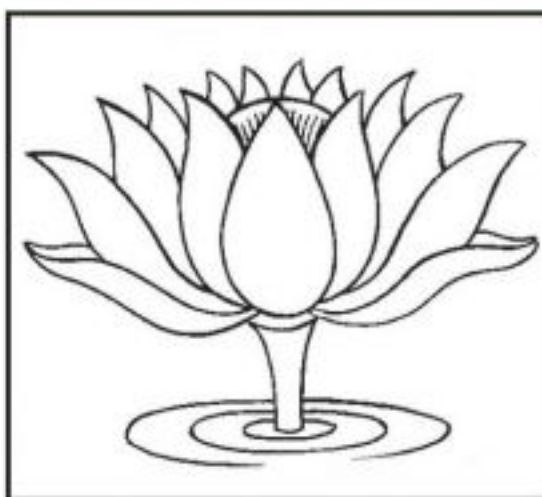
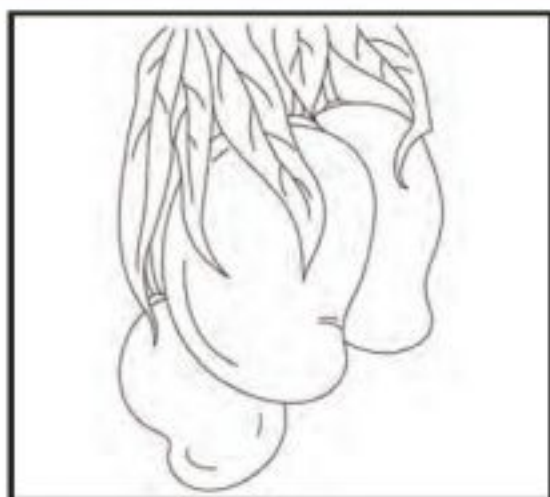
Collect a few herbs such as grass, coriander, mint and small rice plants. Dry them keeping inside your old books or newspapers. Then paste them on your scrapbook and label them as "collection of herbs".

**ACTIVITY 2**

Organize a poetry writing competition in the class after taking permission from your science teacher. The theme of the poems should be "TREES". Collect poems from books in school library or Internet.

**ACTIVITY 3**

Colour the following plants and plant parts.



**HOTS QUESTIONS**

1. Why do we need to grow more trees around our neighbourhood?
2. Why do people like to live in a green environment?



**LIFE SKILLS**

1. Neeta asked her teacher why we should play out in natural surroundings everyday. Do you play outdoor games? Write two benefits of playing outdoor games.
2. Make your own garden at home or in the school. Collect a variety of plants. Plant them in clay pots or in the garden. It will give you immense pleasure when these plants start bearing fruits and flowers. If you grow a fruit tree outside your home, you can give it a nice name and treat it like a family member!





## SUBJECT LINK

Rahul visited a garden and saw following flowers and vegetables. Can you tell the name of colours for those flowers and vegetables?

- |                      |                    |                         |
|----------------------|--------------------|-------------------------|
| (i) Rose _____       | (ii) Jasmine _____ | (iii) Lady finger _____ |
| (iv) Sunflower _____ | (v) Mint _____     | (vi) Brinjal _____      |

## FUN TIME



### Head, Heart and Hand

1. Visit a garden or a park near your home.
2. Observe the variety of plants growing in the garden.
3. Pick up the leaves lying under the trees.
4. Try to collect the leaves of different shapes, sizes and colours (variety of greens) from different plants.
5. Now organize them in different patterns like given below:



Flower



Caterpillar

Now you create

6. Create more and enjoy the nature's blessings.
7. Use leaf patterns to decorate cards, book marks, file covers, etc.
8. Once made cover them with cellophane sheet as they will fall off once they dry or if pasted improperly.





# 2

## Useful Plants

Children, did you ask your parents/ grandparents about the herbs that they use for various ailments as home remedies?

Yes ma'am! My mother gives me ginger juice with honey to cure sore throat.

That's great! It is easily available in kitchen. Anyone else who wants to share their experience?

Yes ma'am! My grandparents take herbal tea with ginger, elaichi, cloves and dalchini. It keeps them fresh and increases immunity. So, my grandparents are very fit and healthy. They do yoga as well.

Wow! So inspiring, we should learn good eating and exercising habits from them.

Ma'am, each day my mother gives me soaked almonds with milk to increase my memory.

See how much we get from plants; not only food but good health also. Let's see what other things we get from plants.

### Let's Learn More About

- Things we get from plants
- Other uses of plants



All animals including humans are dependent on plants for their food. Other than food, plants give us many useful things also. They give us wood, fibre, medicine, etc. Let us read about some of the things plants give us.

## Plants give us food

We get vegetables and fruits from plants. The pictures of some fruits, vegetables and nuts are given below. Their names are in jumbled form. Can you set them right and fill in the blanks?



BBGAECA



ELAPP



NJARILB



OGNAM



UGAAV



ADSHIR



TOPAOT



DNOMLA



RROTCA



RAGSUACNE



UTNLAW



HCANIPS



## Plants give us food grains

We get food grains such as cereals and pulses from plants.

**Cereals:** Rice, wheat, maize and oats.



Rice



Wheat



Maize



Oats

**Pulses:** Chickpeas (*chana*), green grams (*moong dal*), kidney beans (*rajma*) and lentils (*masoor dal*)



Chickpeas (*Chana*)



Green grams  
(*Moong dal*)



Kidney beans (*Rajma*)



Lentils (*Masoor dal*)

## Plants give us oil

Oil is extracted from the seeds of some plants. Examples of such plants include mustard, sunflower, groundnut, coconut and soybean. These oils are used for cooking food.



Sunflower oil



Coconut oil

## Plants give us fibre

Some plants give us fibre. Cotton, jute, hemp and coconut fibre are used for making clothes, bags, sacks and ropes.



Cotton plant



Jute



Hemp



Coconut plant



## Plants give us wood

We get wood from plants. We use wood for making furniture, houses, pencils, toys and matchsticks. We use firewood for cooking food.



Logs



Wooden furniture



Firewood



Wooden toy

## Plants give us medicines

Some plants or plant parts are used as medicines.

We get quinine from the bark of cinchona tree. Quinine is a medicine for curing malaria.

Aloe vera, neem, *tulsi*, *amla* and turmeric are also very useful plants. These plants are used to cure different diseases. *Tulsi* leaves can cure cough and cold.



Cinchona tree



Aloe vera



Neem



Amla



Turmeric

## Plants give us beverages

Plants give us tea, coffee, cocoa and sugar. We use them as hot or cold drinks. Sugar juice is extracted from the sugarcane plant. We use sugar in tea or coffee or use it for making sweets.



Tea leaves



Coffee beans



Cocoa beans



Sugar



## Plants give us paper, rubber and gum

Plants also give us other useful products such as gum, paper and rubber.

Paper is made from bamboo trees. Rubber is made from the juice of the rubber trees.

### AMAZING FACT

Bamboo is the fastest growing plant. It has been recorded growing at 47.6 inches in a day.



Bamboo tree



Rubber tree

### CONCEPTUAL CANYASS

1. Name any five oil-yielding plants.
2. Write any two uses of cotton.
3. Name two sweet smelling flowers.

Gum is extracted from the juice of some trees such as bel, acacia and drumstick.



Bel tree



Acacia



Drumstick

## Plants give us perfumes

Some plant parts like flowers and leaves are used to make perfumes. Flowers of some plants like rose and jasmine have sweet smell. These flowers are used to make perfumes.

### AMAZING FACT

There are around 2000 different plant types that humans use to cultivate food.



Rose



Jasmine

### FUN to Learn

The art of growing trees in a pot and artificially prevented from reaching its normal size is called Bonsai. It is a Japanese word which means 'a tree in a pot or in a tray'.



## Plants beautify our surroundings

Some plants are grown to decorate and beautify our homes, schools and the roadsides.



## Other uses of plants

Plants are also home to many animals.

Birds, insects and some animals live on plants.

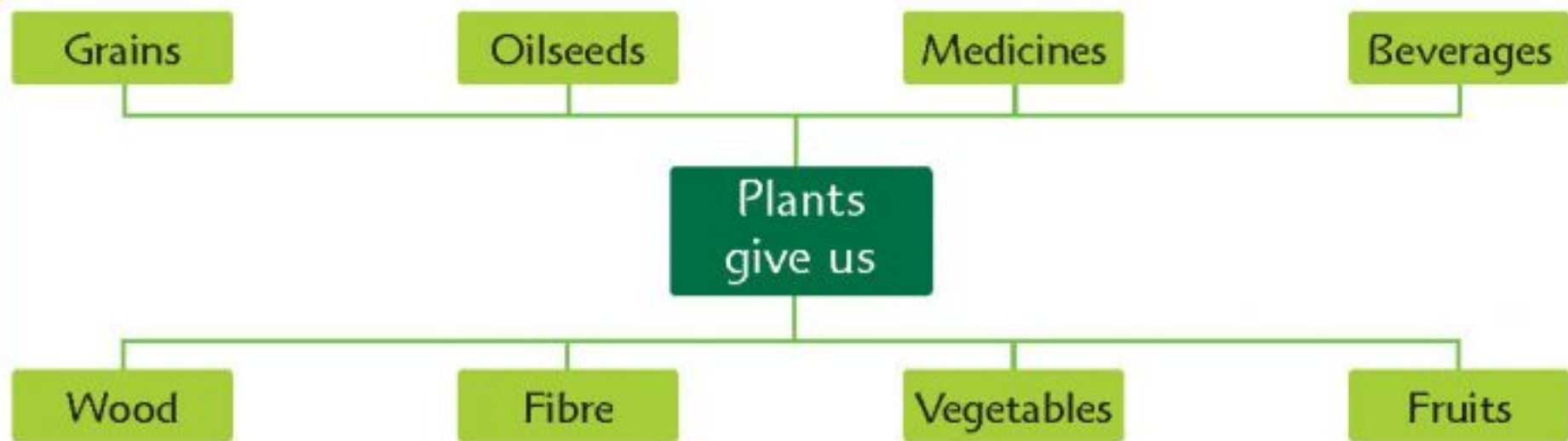
Plants give us oxygen and absorb carbon dioxide. Thus, they make the air fresh and cool. Fresh air is good for our health. So plants are very useful for us. We should plant more and more trees to make the environment clean, green and healthy.



Bird's nest on a tree



*Now I Know...*



### WORD BEE

Re-read the lesson, write below the new words and read them aloud.




## EXERCISES

### A. Tick (✓) the correct option.

- Which of the following is not a plant product?  
(a) Cabbage (b) Almond (c) Egg (d) Spinach
- Which of these medicines is extracted from cinchona plant?  
(a) Quinine (b) Beledona (c) Penicillin (d) All of these
- Which of these is not a cereal?  
(a) Wheat (b) Lentil (c) Rice (d) Corn
- Oil is extracted from which of the following plants?  
(a) Soybean (b) Mustard (c) Groundnut (d) All of these
- Which of these is made of wood?  
(a) Cloth (b) Pencil (c) Shoe (d) All of these
- Perfume is extracted from which of the following plants?  
(a) Cotton (b) Jasmine (c) Acacia (d) All of these

### B. Fill in the blanks with the words given in the brackets.

- Oil is extracted from \_\_\_\_\_ . (flowers/seeds)
- \_\_\_\_\_ is extracted from the bark of cinchona. (Quinine/Penicillin)
- Bread is made from \_\_\_\_\_ . (rice/wheat)
- Tea is made from \_\_\_\_\_ . (leaves/seeds)
- Sugar is made from \_\_\_\_\_ plant. (beetroot/sugarcane)
- \_\_\_\_\_ is an example of cereal. (Kidney bean/Maize)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

- Tulsi* leaves can cure cough and cold. ☐
- Beetroot is used for its medicinal value. ☐
- Jasmine flowers are used for making perfume. ☐
- Juice of the acacia tree is used for making gum. ☐
- Paper is made from bamboo trees. ☐

### D. Answer the following questions in one word or a sentence.

- Name any two plants that we eat as vegetables.
- Juice of which plant is used to make rubber?
- List two fruits that you like to eat.
- Name one plant that gives us fibre.
- What do you make from rose flower extract?



**E. Answer the following questions in short.**

1. Name five plants that we use to cure diseases.
2. How do plants make air fresh?
3. List any two articles made from jute.
4. Name any four cereal crops.

**F. Give answers to the following questions.**

1. Observe the pictures given below:

Name any one product we get from these plants and write them in the blanks.



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_



\_\_\_\_\_  
\_\_\_\_\_

2. Vegetables and fruits are good for our health. Cross (×) the food items we should not eat regularly.

☐☐☐☐☐☐☐☐☐



**G. Answer the following questions in detail.**

1. Name two plants that give us fruits.
2. List two things other than food items that plants give us.
3. Write any four things we make from/with wood.
4. List any two flowers from which we make perfumes.
5. Name two plants that give us gum.



**ACTIVITY**

Collect things such as a piece of cotton cloth, some pencil shavings, some grains of rice, some grains of pulses, a piece of rubber, soap, a piece of jute rope and a spoonful of tea leaves. Put them in small plastic packets/pouches and staple them on your scrapbook. Label them and label your worksheet. "Things that Plants Give Us".



**HOTS QUESTIONS**

1. What will happen if we destroy all the trees on earth?
2. Why does your doctor advise you to eat plenty of fruits and vegetables daily?



**LIFE SKILLS**

1. Plants give us many things. Take a look around your house. List the things you find in the following rooms, which are made of things you get from plants.
2. Visit a garden or a forest on a hot summer day. What do you feel? Is there a difference in the heat you feel inside the garden/forest and outside it?



**SUBJECT LINK**

Plants give us a lot of things. Names of a few are given below, read them and rewrite in alphabetical order:

Apple, Drumstick, *Tulsi*, Aloe vera, *Amla*, Coconut, Soybean, Canola, Banana, Coffee, Brinjal.

**FUN TIME**



**Head, Heart and Hand**

With the help of your mother/elders, perform the following experiment:  
Take a glass of sugarcane juice. Ask your elders to boil it till it becomes a thick, brown solution. Taste it after cooling. It is nothing but sugar that we eat in tea, coffee, milk and sweets. You must be wondering why the solution is brown when the sugar we put in our food is white in colour. This brown solution is further dried, cleaned and discoloured to give us crystal sugar which we buy from the store.





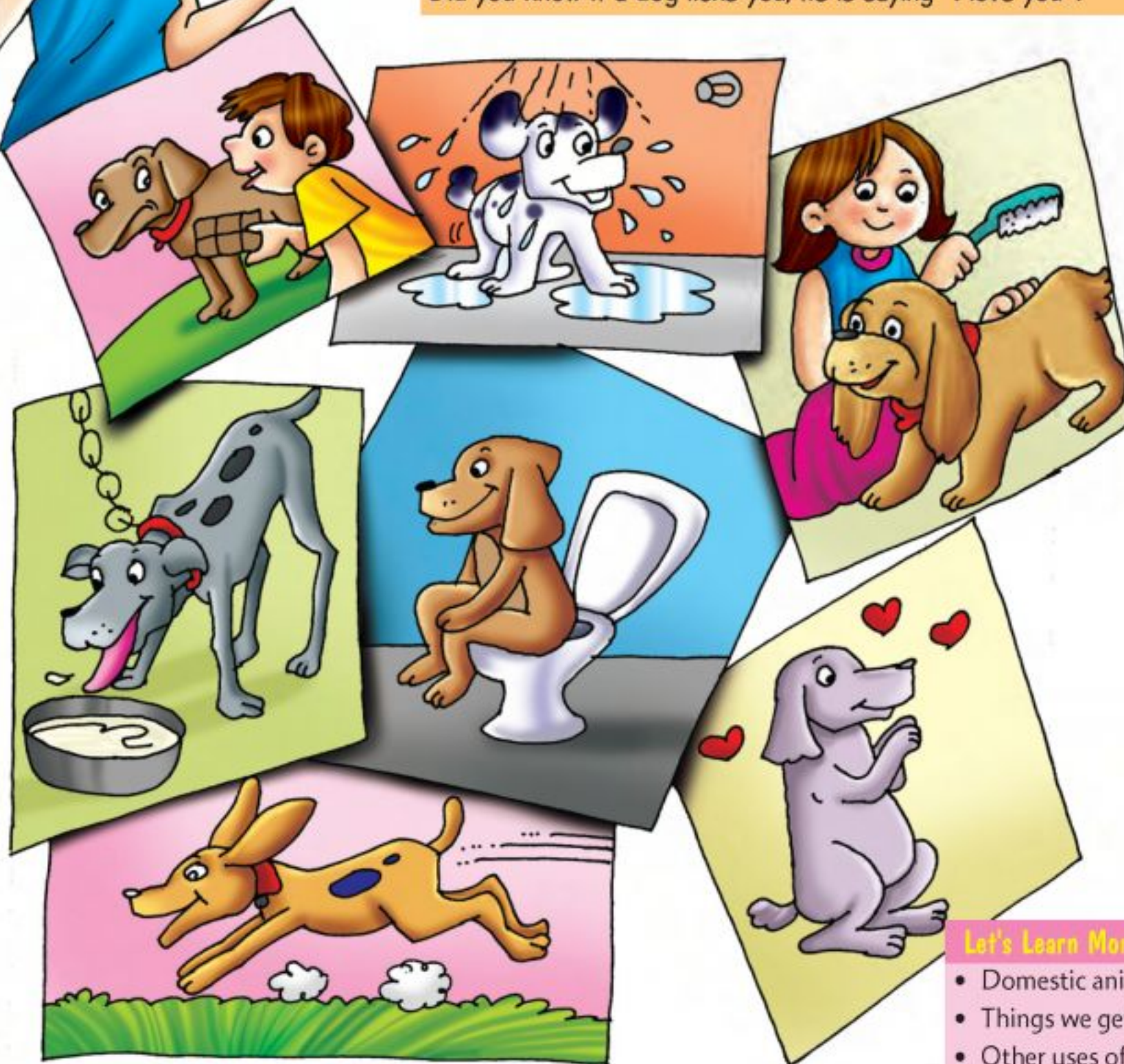
# 3

## Useful Animals

Children, today we will discuss about our pet animals. I hope many of you have a pet at home. Keeping a pet at home is a pleasure. I will give you some tips to take care of your pets:

- Do not give any chocolate to the pets. It can make most animals sick.
- Make sure your dog takes a bath at least once a month but for cats once in a few months.
- Brush and comb your pets everyday to get rid of loose hair or ticks.
- Feed your pet at a particular time and always give clean and healthy food.
- Train your pet to use a particular place and time for toilet.
- Dogs need plenty of physical exercise to keep them healthy and happy.
- You should train your dog to be well behaved.

Did you know if a dog licks you, he is saying "I love you"?



### Let's Learn More About

- Domestic animals
- Things we get from animals
- Other uses of animals



Like plants, some animals are also very useful to us. We depend on animals for many things.

## Domestic animals

Some animals live in and around our homes. Cats, dogs, cows, buffaloes, rabbits are some of them. Some animals are reared in farms. These animals are called **farm animals**. For example, cows, buffaloes, goats, sheep and hens.

We keep some animals in our homes such as cats, dogs, rabbits and parrots. They are like our friends. These animals are called **pet animals**.

Farm animals and pet animals are called **domestic animals**.

See the pictures of some domestic animals. Can you circle the pet animals and put a square around the farm animals?



Parrot



Cow



Buffalo



Hen



Rabbit



Horse



Goat



Fish



Sheep



Dog



Camel



Duck



Pigeon



Honeybee



Cat

### AMAZING FACT

A group of cats is called a clowder, a male cat is called a tom, a female cat is called a molly or queen while a young cat is called a kitten.



## Food that we get from animals

Pictures of some animals are given below. They give us **milk**. Can you write their names in the space provided?



Pictures of some animals are given below. They give us **eggs**. Can you write their names in the space provided?



Pictures of some animals are given below. They give us **meat**. Can you write their names in the space provided?



## Other things we get from animals

Animals give us many other useful things. Look at the pictures and write their names. They give us **wool** or **fur**.





Look at the pictures and write their names. Their skin after the death is used as **leather**. Leather is used for making jackets, shoes, bags, belts and many more.



Honeybees give us **honey**. They live in beehives. We get wax from beehives.

**FUN to Learn** 

Dogs can survive on a vegetarian diet but cats cannot survive on a vegetarian diet!



Honeycomb



Honeybee

We get **silk** from silkworms. We make sarees, shirts, scarves, handkerchiefs and ties with silk.



Silkworms



Silk sarees



Silk shirt



Silk scarf

## Animals that make our work easy

We keep some animals to make our work easy. He buffaloes, oxen (bullocks), camels, horses and donkeys are some common animals that work for us.



Buffalo pulling cart



Oxen ploughing fields



Donkey carrying loads



Man riding horse



## Animals that we keep for our entertainment and security

We keep some animals at home for our entertainment. We love them and care for them. They too love us. Dogs and cats are common pets. We keep dogs in our home for our security. Some people keep birds such as parrots, ducks or even rabbits as pets. Some fishes are kept as pets in aquariums.

### CONCEPTUAL CANVASS

1. Why do we keep some animals at home?
2. Give name of two egg-laying animals.
3. Goat gives us milk. (True/False)



Dog



Cat



Parrot



Rabbit



Duck



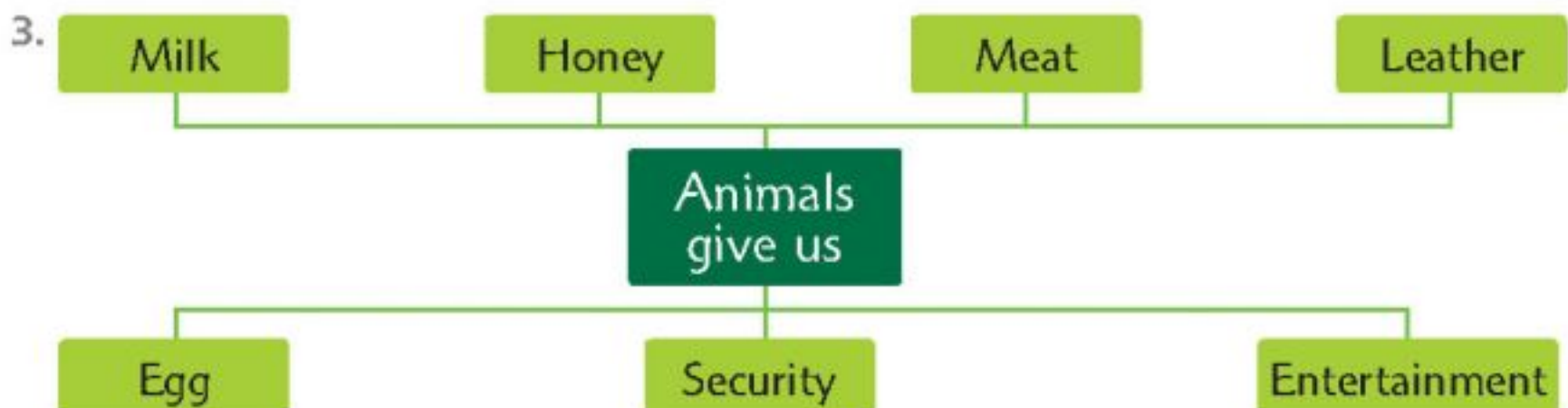
Fish

Animals we keep for our entertainment and security



### Now I Know...

1. There are two types of domestic animals—pet animals and farm animals.
2. We should love animals and never be cruel to them.





## WORD BEE

Find bold words from the lesson, read them aloud and write them below.


## EXERCISES

### A. Tick (✓) the correct option.

- Goats are reared for their  
(a) milk (b) meat (c) both (a) and (b) (d) neither (a) nor (b)
- Insect that gives us honey.  
(a) Mosquito (b) Housefly (c) Bee (d) Butterfly
- We get leather for making shoes, bags, belts, etc. from  
(a) crocodile (b) camel (c) snake (d) all of these
- Animals that we keep in our farms.  
(a) Cows (b) Buffaloes (c) Sheep (d) All of these
- This animal gives us eggs.  
(a) Duck (b) Sheep (c) Goat (d) Cow

### B. Fill in the blanks with the words given in the brackets.

- \_\_\_\_\_ and farm animals are called domestic animals. (Pet/Wild)
- Hens and \_\_\_\_\_ give us eggs. (ducks/goats)
- Woollen sweaters and shawls are made from \_\_\_\_\_ that we get from sheep. (wood/wool)
- \_\_\_\_\_ carry heavy logs/ wood from forests for us. (Horses/Elephants)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

- Dogs and cats are pet animals.
- Only cows and buffaloes give us milk.
- Horses are kept as farm animals.
- We get wool from buffaloes.


### D. Answer the following questions in one word or a sentence.

- Name two pet animals.
- Name two farm animals.



3. What are domestic animals?
4. Name a food made from milk which most children love to eat.

**E.** Some animal products rhyme with the words given below. Can you write their names in the blanks? One is done for you.

- |            |       |
|------------|-------|
| 1. Milk    | Silk  |
| 2. Feather | _____ |
| 3. Money   | _____ |
| 4. Cutter  | _____ |
| 5. Seat    | _____ |

**F.** Answer the following questions in one word.

- |   |       |
|---|-------|
| 1. We keep dogs at home for this.                               | _____ |
| 2. Bees give us this.   | _____ |
| 3. A silkworm grows into this colourful insect.                 | _____ |
| 4. Milk of this animal is best for everyone including patients. | _____ |

**G.** Answer the following questions in short.

1. (a) Which of these animals gives us wool: dog, cow, sheep or hen?  
(b) Name any two articles made of wool.
2. Mr Ramesh needs the help of an animal to carry big logs from a forest to the market.  
(a) Which animal would he select to get the job done?  
(b) What does this animal eat?
3. Name one more product the following animals give us.  
(a) Goats give us meat. They also give us \_\_\_\_\_.  
(b) Sheep give us wool. They also give us \_\_\_\_\_.  
(c) Hens give us eggs. They also give us \_\_\_\_\_.  
(d) Some fishes are kept as pets in aquariums. They also give us \_\_\_\_\_.



### ACTIVITY

1. Visit a farmyard or farmhouse in your neighbourhood.
2. Find out the animals that are reared in that farm.
3. Take photographs of those animals and paste them in your scrapbook.
4. Find out what products they give us.
5. Find out what these animals eat.





## HOTS QUESTIONS

1. Anil asked his mother why children must drink milk everyday. He also asked why newborn babies must be fed mother's milk.
2. Tom told his teacher what he had read in a newspaper that an elephant had killed some people in a forest. Why did it do so?



## LIFE SKILLS

1. Visit a farmyard with your classmates. Observe how the farmer takes care of the animals there. You can ask him the following:
  - (a) What do the animals eat?
  - (b) How many times a day do they need to be fed?
  - (c) Does he give medical aid to these animals?
  - (d) Are the animals given a wash everyday?
  - (e) How much water does each animal drink?
2. Now organise a group discussion and make a list of "Dos" and "Don'ts" that should be followed for the proper care of animals.



## SUBJECT LINK

Karan had 2 chickens in his backyard. He feeds each of them 20 grains daily. Tell how many grains he feeds them everyday?

## FUN TIME



## Head, Heart and Hand

1. Make your own aquarium.
2. Take a big glass jar or a glass box.
3. Collect a few small fishes from a pet shop.
4. Collect some water plants like hydrilla from a store.
5. Collect some sand, pebbles and buy a small air pump to push air into the water.
6. Put all these things in the glass jar. Fill water in it. Then release the fishes into the water.
7. Your aquarium is ready.
8. You must give some food to the fishes everyday. Fish feed is available in pet shops.





# 4

## Jungle Animals

Children, today I will recite a funny poem on animals.



Okay, ma'am.  
We will have fun!



Yes, and then you all will also try  
to write a funny poem, all right?  
Here I go;  
Camels want to swim in water,  
And fishes fly in the air,  
Lazy sloths want to run fast,  
Animals that could be there!  
Bald headed eagles want to have  
Hair like sheep,  
Mr Donkey finds it okay,  
But may be, Nature would weep.



### Let's Learn More About

- Where animals live
- What animals eat
- Protecting animals



Have you ever seen deer roaming around your home? No. This is because like deer many other animals such as lions, elephants, giraffes, rhinoceroses, zebras, bears and jackals live in the jungle. These animals are called **wild animals**.



Lion



Monkey



Bat



Giraffe



Tiger



Eagle



Owl



Kangaroo



Rhinoceros



Peacock



Elephant



Bear

Can you keep a wild animal in your house as a pet? No, you cannot. We must keep wild animals captive in cages.

## Where wild animals live in the jungle

Animals like tigers and bears live in **caves**.

Lions live in **dens**.



Animals like elephants and deer rest or sleep under trees.  
Animals such as monkeys and chimpanzees live on trees.



Lion's den



Monkey on a tree



Bear standing in a cave

Some animals live in holes under the ground. These underground holes are called **burrows**. Rats, snakes, moles, mongoose and rabbits live in burrows.



Rat in a hole



Snake in a burrow



Mole in a burrow

Birds live on trees. They make nests for laying eggs. Cuckoos do not make nests. They lay their eggs in crow's nest. Some birds like stork and duck live in or near water.



Bird sitting on its eggs in a nest

## What wild animals eat

Some animals such as deer, elephants, monkeys, and horses eat only plants. These animals are called **herbivores**.



Deer eating plants



Elephant eating plants



Monkey eating banana



Some animals kill other animals and eat their flesh. These animals are called **carnivores**. Lion, tiger, wolf and crocodile are examples of such animals.



Lion eating flesh



Wolf eating flesh



Crocodile eating fish

Some animals eat the flesh of dead animals. They are called **scavengers**. They keep the environment clean. Vultures, jackals, hyenas, wild dogs and wild crows are some examples of scavengers.



Vulture eating  
dead animal



Hyena eating  
dead animal



Crow eating  
dead animal

## Protecting animals

We must protect wild animals. Animals like tiger, Indian rhinoceros, great Indian bustard and panda have become very few in numbers and may soon no longer exist. So, they are called **endangered animals**.



Tiger



Indian rhinoceros



Great Indian bustard

### CONCEPTUAL CANVASS

1. What are herbivores? Give two examples.
2. How do scavengers help us to keep our environment clean?
3. Give two examples of wild animals.



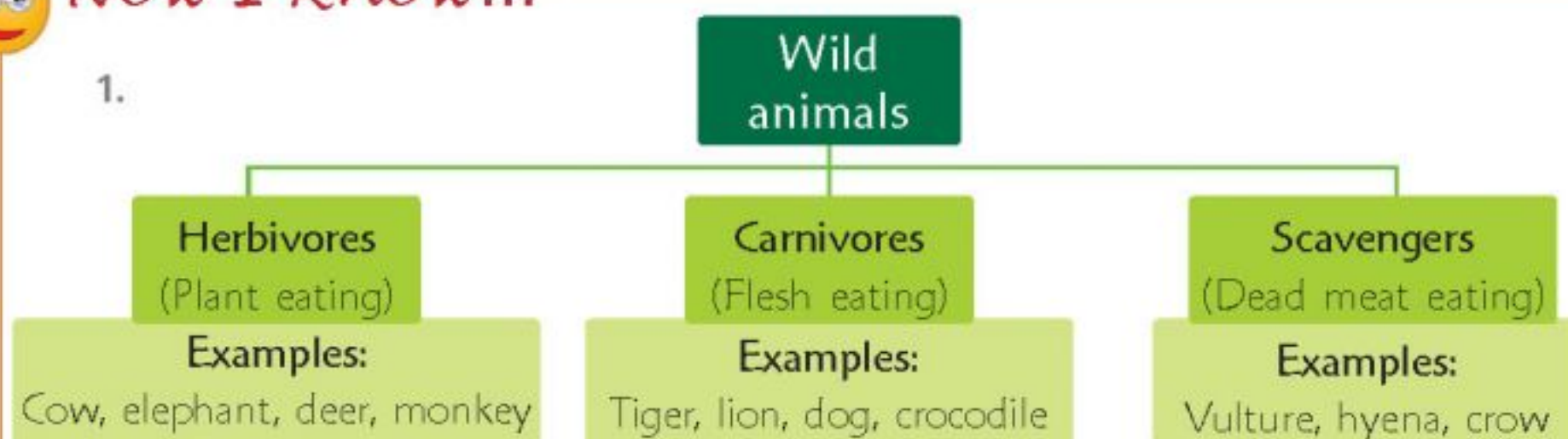
We should not hunt or kill animals and should protect them.

We should not cut trees and clear forests. When we destroy forests, wild animals become homeless.

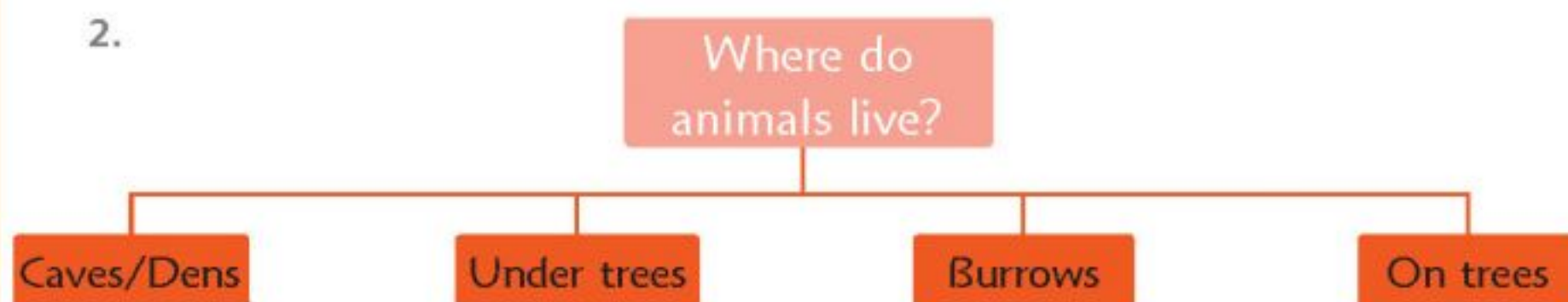


## Now I Know...

1.



2.



3. Animals like tiger, Indian rhinoceros, great Indian bustard and panda are endangered animals, i.e., they have become very few in numbers and may soon no longer exist.

## WORD BEE

Find bold words from the lesson, read them aloud and write them below.




## EXERCISES

### A. Tick (✓) the correct option.

- Which of the following is not a wild animal?  
(a) Hippopotamus      (b) Zebra      (c) Dog      (d) Lion
- Which one of these is a scavenger?  
(a) Deer      (b) Monkey      (c) Lion      (d) Vulture
- Animal that lives in a burrow.  
(a) Crow      (b) Bear      (c) Rabbit      (d) Chimpanzee
- Wild animals that are herbivores.  
(a) Elephants      (b) Deer      (c) Monkeys      (d) All of these

### B. Fill in the blanks with the words given in the brackets.

- A lion lives in a \_\_\_\_\_. (den/cave)
- We should not \_\_\_\_\_ wild animals. (protect/hunt)
- Birds make nests for \_\_\_\_\_ eggs. (laying/eating)
- \_\_\_\_\_ live in caves. (Deer/Bears)

### C. Match the following.

- |            |               |
|------------|---------------|
| 1. Tiger   | (a) Burrow    |
| 2. Deer    | (b) Den       |
| 3. Vulture | (c) Carnivore |
| 4. Lion    | (d) Scavenger |
| 5. Snake   | (e) Herbivore |

### D. Write 'T' for true and 'F' for false in the boxes given against the statements.

- A mongoose lives in a burrow. ☐
- Monkeys eat fruits, leaves and seeds. ☐
- Birds live in nests. ☐
- Scavengers kill animals and eat their flesh. ☐

### E. Answer the following questions in one word or a sentence.

- What does a hyena eat?
- Where does an elephant live?
- Do snakes live in burrows?
- Which bird does not make a nest for laying eggs?

### F. Answer the following questions in short.

- What are scavengers?
- What are carnivores? Give examples.
- Name any three wild animals that eat the flesh of dead animals.
- Name any two animals that become very few in numbers.



**G. Answer the following questions in detail.**

1. (i) Write the homes of the following animals:



(ii) Write in one sentence each what these animals eat.

2. (i) Join the dots to get the pictures of these animals.

(ii) Also, name their homes.



## ACTIVITIES

### ACTIVITY 1

1. Collect the pictures of wild animals.
2. Draw a jungle scene on a white full-size chart paper. Colour it.
3. Paste the pictures of the wild animals that you have collected onto the chart paper on which you have drawn the jungle scene.
4. Write the name of each animal under its picture.
5. Now display the chart paper in your class or your bedroom.
6. Learn the spellings of the names of all the animals, the names of their babies and their dwelling places.

### ACTIVITY 2

1. Organise a visit to the local zoo or a wildlife sanctuary by writing an application for permission to your class teacher.
2. When you visit the zoo or sanctuary, note the following to know more about the wild animals that you see. You can ask your teacher or the zoo keeper for answers:
  - (a) Why are the animals kept in the zoo?
  - (b) At what time do these animals get food to eat?
  - (c) How much flesh is given to a tiger or a lion to eat everyday?
3. What do zoo keepers do when animals fall sick?
4. Why are visitors not allowed to give the animals any food?
5. You can also take the pictures of these animals and make your own photo album of wild animals!





### HOTS QUESTIONS

1. Rinki asked her teacher if tigers kill other animals, why cannot we kill the tigers.
2. Lucky asked his mother why all wild animals cannot eat the same food.



### LIFE SKILLS

1. Collect some Indian postage stamps of wild animals and paste them in your notebook.
2. Take some grains in a bowl. Place the bowl on the rooftop of your house. Watch the birds that eat the grains. Find out the names of birds.



### SUBJECT LINK

Tamana went to her village in Himachal. There she saw a snake hole. She returned home and told her father about it. Her father instructed her never to go near it. Later at night she imagined the snake and drew its colourful picture. Can you imagine that snake and draw its picture?

## FUN TIME



### Head, Heart and Hand

#### Make a jungle scene

1. Let's make jungle scene with cutouts of trees, wild animals, dry grass, fallen leaves, dry sand, fevicol, cardboard and white chart paper.
2. Paste white chart on cardboard and cover the bottom with fevicol and stick dry sand, dried grass and tree cuttings.
3. Now place the animal cutouts at different places in the model like monkey on tree, snake over grass, lion below/behind tree, etc.
4. Now your jungle scene is ready.





# 5

## Bones and Muscles

Ma'am, how many legs does a cockroach have?



Does anyone in the class know the answer?



Yes ma'am! I know it. The other day I saw a dead cockroach in our kitchen. It was lying upside down. I counted its legs. It has six legs.



Good! Yes, insects have six legs.



Ma'am, how many legs does an octopus have?



An octopus has eight legs.



### Let's Learn More About

- How bones and muscles work together
- Importance of right posture

Ma'am, when snakes do not have legs, how do they move?



Snakes move with the help of their chest muscles and scales on the abdomen. Now let us discuss about the bones and muscles of our body.





Have you ever seen how clay idols are made? Potters make a strong frame of the body of an idol first. They use wood, straw and mud to make the frame. On the top of the frame they put layers of clay to give shape to the body of an idol. Our body is exactly like a clay idol. The strong frame of our body is made up of **bones**. On the top of the bones lie layers of **muscles**. The whole body is covered with **skin**. Press your thigh with your finger. You will feel something soft. These are your muscles on your leg. Now press it further. You will feel something hard. This is your bone.



A wrestler showing his muscles



A skeleton

Our body is made up of bones and muscles. These are then covered with skin. Bones and muscles together give shape and support to the body. An adult human body has 206 bones and more than 600 muscles. All bones together form the **skeleton**.

**FUN** to Learn 

Human babies are born with 300 bones which reduce to 206 when they become adults.

## How bones and muscles work together

The muscles are fixed on to the bones. When we want to move our arms or legs, muscles contract and pull the bones. Thus bones and muscles work together for the movement of our body.

Bones and muscles help us in doing activities like swimming, dancing, playing, cycling, jogging, eating and lifting. We use our arms, head, eyes, legs, hands and feet for doing all activities.



Children swimming



Children dancing



Children playing





A boy cycling



Children eating food



Weight lifting

Muscles and bones work properly if they are strong.

Exercises, outdoor games, jogging and walking are good for our health. These make our muscles and bones strong. We should eat healthy food to become healthy and strong.

## Posture

Posture is the position of our body when we sit, stand or move. While sitting, standing or walking, we must keep our back straight.



A woman sitting on a chair with back straight



A woman standing straight



A woman walking with back straight

Sitting or walking straight keeps our muscles and bones in good shape. It helps us to stay fit and healthy. It gives proper shape to our body.

### CONCEPTUAL CANVASS

1. What give shape to our body?
2. How many muscles does an adult human being have?
3. Bones and muscles work together for walking. (True/False)
4. Why do we need to have strong bones and muscles?
5. Sitting with the backbone bent is a right posture. (True/False)

### AMAZING FACT

- Over half of the body's bones are present in our hands and feet.
- The strongest muscle in the human body is the tongue.
- The hardest muscle in the human body is the chin.





## Now I Know...

1. Our body is made up of bones and muscles.
2. Bones + muscles = shape + support to body.
3. Exercise and healthy food keep our body strong and healthy.
4. There are 206 bones and more than 600 muscles in an adult body.

### WORD BEE

Find bold words from the lesson, read them aloud and write them below.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## EXERCISES

### A. Tick (✓) the correct option.

1. The muscles are fixed on to the  
(a) bones                      (b) ear                      (c) eyes                      (d) leg
2. Exercises make our muscles and bones  
(a) weak                      (b) strong                      (c) hard                      (d) loose
3. Outdoor games, jogging and walking are good for our  
(a) health                      (b) wealth                      (c) work                      (d) all of these
4. Correct posture gives proper shape to  
(a) only our hands                      (b) only our legs                      (c) only our neck                      (d) our whole body

### B. Fill in the blanks with the words given in the brackets.

1. Playing football everyday makes our muscles \_\_\_\_\_ (strong/weak)
2. Bones and \_\_\_\_\_ give shape and support to our body. (muscles/blood)
3. \_\_\_\_\_ is the position of our body when we sit, stand or move. (Posture/Gesture)
4. We should sit keeping our back \_\_\_\_\_. (bent/straight)



**C. Match the following.**

- |                               |                    |
|-------------------------------|--------------------|
| 1. 206                        | (a) Good posture   |
| 2. Jogging                    | (b) Bones          |
| 3. Sitting with back straight | (c) Muscles        |
| 4. More than 600              | (d) Strong muscles |

**D. Write 'T' for true and 'F' for false in the boxes given against the statements.**

1. The soft part under the skin of our hand is the bone.
2. Muscles and bones work properly, if they are strong.
3. Children should not play outdoor games.
4. Muscles and bones work together for our movement.


**E. Answer the following questions in one word or a sentence.**

1. What gives shape and support to our body?
2. Which part(s) of the body is/are involved in swimming?
3. How many bones does an adult human have?
4. What is posture?

**F. Answer the following questions in short.**

1. What makes you move your legs while walking?
2. How many muscles are there in an adult human?
3. Which is the outermost layer of your body?
4. Name at least four activities that give us exercise.

**G. Answer the following questions in detail.**

1. (i) Observe the pictures given below. Draw a circle around the picture you think is right to keep our body healthy and strong.



- (ii) Why should we do exercise regularly?
2. Why should we sit or walk with our back straight?





## ACTIVITIES

### ACTIVITY 1

Exercises make your muscles and bones stronger. So you should do the following exercises and eat healthy food everyday.

- (a) Playing outdoor games like playing football/hockey/cricket/kho kho/badminton regularly.
- (b) Exercising, stretching and swimming are also good for your health. Learn these from a trained person.

### ACTIVITY 2

Write five sentences on your favourite game.

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## HOTS QUESTIONS

- Why does a fat (obese) boy get tired easily while playing than a thin and strong boy of the same age?
- What should you suggest to your friend who watches TV for long hours sitting on a couch and keeps snacking on potato chips?



## LIFE SKILLS

- Visit a gymnasium along with your elders. Watch people doing exercises on various machines. Ask the instructor which machine helps to make thigh muscles or arm muscles strong. Also ask at what age should someone start going to the gymnasium for exercises?
- Join a swimming club in your neighbourhood during your summer vacation. Utilise your holidays to learn swimming or other sports like judo, karate or gymnastics.



## SUBJECT LINK

Rohan and Reema practise racing daily. Reema beats him each day. Who is a faster runner and more fit out of the two?

## FUN TIME



## Head, Heart and Hand

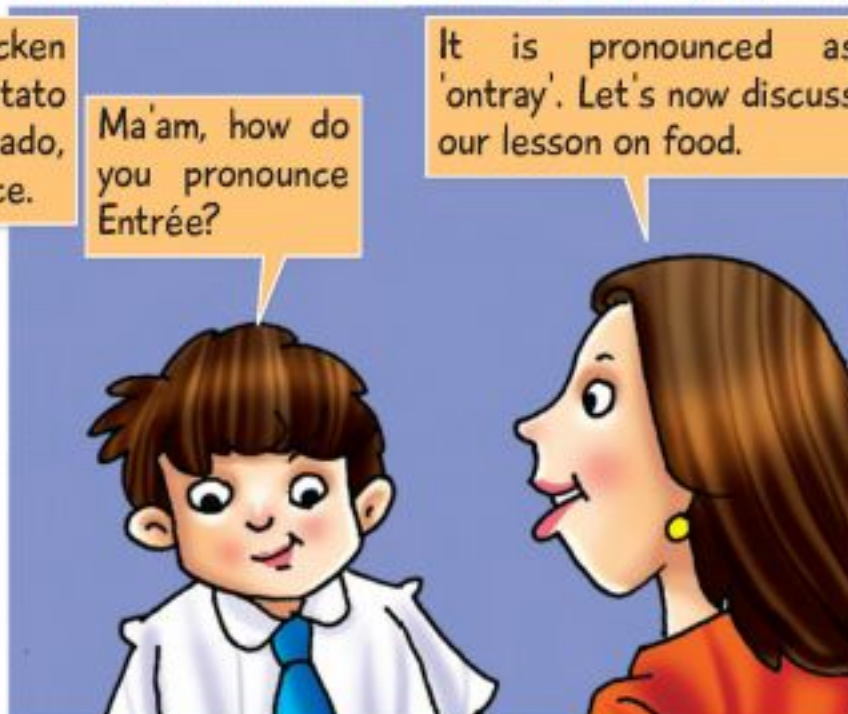
Collect pictures of various simple *asanas* from newspapers or magazines. Paste them in your scrapbook and label them properly. Also practise them at home.





# 6

## Food



### Let's Learn More About

- The food we eat
- Types of food
- Healthy eating habits
- Tooth care



When we feel hungry, we eat food.

What is food? Food is the substance that gives us energy to work and play. It helps our body to grow. It also helps us to remain strong and healthy. We depend on plants and animals for food.

## Types of food

We eat different types of food. Some food give us energy to do work. They give us energy to walk, run, play and read. Rice, bread, chapatti, butter, cheese and sugar give us energy. So these are called **energy-giving food**.



Rice



Bread



Butter



Cheese



Chapatti



Sugar

### Energy-giving food

Some food such as milk, eggs, fish, meat, pulses, soybean help us to grow. They make our muscles and bones strong. So they are called **body-building food**.



Milk



Eggs



Fish



Meat



Moong dal



Soybean

### Body-building food



Vegetables such as carrot, cabbage, spinach, lettuce, etc., and fruits such as apple, orange, grapes, melon, etc., help us to remain healthy. These food items protect us from diseases. We call these food as **protective food**.



Cabbage



Carrot



Spinach



Lettuce



Apple



Grapes



Orange



Melon

### Protective food

#### CONCEPTUAL CANVASS

1. Which cereal grain is used to make bread or chapatti?
2. Why do we need to eat food like milk, egg, etc.?
3. Name two fruits and two vegetables that help us to remain healthy.

#### AMAZING FACT

Pumpkin is not a vegetable rather a fruit.

## Healthy eating habits

- You must wash your hands and mouth before and after every meal.
- You must eat food slowly and chew it well.
- You must eat your food at a fixed time daily.
- You should never skip breakfast before going to school.
- You must drink a glass of milk everyday.
- You must eat well-cooked food.



Hand wash



Child taking milk



- Do not eat too little or too much.
- You must drink plenty of water.
- You must not eat food kept uncovered in roadside stalls. It may be contaminated by dust and flies.
- Eating too much junk food items make you obese (fat). Burgers, pizza, chips and samosas are **junk food**.



Sweets



Chocolate



Burger



Pizza



Soft drink

## Tooth care

- You must brush your teeth in the morning and at night. It helps to keep teeth clean and strong.
- You should not eat too many sweets or chocolates. These are harmful for our teeth.
- You must get your teeth checked by a dentist regularly.



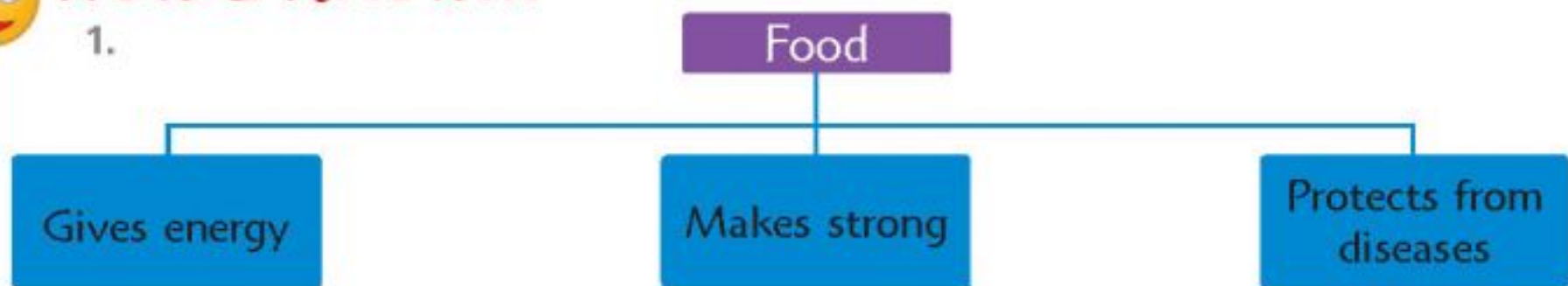
### AMAZING FACT

Humans form 2 sets of teeth over the course of their lives.



### Now I Know...

1.



2.



3. We should have healthy eating habits to stay healthy.



## WORD BEE

Find bold words from the lesson, read them aloud and write them below.


## EXERCISES

### A. Tick (✓) the correct option.

- We get most of our food from  
(a) plants (b) animals (c) both (a) and (b) (d) neither (a) nor (b)
- Food that gives us energy.  
(a) Sugar (b) Salt (c) Spices (d) Cabbage
- We should not eat  
(a) covered food (b) uncovered food (c) well-cooked food (d) none of these
- Which of the following is a junk food?  
(a) Banana (b) Chips (c) Milk (d) None of these

### B. Fill in the blanks with the words given in the brackets.

- \_\_\_\_\_ gives us energy to work and play. (Food/Air)
- Green vegetables and fruits protect us from various \_\_\_\_\_. (diseases/wild animals)
- You must drink \_\_\_\_\_ daily. (milk/cola)
- You must brush your teeth \_\_\_\_\_ daily. (once/twice)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

- You must eat uncovered food sold by roadside vendors.
- Green fruits and vegetables are good for our eyes.
- You must eat junk food.
- When we feel hungry, we must eat food.


### D. Match the following.

- |                   |                              |
|-------------------|------------------------------|
| 1. Milk, eggs     | (a) Tooth care               |
| 2. Apple, cabbage | (b) Diseases                 |
| 3. Dentist        | (c) Strong muscles and teeth |
| 4. Uncovered food | (d) Protective foods         |



**E. Answer the following questions in one word or a sentence.**

1. What is food?
2. Name an energy-giving food.
3. Who takes care of our teeth?
4. Name two fruits that are good for your eyes.

**F. Answer the following questions in short.**

1. (a) Why should we not eat uncovered food?  
(b) Name two food items that help us grow.
2. Write any two healthy eating habits.
3. Write any two points about how you can take care of your teeth.
4. (a) Name two protective foods.  
(b) Draw, label and colour them.

**G. Answer the following questions in detail.**

1. Which of these do you like to eat? Circle it/them.



2. How do these food items help you? Write in a sentence next to the food item. One is done for you.

Carrot: It is good for my eyes.

Butter and bread: \_\_\_\_\_

Banana: \_\_\_\_\_

Fish: \_\_\_\_\_

Egg: \_\_\_\_\_

Grapes: \_\_\_\_\_

Apple: \_\_\_\_\_

Chapatti: \_\_\_\_\_

3. (a) Name any two body-building foods.  
(b) Why should we brush our teeth at night before going to bed?  
(c) Name two junk food items that you should not eat daily.

**H. Find the odd one out and circle it.**

1. Rice, chapatti, butter, cauliflower
2. Milk, fish, meat, bread
3. Pizza, chocolate, burger, banana
4. Lettuce, cabbage, spinach, grapes





## ACTIVITY

1. Make a list of ten food items that are healthy foods.
2. Draw their pictures on a chart paper and colour them.
3. Alternatively, you can also collect pictures of these foods from old newspapers, books and magazines or buy a food chart. Cut and paste the pictures of these foods on the chart paper.



## HOTS QUESTIONS

1. Arun does not like to eat fruits. He always asks for chocolate. Is it a good habit? What will happen if he does not eat fruits at all?



2. One day Anu fell down on the ground while she was attending the morning assembly. She was rushed to the school clinic and was given a glass of milk. She recovered after a while. Can you say why Anu recovered soon after getting milk?



## LIFE SKILLS

Check how many students in your class do not drink a glass of milk or eat breakfast before coming to school. Make a list of such students. Inform your house warden or class teacher about it. He/she will counsel these students in the morning assembly.



## SUBJECT LINK

Mona went to market with her mother to buy fruits. Her mother bought 2 kg of apples, 1 kg of pears and 2 kg of grapes. Tell how much weight her mother is carrying in her shopping bag?

## FUN TIME



## Head, Heart and Hand

1. Make a fruit salad.
2. Collect any five different fruits such as apple, banana, grapes, guava and pear.
3. Ask someone to help you wash and cut them. Keep the cut fruits in a large plate.
4. Squeeze a lemon. Sprinkle some chaat masala or a pinch of rock salt. Toss it all well.
5. Your fruit salad is ready! Share it with your friends or family at the dinner table.







# 7

## House: Our Shelter

Children, can you tell me the various parts of a house along with their use?

Aritra will start and then one by one each one of you will speak.

A porch is a platform with a separate roof at the entrance of a building.

We sleep in the bedroom.

A kitchen and a dining space where food is cooked and served.



Well, a living room or a sitting room is a room where we can sit, talk and relax.



There are one or two bathrooms and toilets for taking shower and freshen up.

A balcony is an external hanging structure in a flat.

A studyroom is a small room for reading or studying.

Is there any one who wants to add to it?

Yes, ma'am, a boundary wall along with a main gate.



Well, now we will discuss about various types of houses.

### Let's Learn More About

- Types of houses
- Materials used for making houses
- Permanent and Temporary houses
- Types of roofs
- Materials used for making roofs
- A good house



We need a house to live in. A house gives us shelter. It protects us from rain, heat, storm and cold. It also protects us from thieves and animals. A house gives us safety, pleasure and comfort.

A house in which we live with our family is called a **home**.

How do you feel when you come back home after a long holiday out of home?

## Types of houses

People make different types of houses.

Houses that last for many years are called **permanent houses**. Bungalows and skyscrapers are examples of permanent houses. These houses remain fixed at one place. They are made up of bricks, stones and cement. They are very strong.



Bungalow



Tent

Some people keep moving from one place to another. Such people live in temporary houses. Therefore, the houses which are not fixed at one place are called **temporary houses**. They are made up of mud, straw and canvas.

Some people like mountaineers, soldiers and scouts make **tents** for camping. Tents are made of canvas (a type of cloth).

Some people like nomads move from one place to another. They live in houses on wheels, which are called **caravans**. Caravans are temporary houses.



Caravan



Houseboat on  
Dal Lake in Kashmir

In Kashmir, people make floating houses on boats. These are called **houseboats** which float on lake water. When tourists visit Kashmir, they stay in these houseboats for some days for their pleasure.



Eskimos make temporary houses with snow. Such houses are called **igloos**.



Igloo

## Materials used for making houses

People use different materials for making their houses.

A permanent house is made up of cement, bricks, wood, stone, tiles, steel or iron.

A temporary house is made of canvas, straw, mud, dry leaves and snow.

## Types of roofs

There are different types of roofs. Some people make flat roofs on their houses. Some make sloping roofs. The type of roof on a house usually depends on the climate of the place.

**Sloping roofs** are built where it rains or snows a lot. It helps rainwater or snow to slide down easily.



House with sloping roof



House with flat roof

**Flat roofs** are built where it does not rain or snow often.

## Materials used for making roofs

Concrete roofs are made of cement, stone and sand.

Thatched roofs are made of dry leaves, grass, straw and bamboo.

Some people use tin, clay tiles and slate.



House with concrete roof



House with thatched roof



House with tinned roof



## A good house

- A good house should be neat and clean.
- A good house must be well ventilated.
- A good house should have a lot of sunshine and fresh air. Sunlight and fresh air kill germs.
- A good house must have large windows and doors.
- A good house should have plants nearby.
- A good house should have garbage pit/garbage bin outside the house.



A good house

### CONCEPTUAL CANVASS

1. Why should we make big windows in our houses?
2. Tents are made of \_\_\_\_\_.
3. Caravan is a permanent house. (True or False)
4. Why do people make sloping roofs?

### FUN to Learn

Nowadays many people make houses with active solar panels. These panels are installed on the roof top. Solar panels capture sun's heat which is used to run fans, lights, heaters, etc. Thus, they can save electricity.



### Now I Know...

1.

Houses protect us from

Sunlight

Rain

Wind

Cold

Thieves

Animals

2.

Types of houses

Permanent

Temporary

3. A good house should be strong, airy, well lit (by natural light) and surrounded by trees.



## WORD BEE

Find bold words from the lesson, read them aloud and write them below.


## EXERCISES

### A. Tick (✓) the correct option.

1. A house protects us from  
(a) heat (b) cold (c) rain (d) all of these
2. Which of the following is a permanent house?  
(a) Tent (b) Igloo (c) Bungalow (d) Caravan
3. People who use temporary houses are  
(a) soldiers (b) scouts (c) mountaineers (d) all of these
4. In Kashmir, tourists like to stay in  
(a) caravans (b) houseboats (c) igloos (d) none of these

### B. Fill in the blanks with the words given in the brackets.

1. In Kashmir, you find floating houses called . (caravans/houseboats)
2. Some people like live in caravans. (nomads/travellers)
3. Eskimos make temporary houses with . (sand/snow)
4. Permanent houses are made of cement and . (bricks/snow)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

1. Eskimos make permanent houses in polar regions. ☐
2. Tent is a permanent house. ☐
3. A good house must be clean and well ventilated. ☐
4. We use raincoats when we go out in the rains. ☐

### D. Answer the following questions in one word or a sentence.

1. Name the house made of canvas.
2. Write two examples of temporary houses.
3. Define a home.
4. Name a house which usually has a flat roof.



**E. Answer the following questions in short.**

1. (a) Why do we need a house?  
(b) Which one do you like—a clean house or a dirty house?
2. Name any four materials people use to make roof of houses.
3. What is a temporary house?
4. Name any three materials used for making thatched roof.

**F. Answer the following questions in detail.**

1. Observe the following pictures and answer the questions given below.



(a)



(b)



(c)



(d)



(e)



(f)

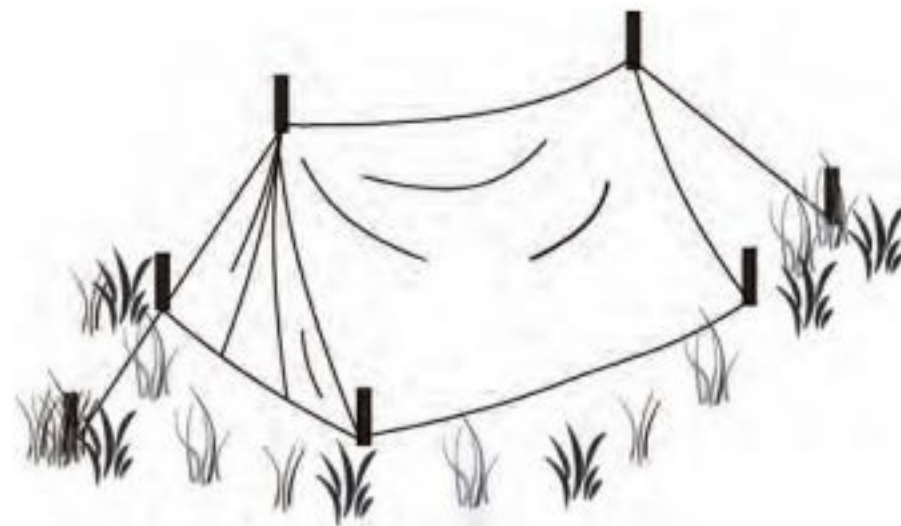
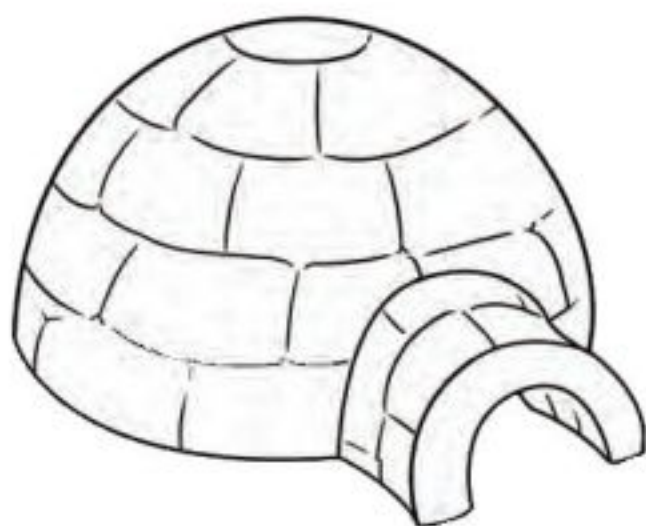
- (a) Name the materials used for making this house.  
(b) What type of roof does this house have?  
(c) What type of house is this?  
(d) What is this? What is it made of?  
(e) Name this temporary house.  
(f) What type of roof does this house have?
2. Answer the following questions in a word.  
(a) A place where we live in.  
(b) A house made of mud and straw.  
(c) A material used for making a tent.  
(d) A snow house.



**ACTIVITIES**

**ACTIVITY 1**

Colour the following houses:





## ACTIVITY 2

Fill in the crossword puzzle with the names of materials used to make a permanent house.



### HOTS QUESTIONS

While visiting a hill station, Rohan found most of the houses to be made of wood with sloping roofs. He asked his father, "Dad, why don't we find houses made of wood in cities or towns in the plains?"



### LIFE SKILLS

Discuss in the class what you can do to help homeless people.



### SUBJECT LINK

Draw and colour a picture of your dream house.

## FUN TIME



### Head, Heart and Hand

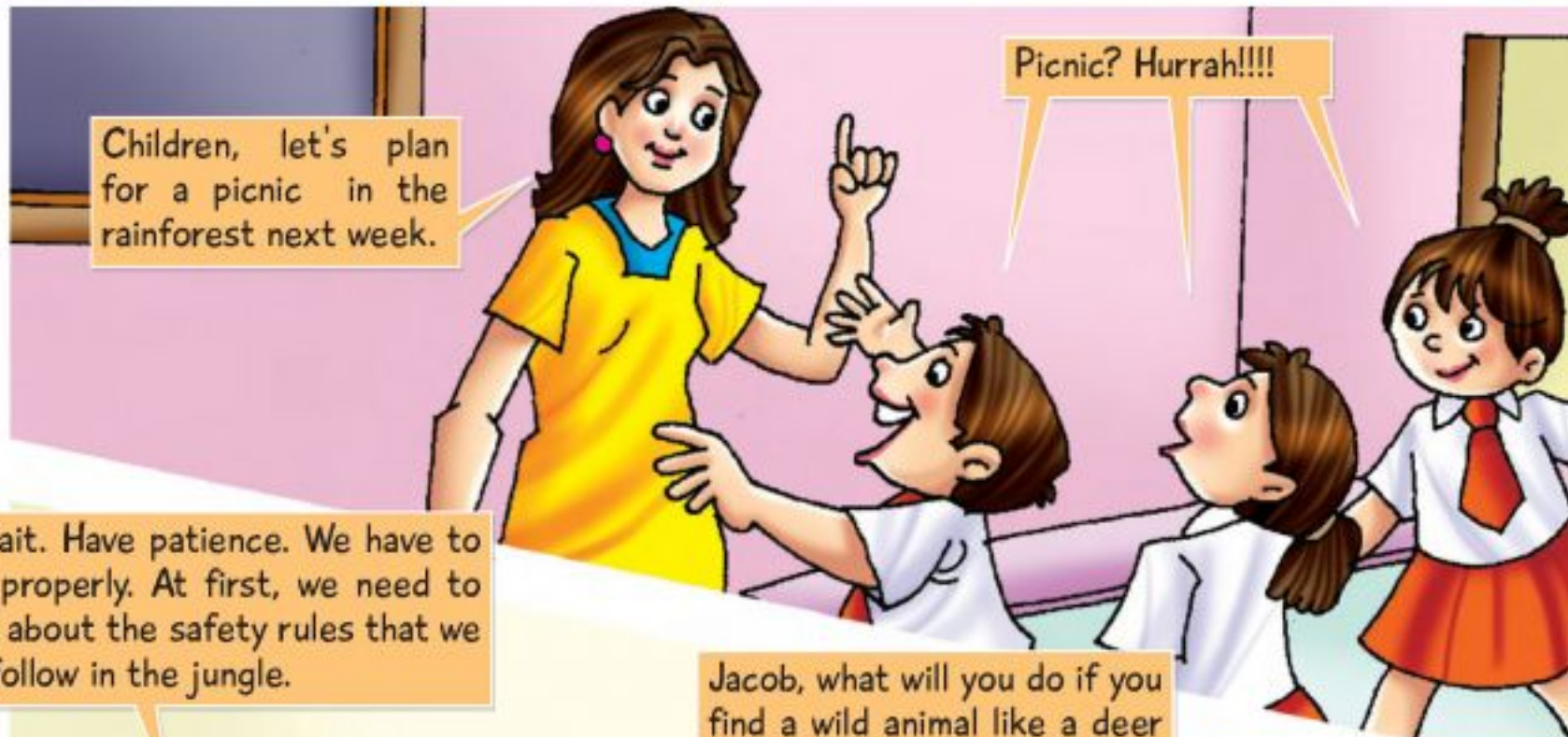
Make a hut using an old shoe box. Make a slanting roof above it. Use mud and water solution to dab on its walls. Use straw or dry leaves to make the roof. Place the house on a thermocol sheet and submit it as a science project.





# 8

## Safety First



Children, let's plan for a picnic in the rainforest next week.

Picnic? Hurrah!!!!

Wait, wait. Have patience. We have to plan it properly. At first, we need to discuss about the safety rules that we all will follow in the jungle.

Jacob, what will you do if you find a wild animal like a deer or a jackal on your way?

Sure ma'am.

Ma'am, I will be delighted to see a wild animal in the jungle. But I will not chase or hurt it. I will watch it from a safe distance.



Good! That's like a good boy. What will you do Juniper if you find a lake in the wild?



I will inform my teacher and friends. I will not go alone near the lake. Our teacher will, for sure, take us to see the beautiful lake.

Well, children, always follow safety rules at home, school and road.



### Let's Learn More About

- Safety Rules
- First Aid



We must always follow some rules for our own safety. We should follow these safety rules at home, in school, on the road and in playground.

## Safety rules on the road

- Always walk on the footpath. If there is no footpath, walk on the left side of the road. Never run or play on a busy road.
- Always cross the road at a zebra crossing. Always look at both sides before crossing the road.
- Always cross the road through a subway or an overhead bridge if the service is available on any road.
- Always follow traffic signals. Red light depicts **STOP**. Yellow light depicts **READY TO GO**. Green light depicts **GO**. You must only cross the road when the **PEDESTRIAN** light is green.



## Safety rules on a bus

- Never try to board or alight from a moving bus. It can be very dangerous.
- Do not lean out of the window of a moving bus.
- Do not put your hands out of the windows of a moving bus.
- Do not run or play in a moving bus.
- Never disturb the driver when he is driving the bus.
- Never travel on the footboard of a bus.





Everyone in a car must wear a seat belt while travelling. In many countries children under the age of four have to seat on a safety car seat especially meant for safely carrying children.

## Safety rules in and around the swimming pool

- Do not go alone to the swimming pool.
- Take the help of an elder to learn how to swim properly.
- Use a swimming tube till you learn how to swim.
- Do not go to the deep side of the pool.
- Do not swim after meals.
- Do not drink the water in the swimming pool.
- Do not push or pull other swimmers in the pool.
- Do not play around the pool.



## Safety rules in the classroom

- Do not run and play between the desks in a classroom, you may get hurt.
- Do not spill water on the classroom floor.
- Do not touch or play with electrical plugs and switches.
- Do not jump on the desks.
- Do not push your classmates.



## Safety rules at home

- Never play with sharp objects like blades, knives or scissors. You may cut yourself badly.
- Do not touch or play with electrical wires and plugs. It can be very dangerous.
- Never play in the kitchen when your mother or elders are cooking.





- Do not leave your toys lying on the floor. Someone may step on them and fall.
- Do not run down the stairs or push others on the stairs. You may fall or cause them to fall and get fractures.
- Never eat or play with things like naphthalene balls and floor cleaners. They may be poisonous.
- Never burn fire crackers alone on Diwali or other festivals. Ask your elders for help.
- Play with safe colours (herbal colours) on Holi.



## First aid

**First Aid** is the aid or help we give to a sick or injured person before the doctor arrives. If someone at home gets hurt, we must inform our elders. If you cut your finger or burn your hand, tell your elders immediately. You will be given First Aid. This will help you get relief from the pain or prevent further hurt.



### CONCEPTUAL CANVASS

1. Why should we not lean out of the window of a moving bus?
2. We do not spill water on the classroom floor. (True/False)
3. What is 'First Aid'?



### Now I Know...

#### On road

- Follow traffic signals and rules
- Cross road on zebra crossing

#### On bus

- Enter and get down in queue
- Never disturb the driver

#### In swimming pool

- Never go alone
- Do not swim after meals

#### Safety

#### In school

- Never push your classmates
- Do not litter

#### At home

- Never play with sharp objects like knives and blades
- Never play with gas stove and electricity



## WORD BEE

Re-read the lesson, write below the new words and read them aloud.


## EXERCISES

### A. Tick (✓) the correct option.

1. We should cross the road only when the pedestrian light is  
(a) yellow                      (b) green                      (c) red                      (d) all of these
2. We should not play with  
(a) scissors                      (b) knives                      (c) blades                      (d) all of these
3. We should go for swimming  
(a) alone                      (b) with elders                      (c) with friends                      (d) all of these
4. We should not touch or play with  
(a) electrical plugs                      (b) hot irons                      (c) heaters                      (d) all of these

### B. Fill in the blanks with the words given in the brackets.

1. Do not stand on the \_\_\_\_\_ of a moving bus. (cupboard/footboard)
2. We must use a \_\_\_\_\_ till we learn how to swim properly. (swimming tube/football)
3. We must cross the road at \_\_\_\_\_. (zebra crossing/anywhere)
4. We must not leave \_\_\_\_\_ on the floor. (toys/carpet)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

1. While crossing the road, you should look at both sides of the road. ☐
2. We must follow safety rules. ☐
3. You must not run or play on the road. ☐
4. You should not maintain discipline in class. ☐

### D. Answer the following questions in one word or a sentence.

1. What is given to a person who gets hurt?
2. Which traffic light says "Go"?
3. Where should we walk if there is no footpath besides the road?



**E. Match the following.**

- |                      |                    |
|----------------------|--------------------|
| 1. Red traffic light | (a) Walk           |
| 2. Zebra crossing    | (b) Stop           |
| 3. Footpath          | (c) Cross the road |
| 4. Blade, scissors   | (d) Diwali         |
| 5. Fire crackers     | (e) Sharp objects  |

**F. Answer the following questions in short.**

1. What should we do to avoid accidents?
2. Write any two safety rules you must follow while swimming.
3. What is First Aid?
4. Why should you not board or alight from a moving bus?

**G. Answer the following questions in detail.**

1. Write any three safety rules that you must follow on the road.
2. Write any three safety rules you must follow while riding the school bus.
3. See the pictures below and answer the questions given below them.



(a)



(b)



(c)

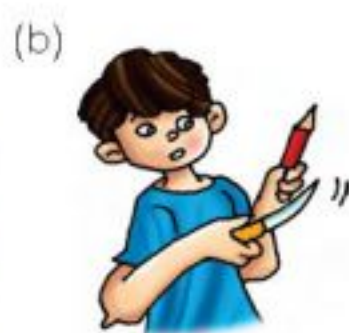
- (a) What is wrong if the boy lights the matchsticks?
- (b) Is the girl doing the right thing? What will happen if she falls down?
- (c) Why did the boy fall down?

**H. Give one word answers for the following.**

1. I tell you to "Be Ready to Go".
2. You must cross a busy road through me.
3. I am a sharp object. You must not play with me.
4. If you follow me, you can avoid accidents.



**I. Circle the pictures in which the actions are wrong.**



## ACTIVITIES

### ACTIVITY 1

1. Make a chart titled SAFETY RULES.
2. Write the safety rules to be followed on the road using a stencil.
3. Display it in class.

### ACTIVITY 2

1. Make a model of a traffic light.
2. Take an old shoe box. Cover it with black chart paper.
3. Take red, green and yellow glazed papers or colour papers.
4. Cut them into circles big enough to fit onto the black shoe box lid horizontally.
5. Paste them on the face of the shoe box.
6. Take an iron or wooden stand longer than the length of the shoe box.
7. Fix the shoe box on it.
8. You may fix the model on a thermocol sheet to make your traffic light stand.
9. Submit it to your class teacher.

### ACTIVITY 3

1. Observe a Safety Week in school.
2. Plan the following activities to be undertaken during the week:
  - (a) Slogan writing
  - (b) Group discussion involving your teacher
  - (c) Visit to the traffic light intersection with your teacher
  - (d) Poster making competition
  - (e) A street play with the help of your teacher.





### HOT'S QUESTIONS

Jack asked his mother why she took him to the doctor last week after he hurt himself badly falling on the road, when she had already given him First Aid.



### LIFE SKILLS

Visit a traffic light intersection with your teacher. Spend about an hour and observe how people follow traffic rules. Count how many cars did not follow the traffic rules and skipped red lights. Observe what the traffic police does to them.



### SUBJECT LINK

Write a slogan for road safety. One example is given below:

**See right, left wait and cross  
Safety first is a must boss!**

## FUN TIME



### Head, Heart and Hand

1. Make a First Aid box.
2. Take a clean empty shoe box.
3. Cover the box and the lid separately inside out with a white chart paper.
4. Draw a big red cross on the outside of the lid.
5. Keep a bottle of Dettol/Savlon, a roll of surgical cotton, a gauge bandage, a tube of Burnol, Band-Aid, soap, and a pair of scissors in the box.
6. Your First Aid box is ready. Keep it handy in your room. Periodically, ask your parents to check for the expiry dates on the medicines and replace old medicines.







# 9

## Air Around Us

Children, you know that some months in a year are hot, some are cold. Some time it rains. All these happen because of the sun, air, water and many other things. Now listen to the poem and try to write such a poem on your own. You can also memorise this poem "Weather", written by Meish Goldish.

### WEATHER

Weather is hot, Weather is cold,  
Weather is changing As the weeks unfold.  
Skies are cloudy, Skies are fair,  
Skies are changing, In the air.  
Days are foggy, Days are clear,  
Weather is changing Through the year.



Isn't it a nice poem?

Yes ma'am. It is.

Now we will discuss about air and water in the next two chapters.



### Let's Learn More About

- Air and its properties
- How to keep air clean
- Moving air and its uses



All living things need air, water and food to live.

We can see or touch water and food but we cannot see or touch air. We can only feel air.

Blow air from your mouth onto your palm.

Stand under a moving ceiling fan.

When you ride your bicycle a little fast, your face and body feel something.

When you ride a swing, you feel something on your face and body.

All these actions make you feel the presence of air.



We cannot live without air. All living plants and animals including humans breathe in air.

Hold your nose with your fingers and press your nostrils together. Do this only in the presence of your elders. Keep your mouth closed. How long can you hold your breath? After a few seconds, you have to open your mouth or nose to take in air.



## Air and its components

Air is a mixture of gases, water vapour, smoke, dust and germs.

### Air contains water vapour

Go to the kitchen to see your mother/elders make tea. They boil the water first. When the water boils, do you see a white gas coming out of the pot and getting mixed with air? This white gas is called **water vapour**. This process of changing water into water vapour is called **evaporation**.



Water boiling and vapour coming out



### ACTIVITY 1

1. Take two handkerchiefs and dip them in water.
2. Hang one handkerchief in the hot sun outside.
3. Hang the other in your room.
4. After sometime, check both the handkerchiefs.
5. What do you observe?

You will see that the one you hung outside in the sun dried faster.

This is because the heat of the sun turned the water in the first handkerchief into water vapour and the water vapour got mixed into air.

### ACTIVITY 2

1. Take a dry glass tumbler.
2. Put some ice in it.
3. Fill it with water.
4. Keep it on the table for a few seconds.
5. What do you observe?



You will see some droplets of water on the outside of the tumbler.

Where did these droplets come from?

These droplets are nothing but water. Water vapour present in air turns back into water droplets when it comes in contact with the cold surface of the tumbler.

When water vapour cools to form water, the process is called **condensation**.

### Air contains smoke

Observe the smoke that comes out of an incense stick (*Agarbatti*).

Where does the smoke go? The smoke mixes with air.

#### AMAZING FACT

Burning of fuels and factory wastes is the main cause of air pollution. Cutting down of trees has also led to an increase in air pollution.

Vehicles and factories emit smoke. This smoke makes the air dirty.



Smoke emitted by  
factory chimneys



Smoke coming  
out from a car



Smoke coming out  
of a steam engine



## Air contains dust

Have you ever noticed a moving bus or car carrying away dust particles after it? Or have you ever observed a stream of sunlight which enters your room filled with dust particles?

These dust particles remain in air and make the air dirty.



Dust particles carried away by a car



Dust particles seen through a beam of light

## Air contains germs

The air around a garbage bin gives out a foul smell. It is because dirty air from the garbage bin contains germs.



Germs from a sick person mixing with air

When a sick person sneezes or coughs, germs come out of his mouth or nose. These germs get mixed with air.

Air that contains a lot of dust, germs and smoke is dirty air.

We fall sick when we breathe in dirty air.



Garbage bin gives out foul smell

We should breathe in fresh and clean air to remain healthy.

We should keep windows open to let fresh air in.

We should play out in the open and in green areas to get fresh air.

## FUN to Learn

Balloons that you get in the parties are filled with helium. Helium is lighter than air, hence the balloons float.

## How we keep air clean

Plants are our friends. They take in carbon dioxide from air and give out oxygen. In this way they make air clean. So we should plant more and more trees around our homes, in parks and on the roadside.



Children are planting trees





## Properties of air

### Air occupies space and has weight

When you blow into a balloon, it becomes bigger in size. What is inside the balloon that makes it grow bigger? It is nothing but air. This shows air occupies space. Air also has weight.

### Air moves things

Slow moving air is called **breeze**.

When air blows fast, it is called **wind**.

When wind blows very fast, it is called **storm**.

A storm can uproot trees and blow away temporary houses. It can also damage birds' nests, homes of many animals and crop plants.

We should not go out of our homes during a storm.

Moving air helps in many ways:

- Wet clothes dry faster in moving air.
- We fly kites in moving air.
- A bird can fly because of air.
- A sailboat sails in the river when wind helps it to move.
- An aeroplane can fly in the sky because of the air.



Windy day



Stormy day



Clothes drying in air



Children flying kites



A sailboat sailing



Aeroplane flying

### CONCEPTUAL CANVASS

1. What is air?
2. What helps a kite to fly?
3. Name two things that make air dirty.
4. Why does a garbage bin give foul smell?

### AMAZING FACT

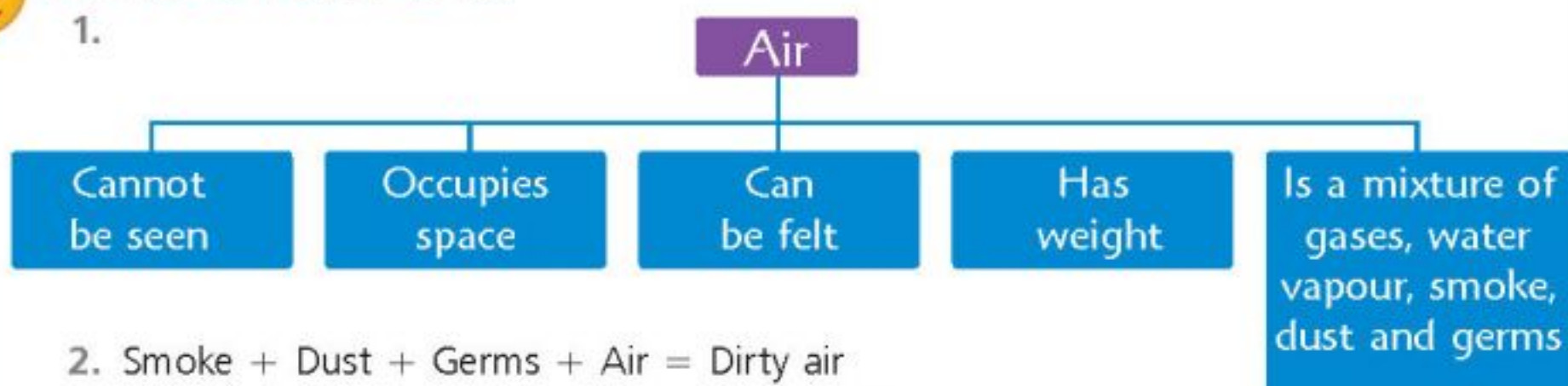
Air pollution affects kids more than adults because they breathe more air and spend more time on playing.





## Now I Know...

1.



2. Smoke + Dust + Germs + Air = Dirty air

3. We should keep air clean by planting more trees.

4.



### WORD BEE

Re-read the lesson, write below the new words and read them aloud.


## EXERCISES



**A. Tick (✓) the correct option.**

1. Air contains

(a) gases

(b) water vapour

(c) dust and germs

(d) all of these

2. A wet cloth dries faster on a

(a) rainy day

(b) hot summer day

(c) cloudy day

(d) none of these

3. Water droplets settle on a cold drink bottle because

(a) air contains water vapour

(b) air contains germs

(c) air contains dust

(d) air contains smoke

4. Wind that blows very fast and strong is called

(a) breeze

(b) storm

(c) air

(d) none of these



**B. Fill in the blanks with the words given in the brackets.**

1. All living organisms need \_\_\_\_\_ to breathe. (air/water)
2. A \_\_\_\_\_ can uproot large trees. (breeze/storm)
3. We should \_\_\_\_\_ more trees to keep our surroundings clean. (plant/uproot)
4. A \_\_\_\_\_ can fly in air. (snake/bird)

**C. Write 'T' for true and 'F' for false in the boxes given against the statements.**

1. Air occupies space.
2. Slow moving air is called storm.
3. Dust, germs and smoke in the air make us sick.
4. We can see air.

☐  
☐  
☐  
☐

**D. Answer the following questions in short.**

1. What makes air dirty?
2. What happens if we breathe in fresh and clean air?
3. What is breeze?
4. How can you show that air occupies space?
5. Join the dots and colour the pictures given below. These are the things that need air to move.



**ACTIVITY**

1. Make a paper kite.
2. You can request your teacher to help you.
3. For making the kites, you need kite paper, thin bamboo sticks, reels of thread, rollers, needles and glue.
4. Cut the kite papers in squares.
5. Fix the bamboo sticks criss-cross on the kite papers with glue. Stitch them together at the crossing point with needle and thread.
6. Paste another strip of paper at the bottom end of the kite.
7. Tie a piece of thread on two points on the kite.
8. Now tie a second piece of thread to the earlier thread.
9. Your kite is ready to fly!
10. Display it or go out in the open and fly it in the sky.
11. Remember to NEVER go alone to the rooftop to fly kites.







### HOTS QUESTIONS

1. Robin asked his mother why we should keep our windows open while sleeping.
2. He also asked her why mountaineers carry oxygen cylinders when climbing high altitudes.



### LIFE SKILLS

1. Check how many trees are there around your house.
2. Organise a tree plantation drive in your neighbourhood on a Sunday. Get all the children in your neighbourhood to plant one sapling each with the help of your community gardener.



### SUBJECT LINK

Find the meaning of word Aero + plane = Aeroplane. Find more words with the beginning Aero.

## FUN TIME



### Head, Heart and Hand

1. Take soap water in a glass.
2. Take a drinking straw and dip it into the soap water.
3. Then take it out and blow gently into it.
4. What happens?
5. Bubbles come out of the straw and fly up into the air.
6. Do you notice that the bubbles get bigger as you blow more air into them?
7. This shows that air occupies space.
8. You can try this with a chewing gum too.



# 10 We Need Water



## Let's Learn More About

- Water and its uses
- From where we get water
- How water changes its form
- The water cycle



## Water and its uses

All living things need water to live. We cannot live without water.

We need water to drink.

We need water to bathe.

We need water for washing.

We need water for cooking.

We need water for gardening.

Water is used everywhere: our homes, schools, offices, railway stations and hospitals.



Drinking



Bathing



Washing



Cooking



Gardening

## Sources of water

We get water from mainly two sources—surface water and underground water.

Water which we get from rivers, lakes, ponds, streams and oceans is called **surface water**.



Rain



Stream



Ocean

Rainwater is the purest water which we get naturally.

Rainwater fills in lakes and ponds, rivers and streams.

### AMAZING FACT

By the time a person feels thirsty, his or her body has lost over 1 percent of its total water amount.



Some rainwater goes into the soil and gets deposited under the ground. This is called **underground water**.

We get underground water by digging wells and tube wells.

In cities, water is stored in overhead tanks after drawing from underground with the help of tube well pumps.



Well



Tube well



Hand pump

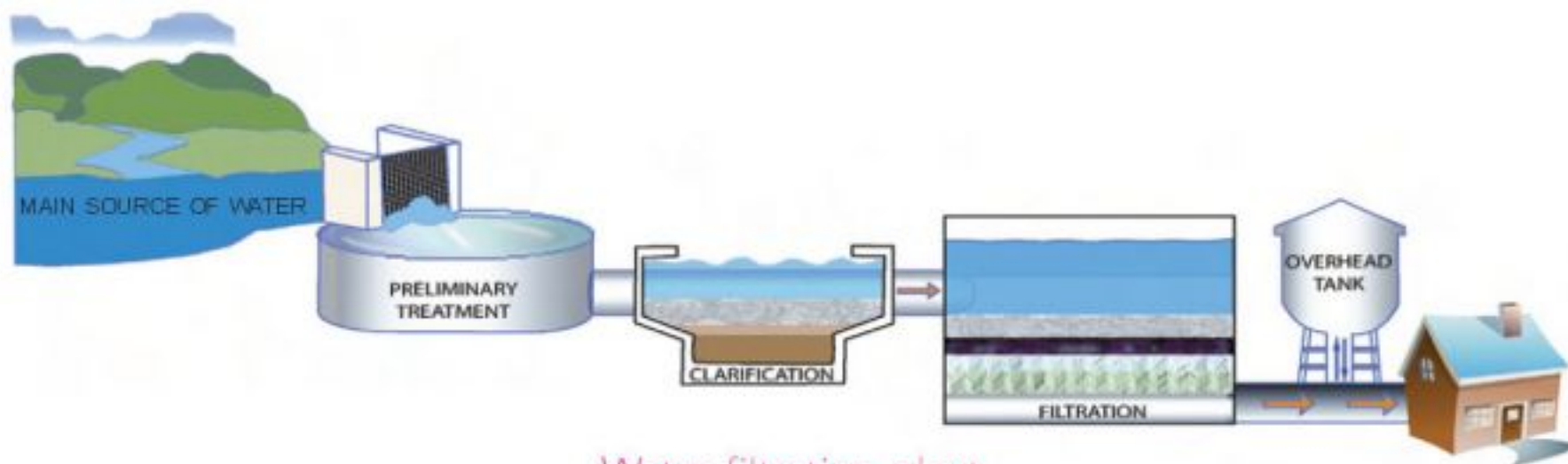
Then the water reaches our homes through water pipelines.

If we live in the countryside, we may have rivers, ponds or lakes near our homes.

## Clean water

Do you know that water from rivers, lakes and ponds is not always clean? Drinking water from these sources can make people sick. People in villages wash clothes in this water. Factories drain chemicals and other wastes into these water bodies. This water is first purified in filtration plants. Then it is supplied to our houses.

At home we further purify this water by boiling or filtering.



Water filtration plant

## Saving water

Water is precious. We can save it in many ways.

- We should not waste water.

**FUN to Learn**

Pure water has no smell or taste.



- Do not keep the tap on while brushing your teeth.
- Use a bucket of water to bathe instead of using a shower.
- Repair the leaking pipes.
- When it rains, rainwater should be collected in large containers. This water can be used to water plants, mop your home and wash staircases.

## Forms of water

Water has three forms—Solid, Liquid and Gas.

When water is boiled, it turns into water vapour. This water vapour is the **gaseous form of water**.

When water vapour is cooled, it turns back into water. So water is the **liquid form**.

When water is cooled further, it turns into ice. Ice is the **solid form of water**.



Solid



Liquid



Gas

### ACTIVITY

1. Ask your elders to boil some water in a kettle.
2. When the water comes to boil, you will see steam coming out of the spout.
3. Hold a metal plate in front of the spout.
4. You will see tiny water droplets of water settling on the plate and then rolling down.
5. When steam from the kettle touches the cool metal plate, it changes into water.



### CONCEPTUAL CANVASS

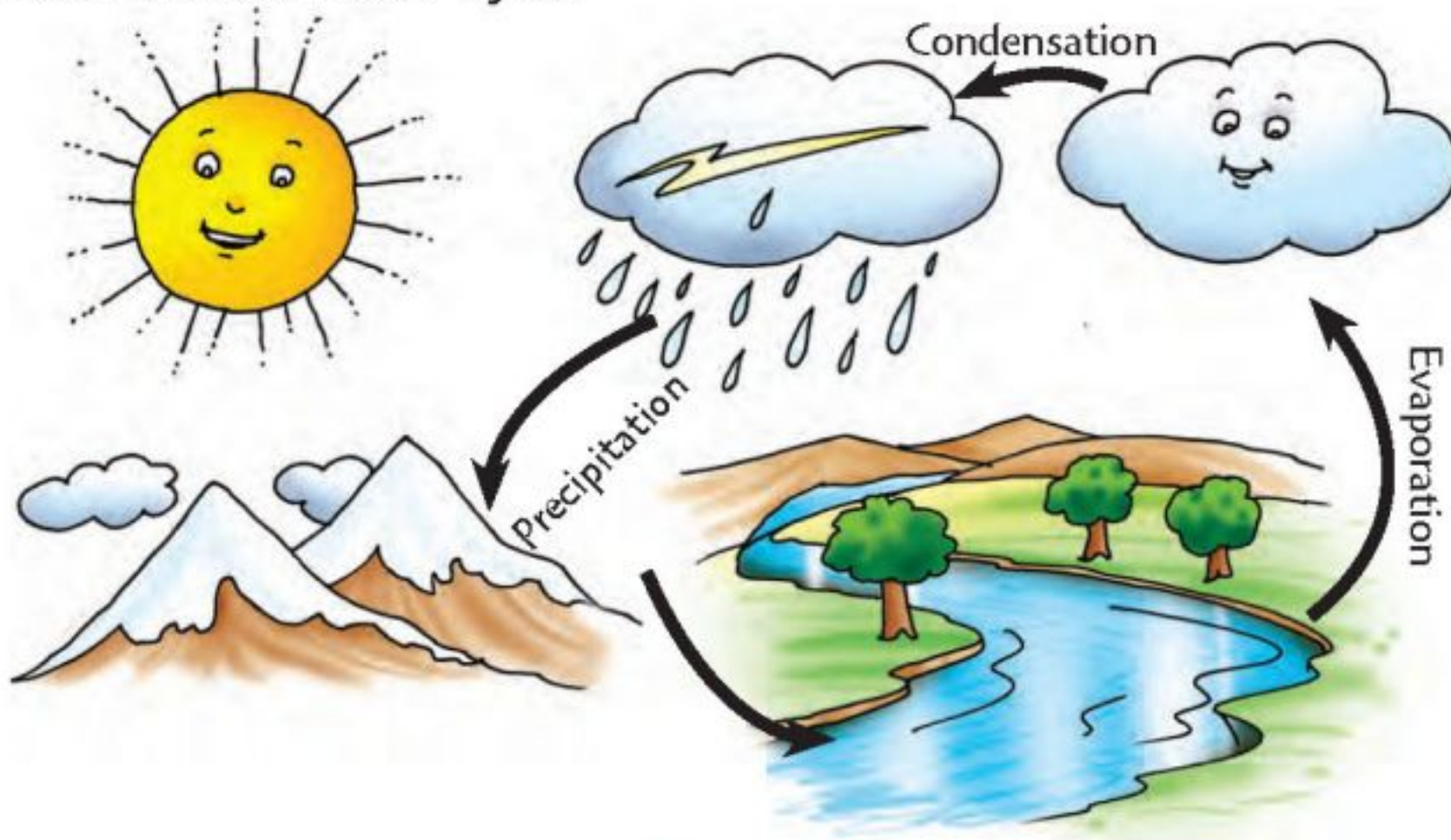
1. Write any two uses of water.
2. Name any two sources of water.
3. Where does the rain water get stored in nature?
4. What are the three forms of water?

## Water cycle

You just read that water changes its form. How does it change its form in nature?



During the day, the sun heats up water in the rivers, lakes, ponds and seas. This water changes into water vapour. Water vapour, rises up where it is cooler. The water vapour cools on going up and changes into tiny droplets of water. These droplets join together to form clouds. When clouds become heavy with water, it falls down on earth as rain. Rainwater then fills up water bodies. Again this water on heating changes into vapour and rises up. On cooling they turn into water droplets. On further cooling, the water droplets come back down to earth as rain. This journey of water from water bodies to the sky and back to the earth is called **water cycle**.



Water cycle



## Now I Know...

1.





2.

Water exists in  
three forms

Solid (Ice)

Liquid (Water)

Gas (Water vapour)

3. Clean filtered/boiled water should be used for \_\_\_\_\_.

4. Water balance on earth is maintained by water \_\_\_\_\_.

## WORD BEE

Re-read the lesson, write below the new words and read them aloud.


## EXERCISES

### A. Tick (✓) the correct option.

- Water when boiled, turns into  
 (a) steam                      (b) ice                      (c) smoke                      (d) all of these
- Factories drain polluted water into  
 (a) well                      (b) tube well                      (c) river                      (d) mountain
- Rain comes from  
 (a) sun                      (b) river                      (c) clouds                      (d) lakes
- We must drink water which is  
 (a) polluted                      (b) germ free and clean  
 (c) mixed with rainwater                      (d) rainwater

### B. Fill in the blanks with the words given in the brackets.

- Water coming from the clouds is called \_\_\_\_\_. (rain/vapour)
- Vapour that comes out of boiling water is called \_\_\_\_\_. (steam/ice)
- Cold and solid cube of water you see in your refrigerator is \_\_\_\_\_. (ice/snow)
- Water from dirty streams contains \_\_\_\_\_. (worms/germs)



**C. Write 'T' for true and 'F' for false in the boxes given against the statements.**

1. We can live without water.
2. Ocean water is an example of underground water.
3. Plants need water to grow.
4. We get water from mountains.


**D. Match the following.**

- |                        |                               |
|------------------------|-------------------------------|
| 1. Water cycle         | (a) Underground water         |
| 2. Boiling             | (b) Supply of water to houses |
| 3. Tube well           | (c) Surface water             |
| 4. Overhead water tank | (d) Kills germs               |
| 5. River water         | (e) Water balance in nature   |

**E. Answer the following questions in one word or a sentence.**

1. Why can't we drink pond water directly?
2. Name three sources of drinking water.
3. Name one source from which we get water for our daily use.



## ACTIVITIES

### ACTIVITY 1

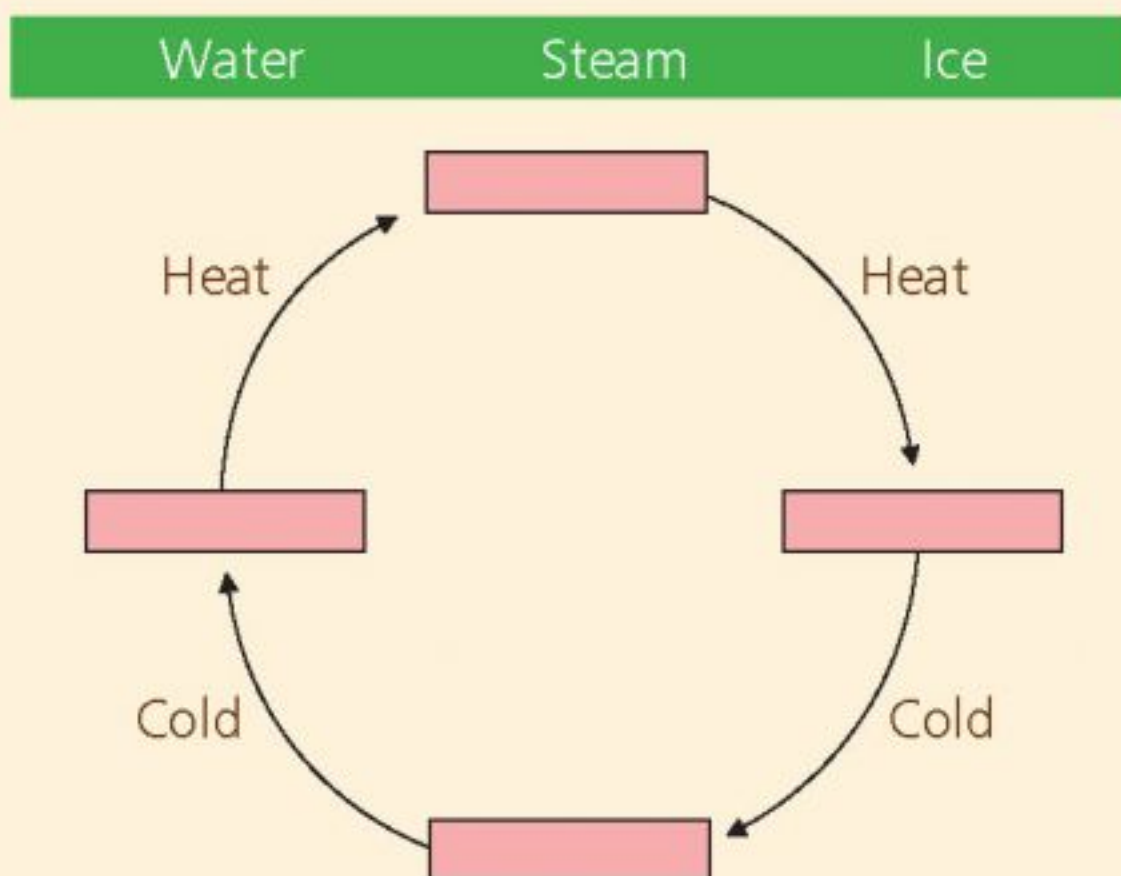
1. Unscramble the words to get three forms in which water can exist.

DOSIL \_\_\_\_\_

QUILID \_\_\_\_\_

SAG \_\_\_\_\_

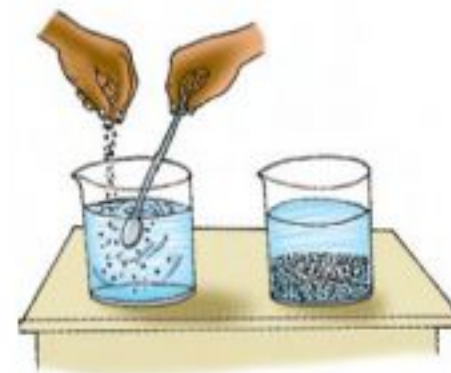
2. Write the missing words choosing from the words given in the box.





## ACTIVITY 2

1. Take some muddy water in a glass beaker. Stir it well and you will see the whole water turning muddy.
2. Put a piece of alum into this water.
3. After a minute, you will see that all the mud and dirt has settled at the bottom of the beaker and the water is clear.
4. Alum, when mixed with dirty water makes the dissolved dirt heavy and settle down. Thus, it cleans the water.



## ACTIVITY 3

Draw the water cycle on a full-sized chart paper. Colour it and paste the chart on a thermocol sheet. Submit it to your teacher or display it in class.



### HOTS QUESTIONS

1. Ask your elders at home why people should use overflow check-valves in the overhead water storage tank.
2. Rohit asked his father why he needs to pay a water bill every month for the water supply at home.



### LIFE SKILLS

1. Turn off the tap when you brush your teeth.
2. Do not waste tap water, use only as much as you need.
3. Do not throw away the water left in your water bottle after you return from school. Use it to water a plant.
4. Avoid using the shower for bathing. Use a bucket of water. This way you can save a lot of water.



### SUBJECT LINK

Surf Internet or discuss with family about ways to reduce water wastage. Write ten ways on drawing sheet and decorate it with colours. Now make five more such pamphlets and distribute them to your neighbours. Do your bit to save water?

## FUN TIME



### Head, Heart and Hand

1. Make your own mango ice cream!
2. Take a mango, peel it and squeeze out its juice in a bowl.
3. Take half a cup of water. Mix six teaspoons of sugar in it. Pour the mixture into the bowl which contains mango juice.
4. Take half a cup of cream (*malai*), mix it well with the mango juice and sugar syrup.
5. Pour the entire contents into an ice cream tray and put it in the freezer for a few hours.
6. Take out the tray after a few hours and you can taste your homemade ice cream!





# 11

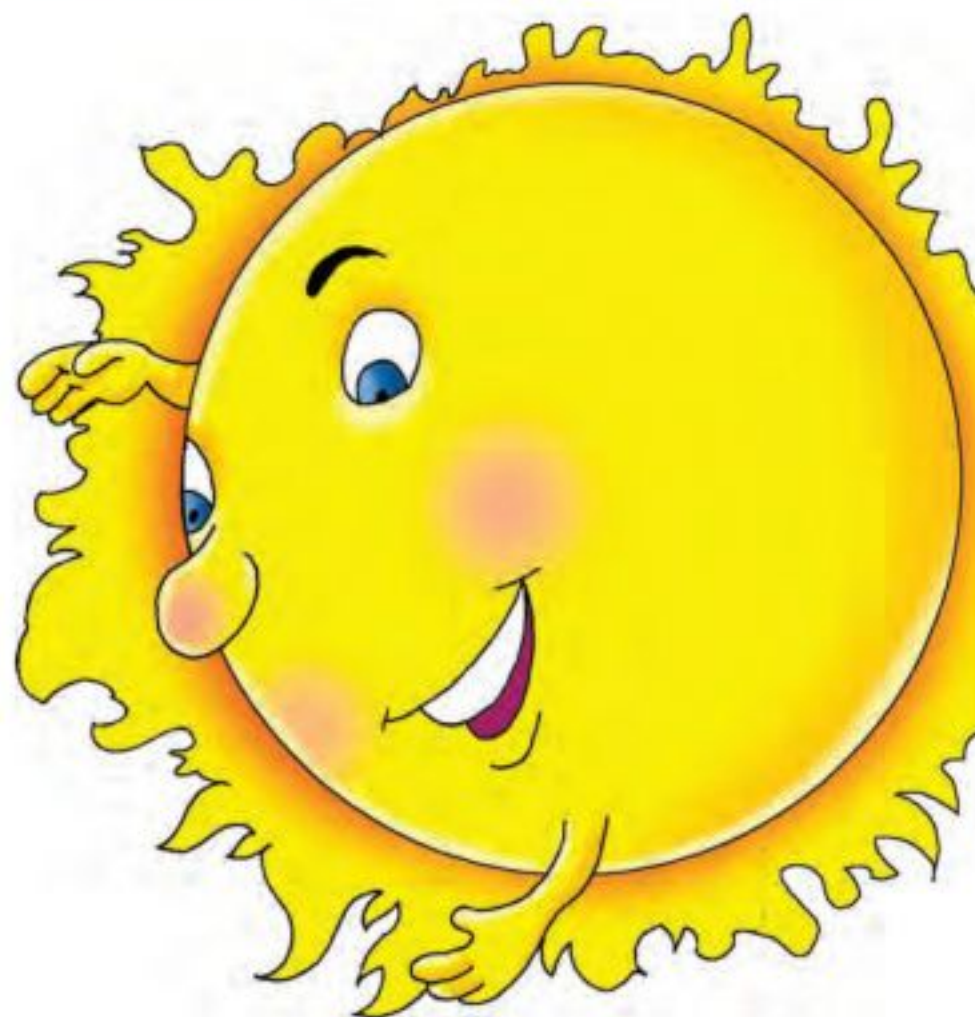
## The Sun and the Shadow

Children, please read this poem, then I will explain you the meaning.

### The Sun

When I throw light,  
Flowers burst into laughter,  
When I shine 'n look at the river,  
The clouds pour water.  
The shadows move along,  
When I follow you,  
Grains turn golden,  
When I touch a few.  
The joyful world dances,  
For the huge golden harvest,  
I do the same,  
Because I did my best.

— Jhara Roy



### Let's Learn More About

- The sun and its effects on earth
- How the sun helps us
- Formation of shadows







## The sun and its effects on earth

The sun is a big ball of fire.

It gives us heat and light.

It looks small but is much larger than the earth.

It is the nearest star to the earth.

It is far away from us.

When the light of the sun falls on a part of the earth, it is **day**.

The sun rises in the east.

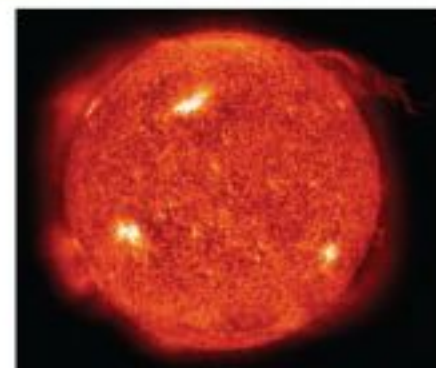
Sunny days are bright and warm.

When the sun's rays do not reach us, it is a cloudy day. Cloudy days are not bright.

When the sun is not seen from a part of the earth, it is **night**.

The sun sets in the west.

Nights are dark. The moon shines at night.



Sun



## How the sun helps us

Sun helps us in many ways.

- Sunlight helps plants to make food.
- The heat of the sun helps us to dry our clothes.
- The heat of the sun evaporates water from rivers, ponds, lakes and oceans. This helps in carrying out the water cycle.
- Farmers sun-dry their crops.
- The heat of the sun helps fruits to ripen.



Sunlight helps plants to make food



Clothes getting dry in the sunlight



Farmers sun-drying seeds

## The shadow

Have you noticed that when you play or walk in the park on a sunny day, a dark shape of your body is formed on the ground? This dark shape is your shadow. Our shadow moves with us.



Shadow of children

### ACTIVITY

1. Take a torch. Switch off the lights in a room. Now switch on the torch. Place your right hand on the path of light. What do you see? A dark shadow of your hand appears on the wall. Now switch off the torch. Can you see the shadow of your hand? No.
2. Thus, shadows are formed when light cannot pass through an object.
3. When sunlight falls on your body, your body blocks the path of the sunlight and a shadow is formed.



Shadow does not form when there is no light.

A shadow is always formed opposite to the source of light.

The shape of the shadow depends on the shape of the object. Your hand will cast a shadow of your hand. Your body will cast a shadow of your body. A tree's shadow will look exactly like the tree.





The shape of the shadow depends on the shape of the objects

The length of a shadow changes.

Shadows are longer in the morning and in the evening.

The shortest shadows are formed at noon when the sun is over our head.



Shadow in the morning



Shadow at noon



Shadow in the evening

### CONCEPTUAL CANVASS

1. The sun is smaller than the earth (True/False).
2. Where does the sun set?
3. How does the sun help plants?
4. When does the shadow become shortest?

### FUN to Learn

The light takes 8.3 minutes to travel from the Sun to the Earth.





## Now I Know...

Shadows are formed by light

Very important for life on earth

Gives heat and light

Sets in the west

**SUN**

Helps to make food for plants and animals

Our nearest star

Rises in the east

### WORD BEE

Re-read the lesson, write below the new words and read them aloud.


## EXERCISES

### A. Tick (✓) the correct option.

- The sun is a big ball of  
 (a) air                      (b) water                      (c) fire                      (d) leather
- Sunny days are  
 (a) bright                      (b) warm                      (c) both (a) and (b)                      (d) cool
- The heat of the sun helps us to  
 (a) dry clothes                      (b) evaporate water                      (c) dry cereal crops                      (d) all of these
- Where is a shadow formed?  
 (a) Near the source of light                      (b) Opposite to the source of light  
 (c) Both (a) and (b)                      (d) None of these

### B. Fill in the blanks with the words given in the brackets.

- The sun gives us heat and . (light/dark)
- The sun sets in the . (east/west)
- . make food with the help of sunlight. (Plants/Animals)
- Shadows are longer in the . (morning/noon)



**C. Write 'T' for true and 'F' for false in the boxes given against the statements.**

1. Shadows form when there is no light.
2. The sun rises in the east.
3. Days are warm because of the heat of the sun.
4. The shape of the shadow depends on the shape of the object.



**D. Match the following.**

- |                        |                              |
|------------------------|------------------------------|
| 1. Morning sun         | (a) In the presence of light |
| 2. The heat of the sun | (b) Long shadow              |
| 3. Cloudy days         | (c) Dries clothes            |
| 4. Shadow is formed    | (d) Not bright               |

**E. Answer the following questions in one word or a sentence.**

1. What does the sun give us?
2. Where does the sun set?
3. What helps to evaporate water from rivers, ponds, lakes and oceans?
4. When is the shadow shortest?

**F. Answer the following questions in short.**

1. How does the heat of the sun help us? Write any two points.
2. How is a shadow formed?
3. Why does the sun look so small?

**G. Answer the following questions in detail.**

1. Look at the pictures given below and answer the questions that follow.



(a)



(b)



(c)

- (a) What time is it when this happens?
  - (b) How do the clothes dry?
  - (c) Observe the shadow and write what time it should be.
2. Draw the three shadows formed in the morning, at noon and in the evening.





## ACTIVITY

1. Take a sheet of white paper, a ball and a torch.
2. Put the ball in the centre of the sheet of paper.
3. Hold the torch a little away from the ball.
4. Now light the torch.
5. A shadow of the ball is cast on the paper.
6. If you move the torch, the shadow will also move.



## HOTS QUESTIONS

1. Ranjana asked her mother why we wear light coloured clothes in summer.
2. She also asked her mother why some big black umbrellas are black on the outside and silver on the inside.



## LIFE SKILLS

We should utilize the heat and light of the sun as much as we can.

1. Request your parents to install a solar water heater. In winters, use the water heated in the heater to bathe or other household tasks.
2. In winters, sit outside your home in the balcony or garden and enjoy the heat of the sun instead of using an electric heater.



## SUBJECT LINK

If you get to travel to the sun will you go there? Why or why not? Write five sentences.

## FUN TIME



## Head, Heart and Hand

1. Make a sun dial.
2. You will need a stool, a piece of wooden ply, glue/fevicol and a marker pen.
3. Place the stool in an open space where the sun's rays fall almost throughout the day.
4. Glue the wooden piece of ply vertically to the stool.
5. Mark the positions of the shadow of the ply after each hour. Mark the time as well.
6. Your sun dial is ready. Do this activity on a holiday.



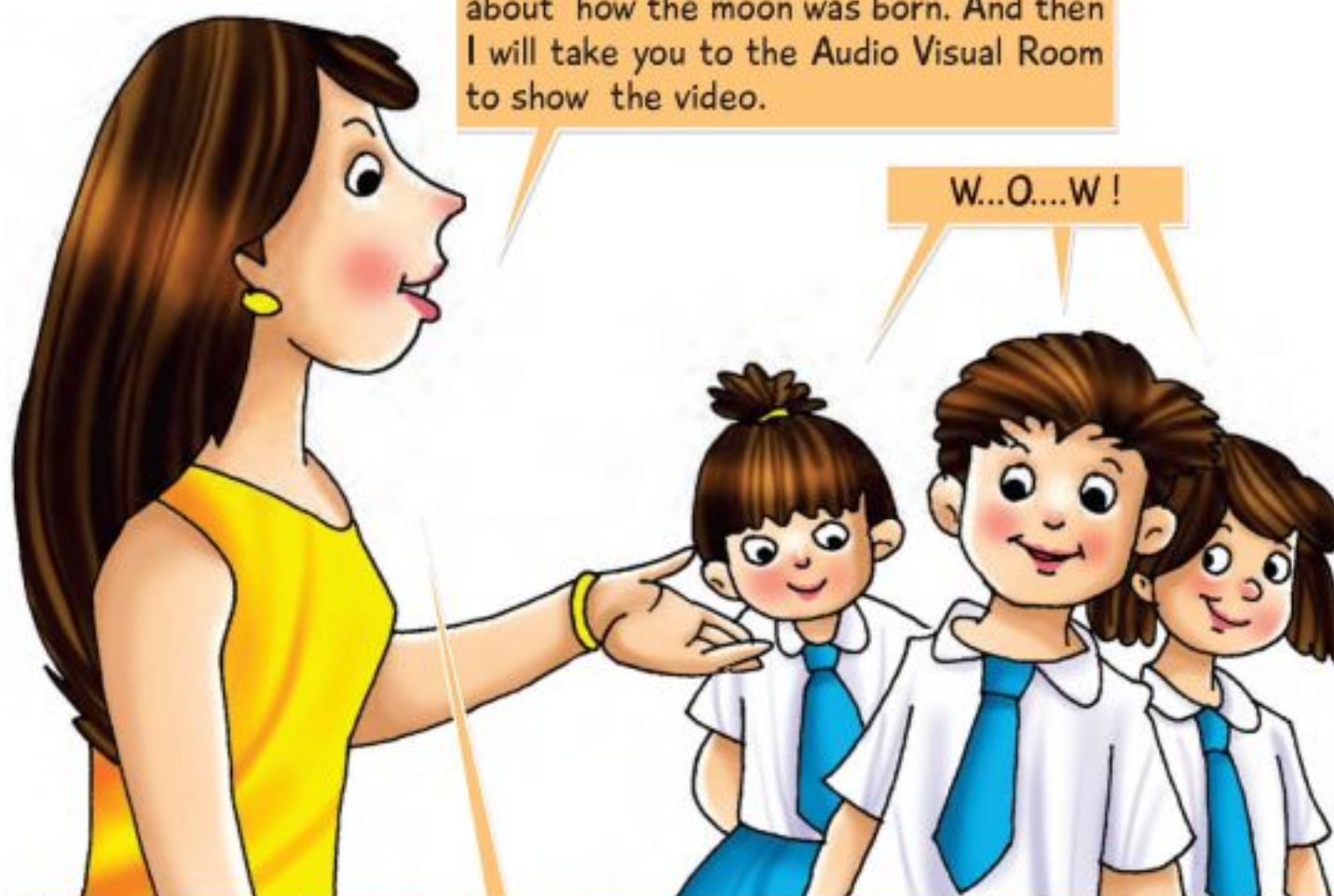


# 12

## Journey to Space and the Moon

Today I will tell you an interesting story about how the moon was born. And then I will take you to the Audio Visual Room to show the video.

W...O...W !



Many years ago, there were 20 planets in the solar system. The Earth was very violent. There were volcanic eruptions, hot molten lava were flowing. There was no life on the earth..... Then one day one of the planets called "Thea" hit the Earth with a big bang. As a result the Thea was destroyed but the Earth survived. And from the aftermath the Moon was born. Isn't it interesting kids? Let's now go to the Audio Visual Hall to see the video.

### Let's Learn More About

- The space
- The universe
- The astronauts
- Moon, stars and planets
- Spacesuit





We live on the earth. There is a vast area around the earth called **space**. When we look up to the sky, what we see is actually space. Many stars, planets and moons exist in this space. The vast space along with the stars, moons and planets is called the **universe**.



Space

Scientists who go into space are called **astronauts**. Yuri Gagarin of Russia was the first man to go into space.

After successful journeys into space, man desired to go to the moon. This dream came true in 1969 when three American astronauts Neil Armstrong, Edwin Aldrin and Michael Collins flew to the moon in a rocket. Neil Armstrong was the first man to land on the moon. These three astronauts brought some soil, gravels and photographs back from the moon.

There is no air or water on the moon. So there is no life on the moon.

### AMAZING FACT

The first animal to go to space was a dog named Laika.  
The first ever rocket was launched by Dr Robert Goddard.

### CONCEPTUAL CANVASS

1. What actually is the sky?
2. What all can you see in the night sky?
3. Name three astronauts who brought soil, gravels and photographs from the moon.
4. Why is there no life on the moon?
5. Name the first Indian astronaut who travelled to the space.



Rakesh Sharma was the first Indian to travel to space.

Kalpana Chawla was the first Indian woman to go into space. Sunita Williams also went to space in 2007 and stayed there for six months.



Neil Armstrong



Edwin Aldrin



Michael Collins



Rakesh Sharma



Kalpana Chawla



Sunita Williams

A special suit is required to be worn to travel to space. It is called **spacesuit**.



Spacesuit

**FUN** to Learn 

Total 12 people have landed on the Moon from 1969 to 1972 who were on Apollo Missions. The last person till today, i.e., Dec 2011 was Gene Cernan.





## Now I Know...

1. The vast area around the earth is called space.
2. The vast space along with the stars, moons and planets is called the universe.
3. Scientists who go into space are called astronauts.
4. Yuri Gagarin of Russia was the first man to go into space.
5. Neil Armstrong was the first man to land on the moon.
6. Rakesh Sharma was the first Indian to travel to space.
7. A special suit is required to be worn to travel to space. It is called spacesuit.
8. The first animal to go into space was a dog named Laika.
9. The first ever rocket was launched by Dr. Robert Goddard.

### WORD BEE

Re-read the lesson, write below the new words and read them aloud.


## EXERCISES

### A. Tick (✓) the correct option.

1. We live on the  
(a) moon                      (b) earth                      (c) mars                      (d) jupiter
2. The sky is actually  
(a) space                      (b) a part of the earth  
(c) a part of the moon                      (d) none of these
3. Which of these exist in the universe?  
(a) Stars                      (b) Planets                      (c) Moons                      (d) All of these
4. Who was the first man to land on the moon?  
(a) Edwin Aldrin                      (b) Neil Armstrong                      (c) Michael Collins                      (d) None of these



**B. Fill in the blanks with the words given in the brackets.**

1. Scientists who go into space are called \_\_\_\_\_. (astrologers/astronauts)
2. There is no \_\_\_\_\_ on the moon. (water/soil)
3. Astronauts go into space in a/an \_\_\_\_\_. (aeroplane/rocket)
4. \_\_\_\_\_ was the second Indian woman astronaut who stayed in space for six months. (Kalpana Chawla/Sunita Williams)

**C. Write 'T' for true and 'F' for false in the boxes given against the statements.**

1. Rakesh Sharma was the first Indian to go into space.
2. Life can exist on the moon.
3. Astronauts go into space in a rocket.
4. There is air on the moon.

☐  
☐  
☐  
☐

**D. Match the following.**

- |                   |                                  |
|-------------------|----------------------------------|
| 1. Yuri Gagarin   | (a) Has no air and water         |
| 2. Rakesh Sharma  | (b) First man landed on the moon |
| 3. Earth          | (c) First man in space           |
| 4. Neil Armstrong | (d) First Indian in space        |
| 5. Moon           | (e) Life exists on it            |

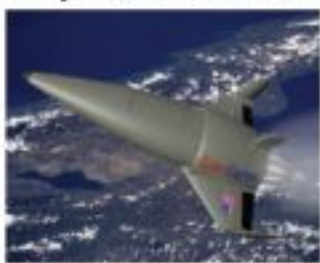
**E. Answer the following questions in one word or a sentence.**

1. Name the vast area around the earth.
2. Who is an astronaut?
3. Who first landed on the moon?
4. What does an astronaut wear to travel into space?

**F. Answer the following questions in short.**

1. Write a line about the following astronauts: Yuri Gagarin, Rakesh Sharma.
2. Identify the following:

(a)



(b)



(c)



(d)



3. Identify the following astronauts and write one sentence about each of them.

(a)



(b)



(c)



(d)







### ACTIVITY

1. Visit the planetarium in your city.
2. Ask your teacher about artificial satellites which are put into the earth's orbit.
3. Collect pictures of these artificial satellites and paste them in your scrapbook.
4. Collect pictures of astronauts and paste them in your scrapbook.
5. Conduct a quiz in your class on the theme "Space" with the help of your teacher.



### HOT'S QUESTIONS

1. Rahul asked his teacher why we cannot live on the moon.
2. He also asked her from where the moon gets its light.



### LIFE SKILLS

Watch the night sky during the month of August. You will be able to see many stars clearly. Find out which is the nearest star. Write your observation and submit it to your teacher.



### SUBJECT LINK

What is light year? Surf the Internet and find out how far is the sun from the earth.

## FUN TIME



### Head, Heart and Hand

1. Take a black chart paper.
2. Collect pictures of stars, the earth, the moon and other planets.
3. Paste them on the chart paper and label them. Ask your teacher/elders to help you place the planets.
4. Mount the black chart paper on a thermocol sheet and display in class.





# 13

## Rocks and Minerals

Children, let us play a word game. You will make words that will have a word 'rock' within it. Then you will make flash cards to display and frame sentences with those words. Are you all ready?

Yes ma'am, we all are ready.

Rock Star

Bed Rock

Hard Rock

Rock and Roll

Rocky Mountain

Rock Salt

Good! Now one by one from the first row start telling the word.

Rocking Chair

Moon Rock

Good! Now start making your flash cards. After the game is over we will discuss about rocks and minerals in this chapter.

### Let's Learn More About

- Rocks
- Minerals
- Types of rocks
- Gemstones



# Rocks

Have you ever written something with chalk on the blackboard? Do you know that both chalk and blackboard are made up of rocks?

The surface of the earth is made up of rocks and soil.

Our earth has many mountains, hills and valleys. These mountains, hills and valleys are made up of stones and rocks.

Rocks are also found on the river beds and at the bottom of seas and oceans. Rocks are found in different shapes, sizes and colours.



Mountains



Boulders



Rocks



River bed

## Types of rocks

There are many types of rocks. Some rocks are hard while others are soft.

### Hard rocks

Rocks such as marble, granite and sandstone are very hard.



Marble



Granite



Taj Mahal in Agra



Lotus Temple  
in New Delhi

**Marble** is used to build monuments, statues, buildings and floors.

The Taj Mahal in Agra and the Lotus Temple in New Delhi are made up of white marble.

Marble rocks are found in the Narmada river in Jabalpur, Madhya Pradesh.

**Granite** is used to make floor tiles.

Some rocks are hard, but not as hard as marble or granite. For example, **Red sandstone**.



Have you ever visited the Red Fort in New Delhi? The Red Fort is made up of red sandstone.



Red Fort in New Delhi

## Soft rocks

Rocks such as coal, chalk and slate are soft.

**Coal** is a soft rock. It is black in colour. It is used for cooking in households and in factories. It is also used in steam engines to run trains.



Coal being used  
to cook



Coal being used  
in a factory



Coal being used  
in steam engine

**Chalk** is a kind of soft, white rock.

**Slate** is also a grey coloured soft rock. Slate is used for making writing slates. Some people use slate to make the roofs of their homes.

**Limestone** is also very soft and brittle. It is used to make cement.





Slate used as blackboard



Writing slate



Roof tiles

## Minerals

Rocks are made up of minerals. They are like the building blocks of rocks. Minerals are found in different colours, sizes and shapes.

Sometimes more than one mineral is found in rocks.

**Quartz** is one of the most common minerals. It is found in granite. Quartz is the raw material used in making glass. It is also used in clocks and watches.



Quartz



Mica

**Feldspar** is found within granite as well. It is used to make ceramic and glass.



Feldspar



Talc

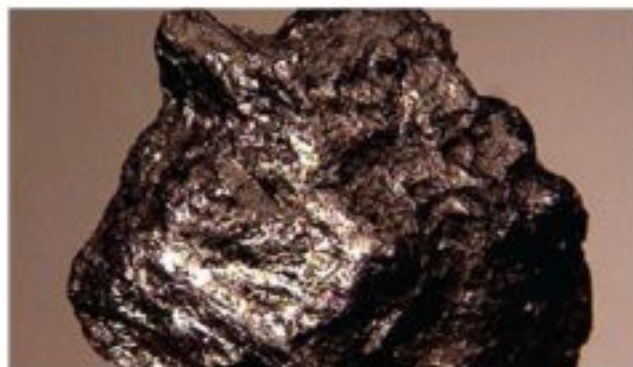
**Talc** is the softest mineral. It is used to make talcum powder.



**Diamond** is the hardest mineral. It is used to make jewellery. It is also used in cutting glass.



Diamond



Graphite

**Graphite** is also a soft, grey coloured mineral. It is used as lead in your pencils.

### CONCEPTUAL CANVASS

1. The earth's surface is made up of rocks only. (True/False)
2. Name a black coloured stone.
3. Write any two uses of coal.
4. Name a stone which is very soft and brittle.
5. Write one use of gemstone.

## Gemstones

Gemstones or gems are very hard minerals. They are cut into various shapes and polished. Usually, they are used in making jewellery. Gemstones are very precious. Ruby, emerald, amber and sapphire are examples of some gemstones.

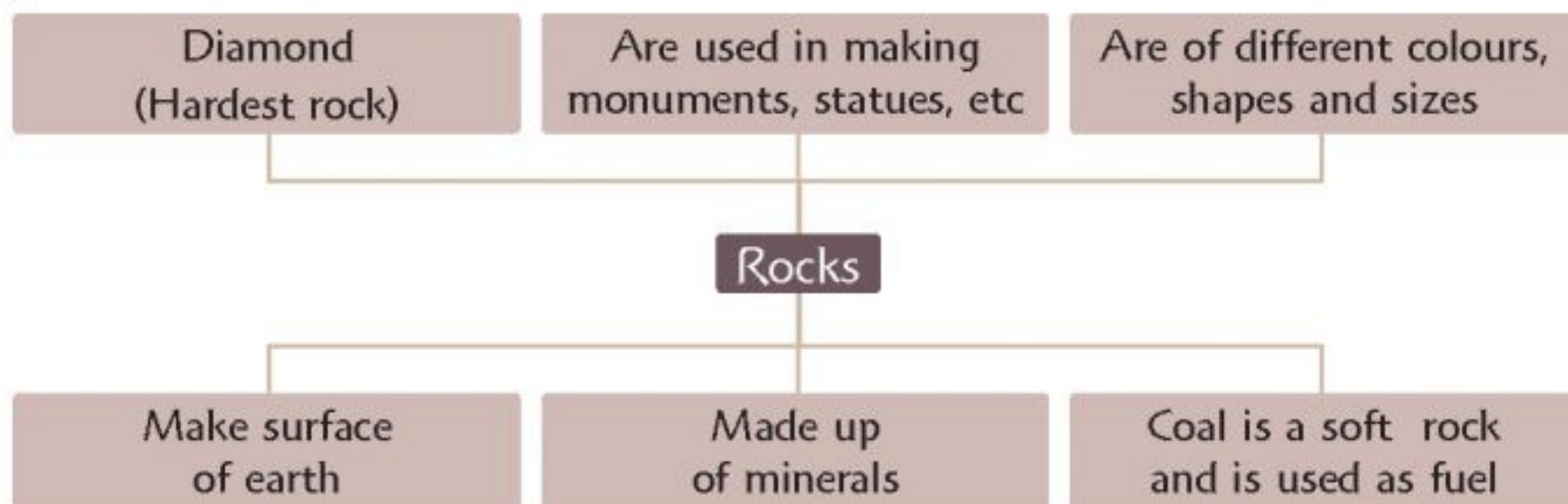
Raw gemstones		Gemstones after being cut and polished	
Ruby (raw)		Ruby (cut)	
Emerald (raw)		Emerald (cut)	
Amber (raw)		Amber (cut)	
Sapphire (raw)		Sapphire (cut)	





## Now I Know...

1.



2. Gemstones are hard minerals. Examples: ruby, emerald, sapphire and amber.

### WORD BEE

Find bold words from the lesson, read them aloud and write them below.

_____	_____	_____	_____
_____	_____	_____	_____

## EXERCISES



### A. Tick (✓) the correct option.

- Rocks are found on  
 (a) mountains (b) hills (c) earth's surface (d) all of these
- The big stones on mountains roll down and break to form  
 (a) sand (b) gravel (c) clay (d) all of these
- The Red Fort in Delhi is made up of this stone.  
 (a) Marble (b) Sandstone (c) Slate (d) Chalk
- Feldspar is used for making  
 (a) ceramic (b) glass (c) both (a) and (b) (d) none of these
- Which of these is/are gemstone(s)?  
 (a) Marble (b) Ruby (c) Sapphire (d) Both (b) and (c)





**B. Fill in the blanks with the words given in the brackets.**

1. The Taj Mahal is made up of . (marble/slate)
2. The Red Fort in Delhi is made up of . (sandstone/marble)
3. Coal is used as fuel in . (steam engine/car)
4. Marble rocks are found naturally in . in Madhya Pradesh. (Jabalpur/Bhopal)
5. . is the hardest mineral. (Diamond/Graphite)

**C. Write 'T' for true and 'F' for false in the boxes given against the statements.**

1. Diamond is used as a fuel. ☐
2. Talc is used to make talcum powder. ☐
3. Mica is one of the most common minerals that make up rocks. ☐
4. Slate is used for making writing slate. ☐
5. Gemstones are used in making jewellery. ☐

**D. Match the following.**

- |              |                         |
|--------------|-------------------------|
| 1. Diamond   | (a) Gemstone            |
| 2. Graphite  | (b) Red Fort            |
| 3. Talc      | (c) Hardest mineral     |
| 4. Sandstone | (d) Lead of wood pencil |
| 5. Amber     | (e) Softest mineral     |

**E. Answer the following questions in one word or a sentence.**

1. Which stone is used for making blackboards?
2. Name two hard rocks.
3. Which rock is used to make floor tiles?
4. Name the mineral used for making ceramic.
5. Name two gemstones.

**F. Answer the following questions in short.**

1. Name two monuments in India made up of white marble.
2. Write any two uses of diamond.
3. Name any two gemstones and two hard stones.
4. Name two soft stones and write their uses.
5. Draw the pictures of the things in which the following rocks or minerals are used:  
(a) Graphite                      (b) Slate                      (c) Marble                      (d) Talc

**G. Give one word answers for the following:**

1. The hardest mineral
2. A soft, black rock
3. A soft, grey shiny mineral
4. Mineral used to make cement
5. The rock used to build the Lotus Temple





## ACTIVITY

Ask your mother or an elder at home to show you different types of gemstones used in jewellery. You may find diamond, topaz, sapphire, emerald, or amber. Try to learn the names of these gemstones. You can read more about them in books or on the Internet.



## HOT'S QUESTIONS

1. Riddhima asked her teacher why the sparkling white marbles of the Taj Mahal have turned yellow.
2. She also asked her why we cannot use limestone for cooking instead of coal.



## LIFE SKILLS

Monuments are the symbols of our heritage and the pride of our country. We must take care of them.

1. Do not write anything on the walls of the monuments.
2. Do not scratch their walls.
3. Try to prevent others from defacing the walls of the monuments.
4. Never litter while visiting these monuments. Try to keep the surroundings clean and encourage others to do the same.
5. Observe the World Heritage Day every year.
6. Take a pledge to preserve our monuments.



## SUBJECT LINK

Rock is a common word and when combined with other letter a lot of new words can be created. For example, Rocky and Rockstar. Using this word find and write five more words.

## FUN TIME



## Head, Heart and Hand

1. Collect pebbles of different sizes from river beds, mountains or any place you visit during school holidays.
2. Wash them and dry them in the sun.
3. Colour them using water colours.
4. Place them on a small tray or ceramic plate.
5. Place it on the centre of your living room coffee table.



## PRACTICE PAPER-1

(Based on Chapters 1 to 7)

### A. Tick (✓) the correct option.

1. Trees have hard, strong and thick stems called  
(a) shrub (b) herb (c) trunk (d) creeper
2. We get silk from  
(a) honeybee (b) goat (c) silkworm (d) sheep
3. Which of these animals is an endangered animal?  
(a) Great Indian bustard (b) Cat (c) Dog (d) Crocodile
4. Our whole body is covered with  
(a) skin (b) hairs (c) both (a) and (b) (d) none of these
5. We must get our teeth checked by  
(a) cardiologist (b) dentist (c) pathologist (d) none of these

### B. Fill in the blanks with the words given in the brackets.

1. Deodar and pine are called \_\_\_\_\_ plants. (desert/alpine)
2. Paper is made from \_\_\_\_\_ tree. (bamboo/rubber)
3. \_\_\_\_\_ are kept as pets in aquariums. (Fishes/Frogs)
4. Elephants are called \_\_\_\_\_. (herbivores/carnivores)
5. An adult human body has \_\_\_\_\_ bones. (206/600)
6. Junk food items make us \_\_\_\_\_. (fat/thin)
7. \_\_\_\_\_ roofs are built where it rains or snows a lot. (Sloping/Flat)
8. Rice, wheat, maize and oats are \_\_\_\_\_. (cereals/pulses)
9. Rats, snakes and moles live in \_\_\_\_\_. (caves/burrows)
10. Fruits and vegetables are \_\_\_\_\_ foods. (energy-giving/protective)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

1. Rose plant is a herb.
2. We get quinine from the bark of cinchona tree.
3. Cows and buffaloes are pet animals.
4. Scavengers eat the flesh of dead animals.
5. Flat roofs are built where it rains or snows a lot.


### D. Match the following.

- |                              |                   |
|------------------------------|-------------------|
| 1. Grass                     | (a) Scavenger     |
| 2. Dentist                   | (b) More than 600 |
| 3. Vulture                   | (c) Herb          |
| 4. Houseboat                 | (d) Tooth care    |
| 5. Total muscles in an adult | (e) Kashmir       |



**E. Find the odd one out and circle it.**

1. Pumpkin, watermelon, spinach, cucumber
2. Rice, wheat, maize, *moong*
3. Lettuce, cabbage, spinach, grapes
4. Lotus, water lily, cactus, water hyacinth
5. Aloe vera, *tulsi*, turmeric, jasmine

**F. Colour the following picture with crayons.**





## PRACTICE PAPER-2

(Based on Chapters 8 to 13)

### A. Tick (✓) the correct option.

- We should not play with  
(a) scissors (b) knives (c) blades (d) all of these
- Wind that blows very fast and strong is called  
(a) breeze (b) storm (c) air (d) none of these
- We must drink water which is  
(a) polluted (b) germ free (c) dirty (d) none of these
- The sun gives us  
(a) heat (b) light (c) both (a) and (b) (d) none of these
- Feldspar is used for making  
(a) talcum powder (b) buildings (c) glass (d) none of these

### B. Fill in the blanks with the words given in the brackets.

- We must cross the road at \_\_\_\_\_. (traffic intersection/zebra crossing)
- A \_\_\_\_\_ can uproot a tree. (breeze/storm)
- Water from dirty streams contains \_\_\_\_\_. (worms/germs)
- Shadows are longer in the \_\_\_\_\_. (noon/afternoon)
- Astronauts go into space in a/an \_\_\_\_\_. (aeroplane/rocket)
- The Red Fort in Delhi is made up of \_\_\_\_\_. (sandstone/marble)
- All living organisms need \_\_\_\_\_ to breathe. (air/water)
- Water balance on earth is maintained by \_\_\_\_\_. (water cycle/life cycle)
- The sun is a big ball of \_\_\_\_\_. (fire/air)
- \_\_\_\_\_ is the hardest mineral. (Diamond/Graphite)

### C. Write 'T' for true and 'F' for false in the boxes given against the statements.

- We should not play with gas stove and electricity. ☐
- Slow moving air is called storm. ☐
- The shortest shadows are formed at noon. ☐
- Sunita Williams is the first Indian woman to go into space. ☐
- Graphite is used as lead in your pencils. ☐

### D. Match the following.

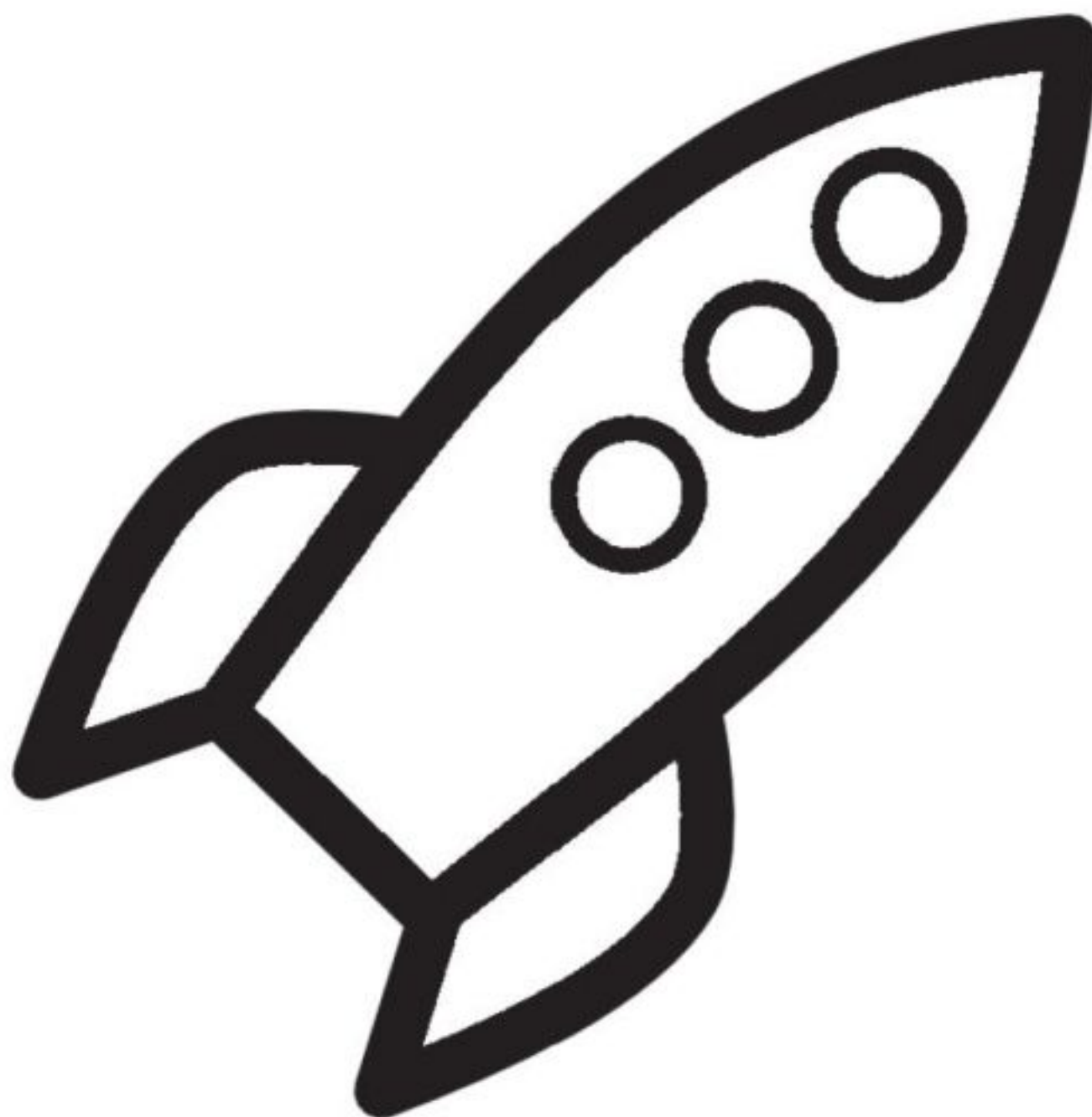
- |                      |  |
|----------------------|--|
| 1. Red traffic light | (a) Tube well                              |
| 2. Air               | (b) The first man who landed on the moon   |
| 3. Underground water | (c) Formed opposite to the source of light |
| 4. Shadow            | (d) Stop                                   |
| 5. Neil Armstrong    | (e) A mixture of gases                     |



**E.** Find the odd one out and circle it.

1. Knife, blade, scissors, toy
2. Breeze, wind, rain, storm
3. River, lake, pond, tube well
4. Kalpana Chawla, Sunita Williams, Rakesh Sharma, Edwin Aldrin
5. Coal, chalk, slate, marble

**F.** Colour the following picture with crayons.









### ABOUT THE BOOK

**Interactive Science** is a set of eight books for students of classes 1 to 8. The series is written according to the new NCERT syllabus, and conforms to the vision of the latest National Curriculum Framework.

Each book in the series helps students understand **plants kingdom, useful (domestic) and wild animals**. It also explains the **food we eat** and **place where we live in**. Besides **our environment and space**, the series tells the students about **safety rules** which should be followed both in home and outside. At the end, two practice papers have been included for practice.

### Key Features

- **Cartoon Illustration** provides a fun element to learning process
- **Amazing Fact** gives additional and interesting information
- **Fun to Learn** increases general knowledge of the students
- **Word Bee** acts as a vocabulary builder
- **Now I Know** reminds the topic taught in the lesson
- **Conceptual Canvass** asks questions for self-assessment
- **Exercises** reinforce the concepts learnt
- **HOTS Questions** develop the thinking skills
- **Activities** teach lessons through enjoyment
- **Fun Time** helps students to gain a practical edge over the theoretical concept

### ABOUT THE AUTHOR

**Jhara Roy** was Headmistress in Delhi Public School, Gurgaon, Haryana. She has more than 15 years of teaching experience. Now, she is engaged in developing Science books for both primary and upper primary classes.



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