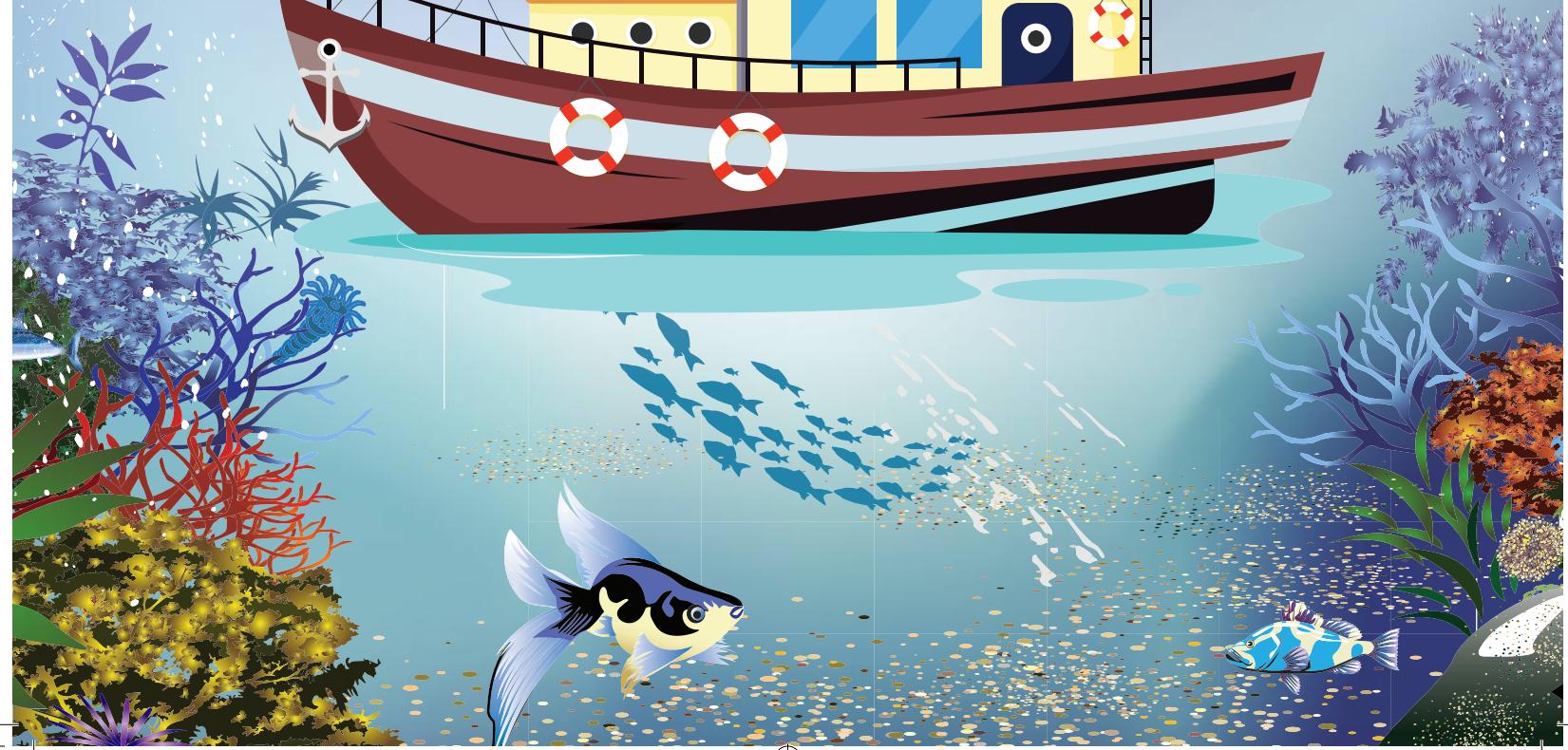




Environmental Science



Term-2





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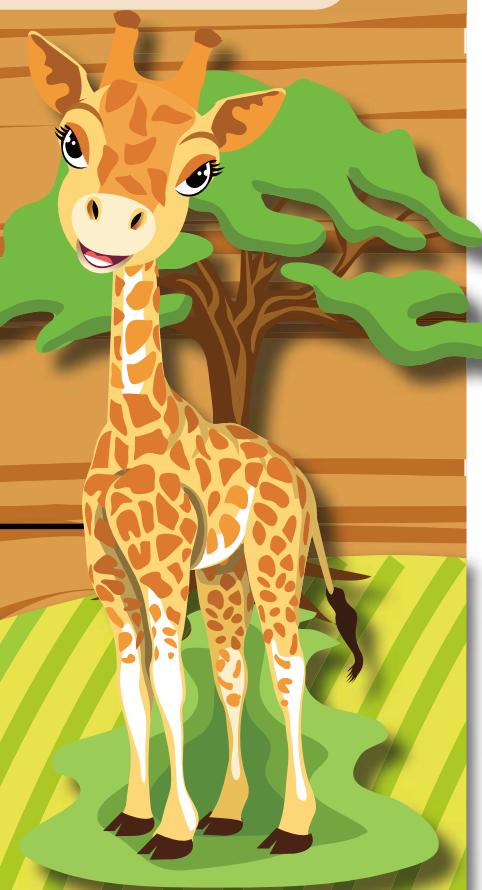
Text Book



Evaluation



DIGI links





Unit
1

Food and Health



You will learn about

- ◀ Sources of food
- ▶ Differences between Healthy Food and Junk Food

Nila: "Grandpa! How beautiful this place is!
Are these paddy fields?"



Grandpa: "Yes, we get rice from paddy plants".



Nila: "Does all our food come from plants, Grandpa?"

Grandpa: "Yes, plants are our major source of food.
We get some food from animals also".

Plants Give Us...



Cereals and Pulses

We get cereals and pulses from plants. Rice and wheat are cereals. Millets are also a type of cereal. Cereals and pulses (lentils) make up the major part of our food and they keep us healthy.



Cereals



Rice
(Arisi)



Pearl millet
(Kambu)



Corn
(Makka cholam)



Finger millet
(Kezhvaragu - Ragi)

Pulses



Red kidney beans
(Sivappu karamani)



Cowpeas
(Karamani)



Double beans
(Irattai beans)



Peas
(Pattani)

Oil

Seeds and nuts give us oil. We use oil to cook.



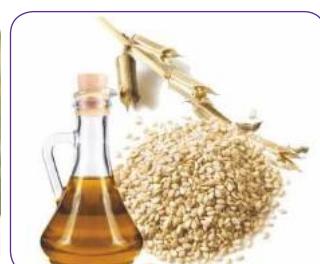
Coconut oil



Groundnut oil



Sunflower oil



Sesame oil

Coffee and Tea

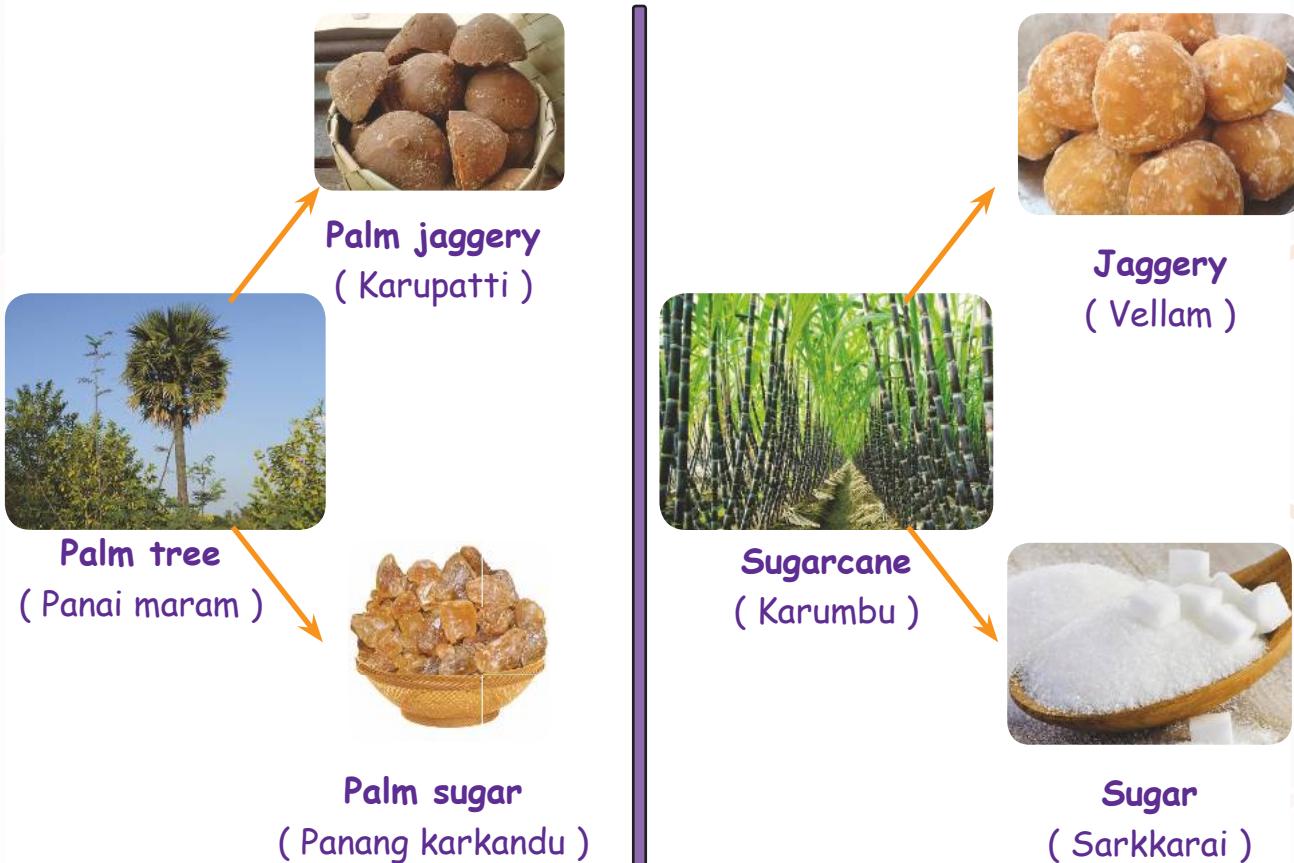
We get coffee from coffee beans and tea from tea leaves.





Jaggery and Sugar

We get sugar and jaggery from both the sugarcane plant and the palm tree.



Spices

Plants give us spices too. They add flavour and taste to the food.





Vegetables, Fruits and Greens



Vegetables



Fruits



Greens

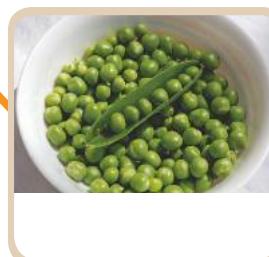
Find and circle the given words and name the pictures.



(Greens, Coffee bean, Sugar, Peas, Tea leaves, Ragi, Chilli, Clove)



L	T	R	C	B	O	P
S	E	I	O	E	Z	E
P	A	F	F	R	X	A
L	L	P	F	A	S	S
C	E	C	E	G	C	G
H	A	S	E	I	L	R
I	V	U	B	T	O	E
L	E	G	E	E	V	E
L	S	A	A	A	E	N
I	P	R	N	J	A	S

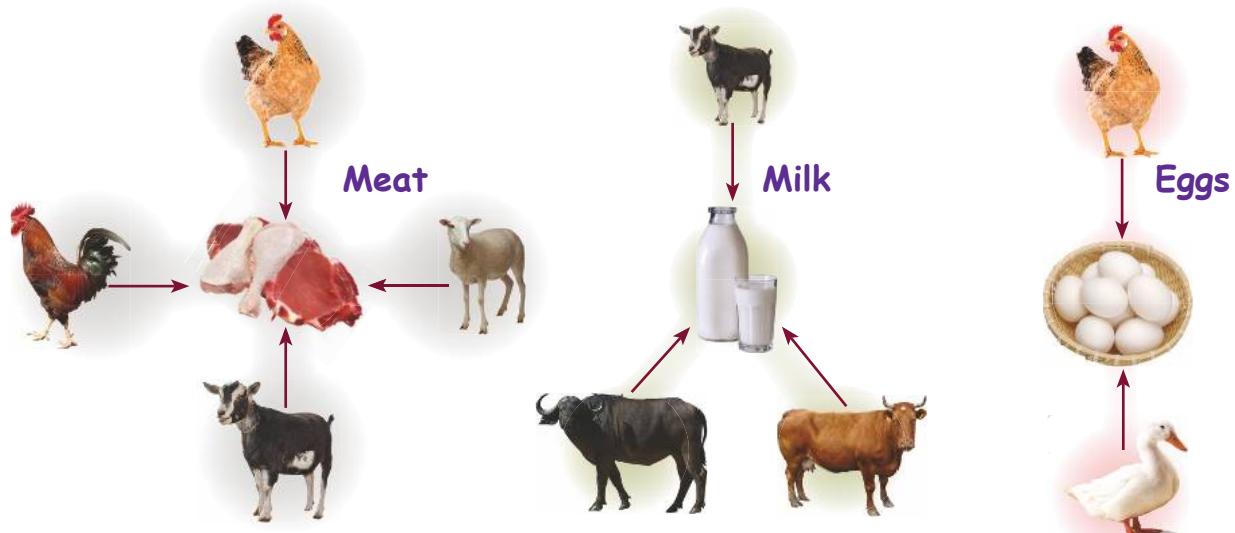




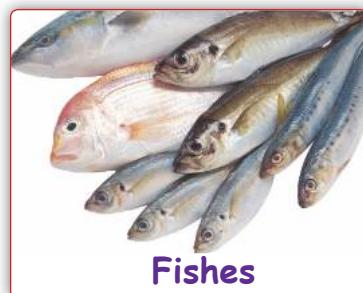
Animals Give Us...



We get meat, milk and eggs from animals.



We get crab, prawns and a wide variety of fishes from water bodies like ponds, lakes, rivers and the sea.



We get honey from the honey bee.



Milk Products

We get curd, butter, ghee, paneer and cheese from milk. Having milk or milk products every day keeps us healthy.

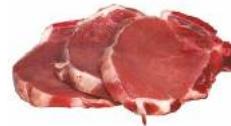




Observe the pictures and write the names of the various food items.



(Milk, Meat, Eggs, Ghee, Curd)



Healthy Food and Junk Food



Nila: "Grandpa, shall I eat this pizza?"

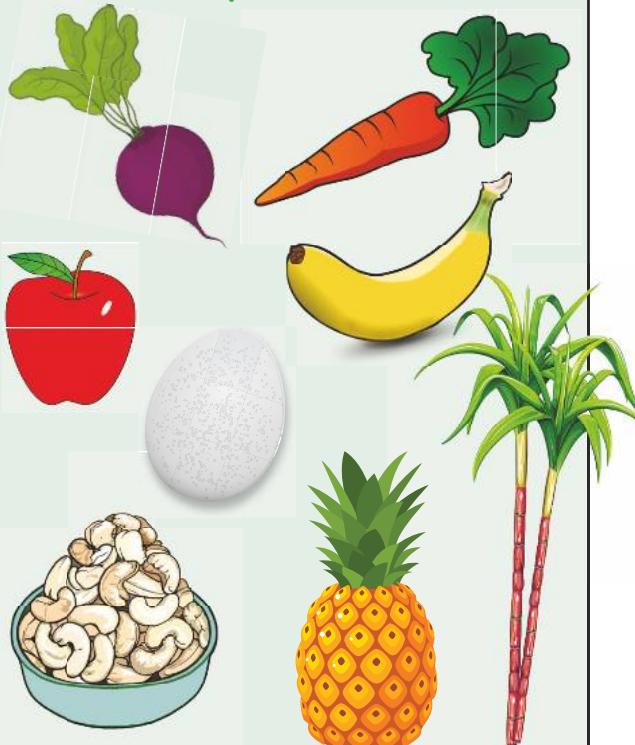
Grandpa: "Come, let me take you to the Healthy and Junk Food Race. After seeing the race you can decide if you want to eat it or not".

Nila: "Raccceeeeeeee....."

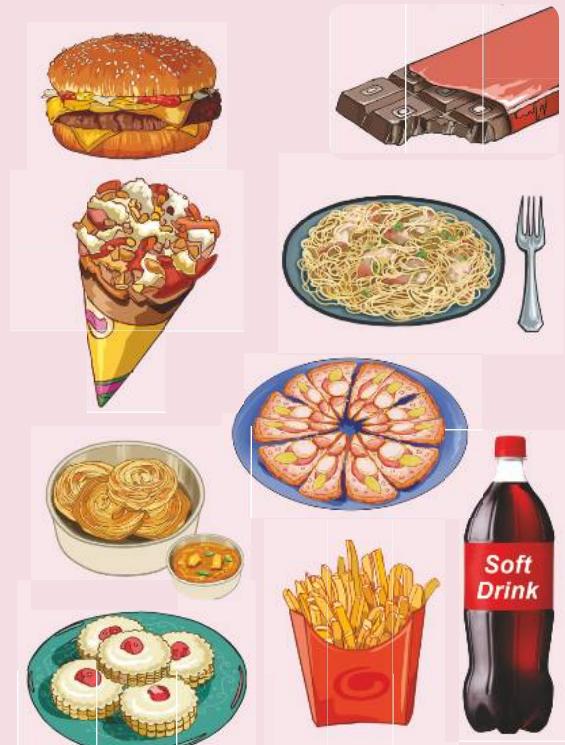
Grandpa: "Healthy Food and Junk Food had a quarrel on who gave better health and strength. They planned to have a running race to decide on it".



Healthy Food Team



Junk Food Team





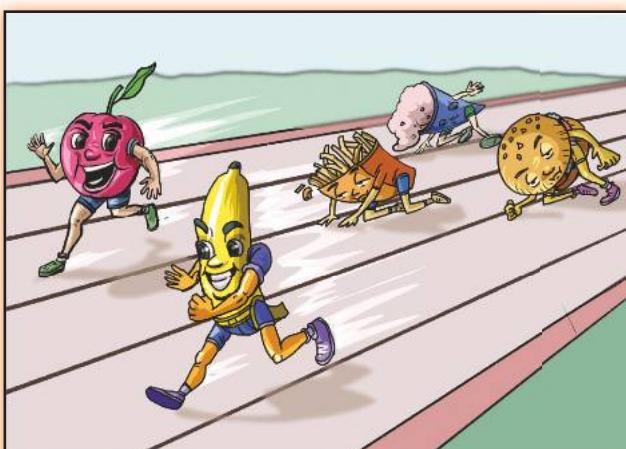
Race between Healthy Food and Junk Food



The race starts



Both teams run fast



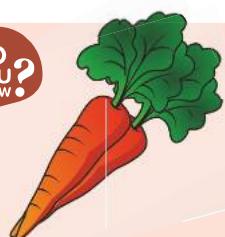
The Junk Food team gets tired
and slows down



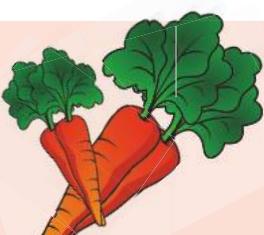
The Healthy Food team wins
the cup

Grandpa: "Nila, some food items taste nice but do not keep us healthy. They make us **put on weight** and cause **harm** to our body. They are called **Junk Food**. Some food items help us **grow** and keep us **fit and strong**. They are called **Healthy Food**. So, eat healthy, stay energetic!"

Nila: Grandpa, "Now I understand. Henceforth I will eat healthy food".



Eating carrots improves our eyesight and prevents night blindness.





Write '1' for the foods that you can eat regularly,
'2' for those you can have once in a while and
'3' for those you should avoid.



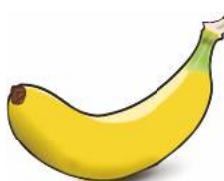
Athirasam



Nuts



Biscuits



Banana



Maida
noodles



Eggs



Murukku



Chocolate

Note for the teacher

Speak to the students about the ill effects of eating Junk Food often.

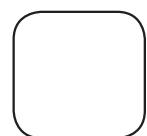
Find the hidden food items in the picture.
Colour and count them.



Healthy Food items



Junk Food items





Evaluation

1. Colour the pictures which belong to the given group.



Milk Group



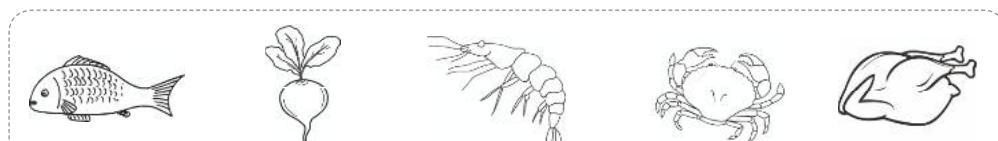
Vegetable Group



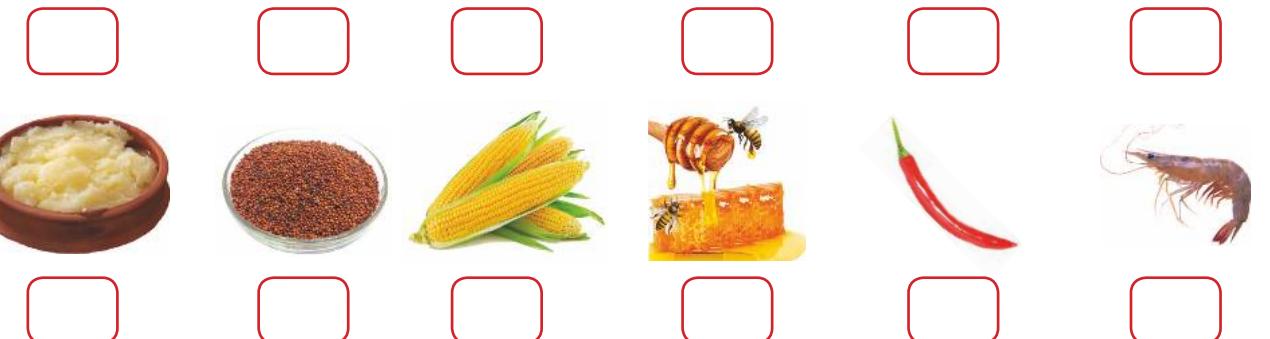
Fruit Group



Meat Group



2. Write 'P' for the food from plants and 'A' for the food from animals.



3. Circle every fourth letter and find me!

e c f j l o c a p m n g r p m g r p o e v o c r z x o y

--	--	--	--	--	--	--



4. Choose the correct word and fill in the blanks.
(cow, paddy, honey bee, hen)

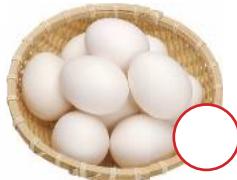
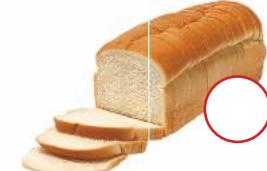
a. We get  from _____.

b. We get  from the _____.

c. We get  from the _____.

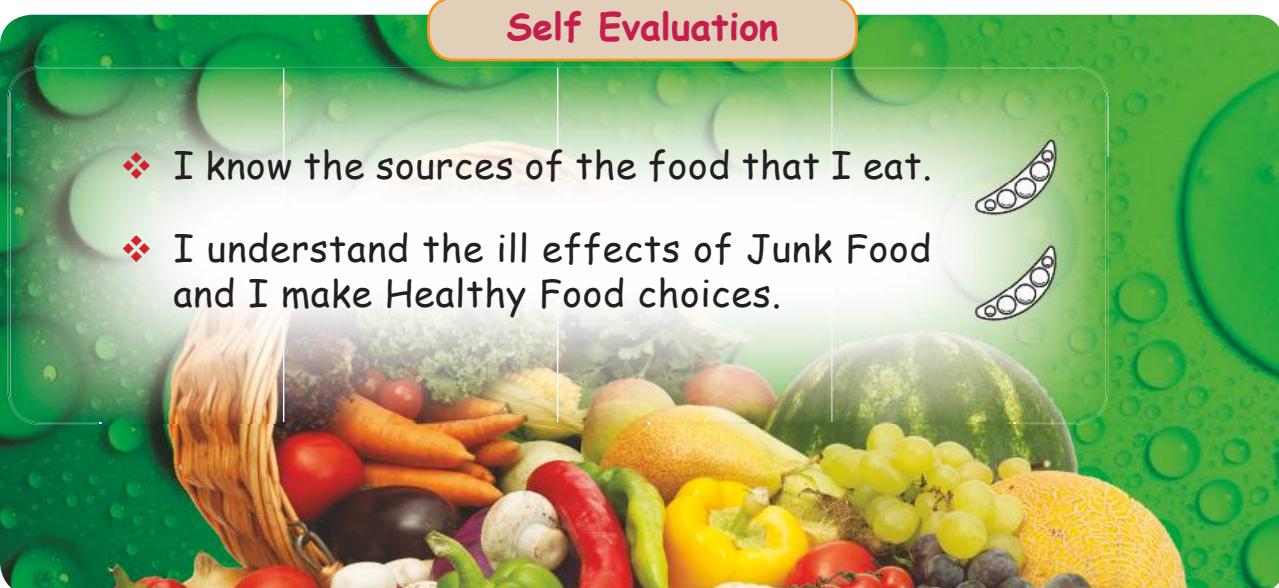
d. We get  from the _____.

5. Tick (✓) the food items that keep us healthy.



Self Evaluation

- ❖ I know the sources of the food that I eat.
- ❖ I understand the ill effects of Junk Food and I make Healthy Food choices.





Journey of Rain

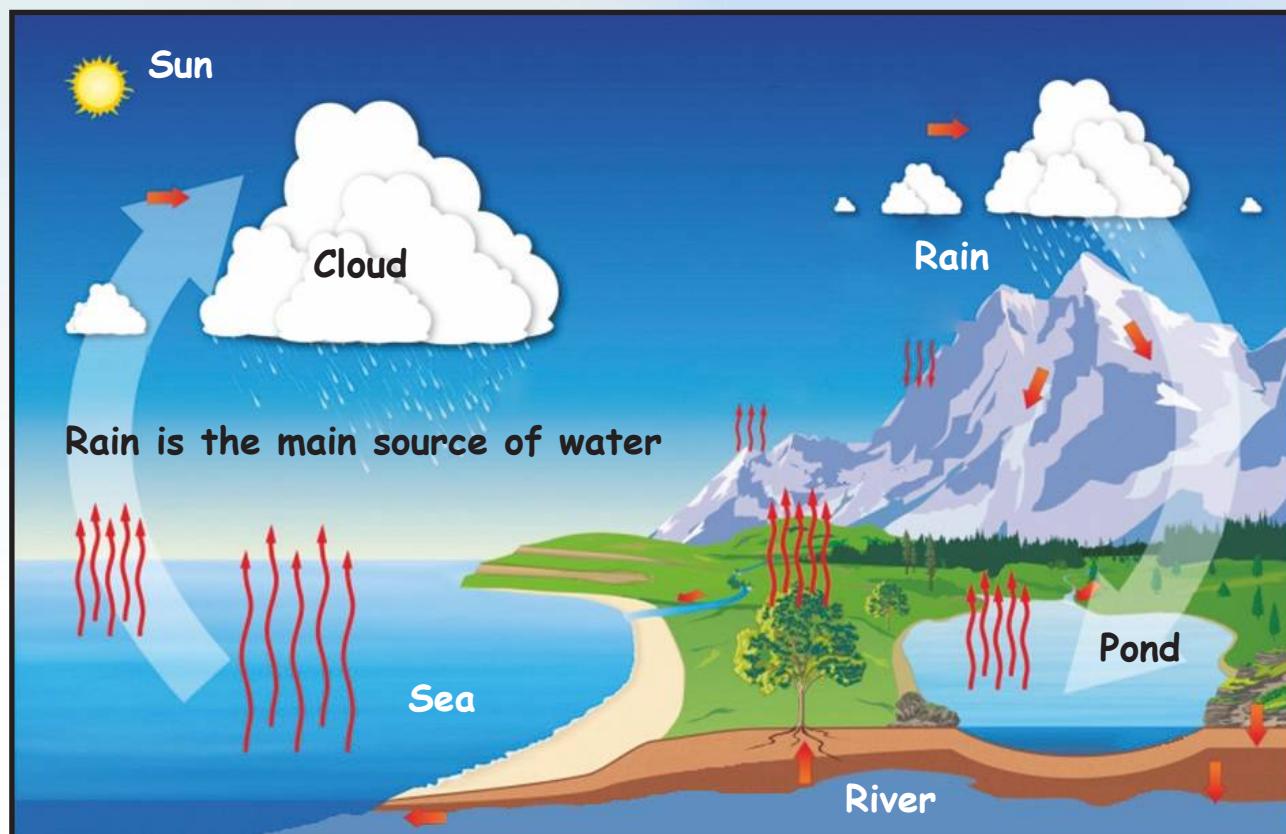


Rain Drops

Drip drop drip drop, they drop from the sky
One by one they multiply

Drip drop drip drop, they fall on the ground
Everywhere with a lovely sound

Drip drop drip drop, they seep into the ground
To grow healthy saplings all around
On hot sunny days, they go back to the sky
To come again on another cloudy day
Drip drop drip drop, they drop all the way
To keep all of us happy





Complete the sentences using the picture clues.



(rainy, Sun, play, bucket, water, happy, plants)



1. It was a day.



2. I could not go out to



4. After sometime, the shone again.



5. The bucket was filled with



6. I watered some with it.

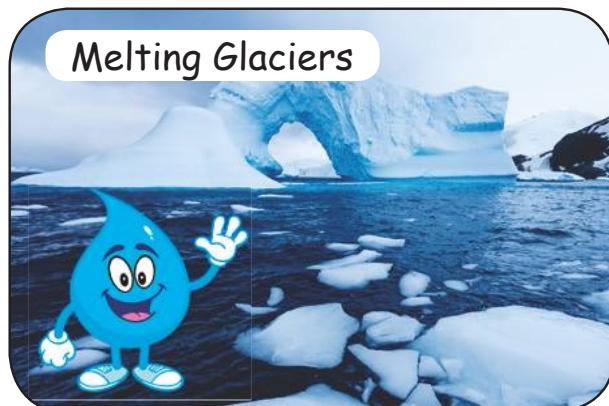


7. I felt very

Water from Glaciers



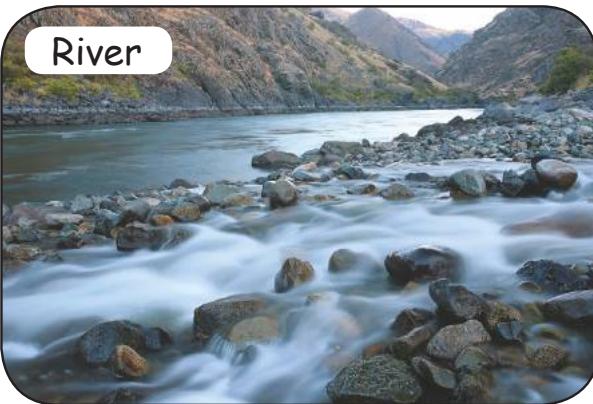
A **glacier** is a slow-moving block of ice.



I am a water drop from the snowy **mountains**. I flow from the glacier when the weather becomes warm.



Stream



River



Waterfall

Many mountain streams join together to form a **river**.

Sometimes rivers or streams flow down as **waterfalls**.



River



Sea



As a river, I continue my journey across **forests**, **villages** and **cities**. **Farmers** use me for farming and **people** use me for drinking, cooking and for other needs. I finally reach the **sea**.

This is what I do with the water left in my water bottle.



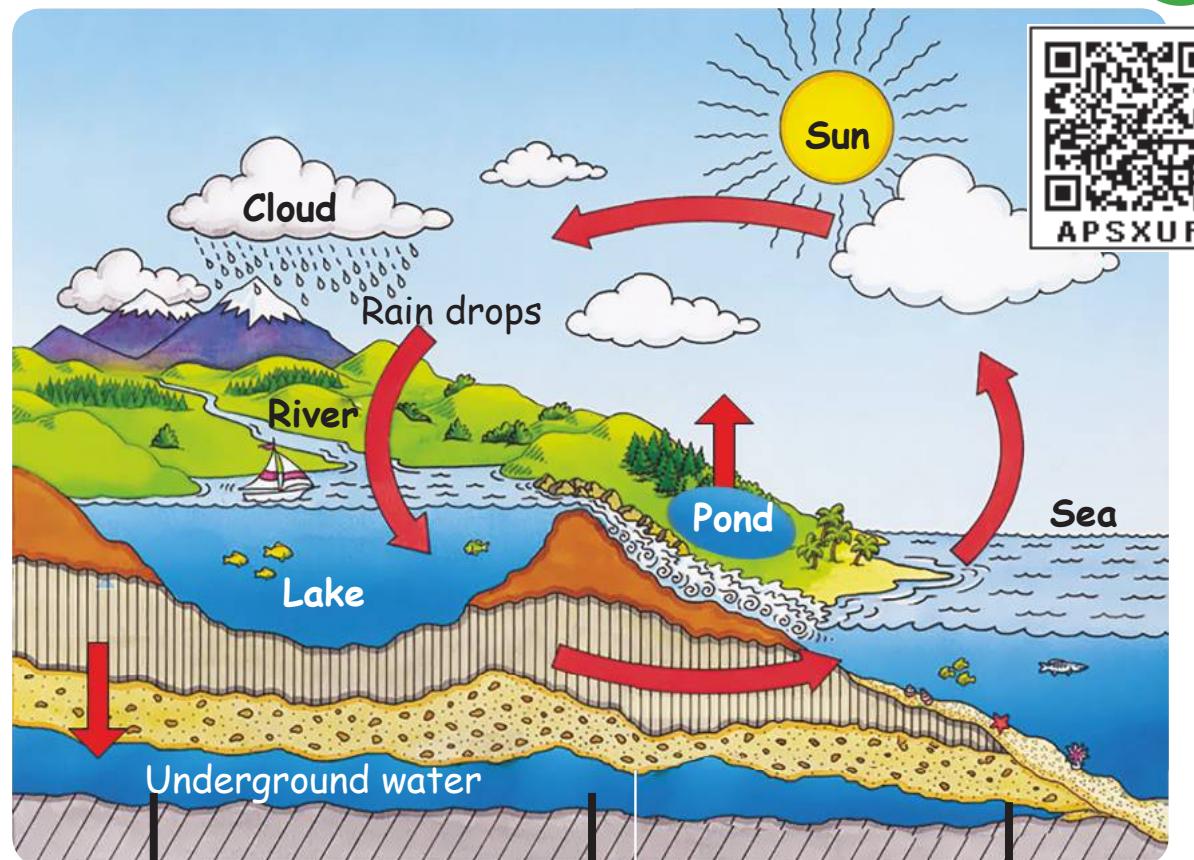
Sequence the pictures by numbering them.



(Glacier-1 Stream-2 River-3 Sea-4)



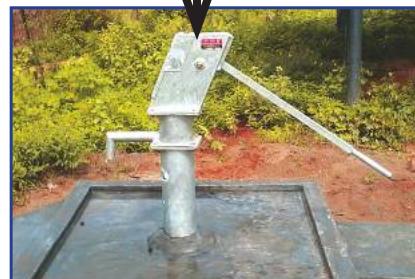
Sources of Water



Well



Borewell



Hand pump

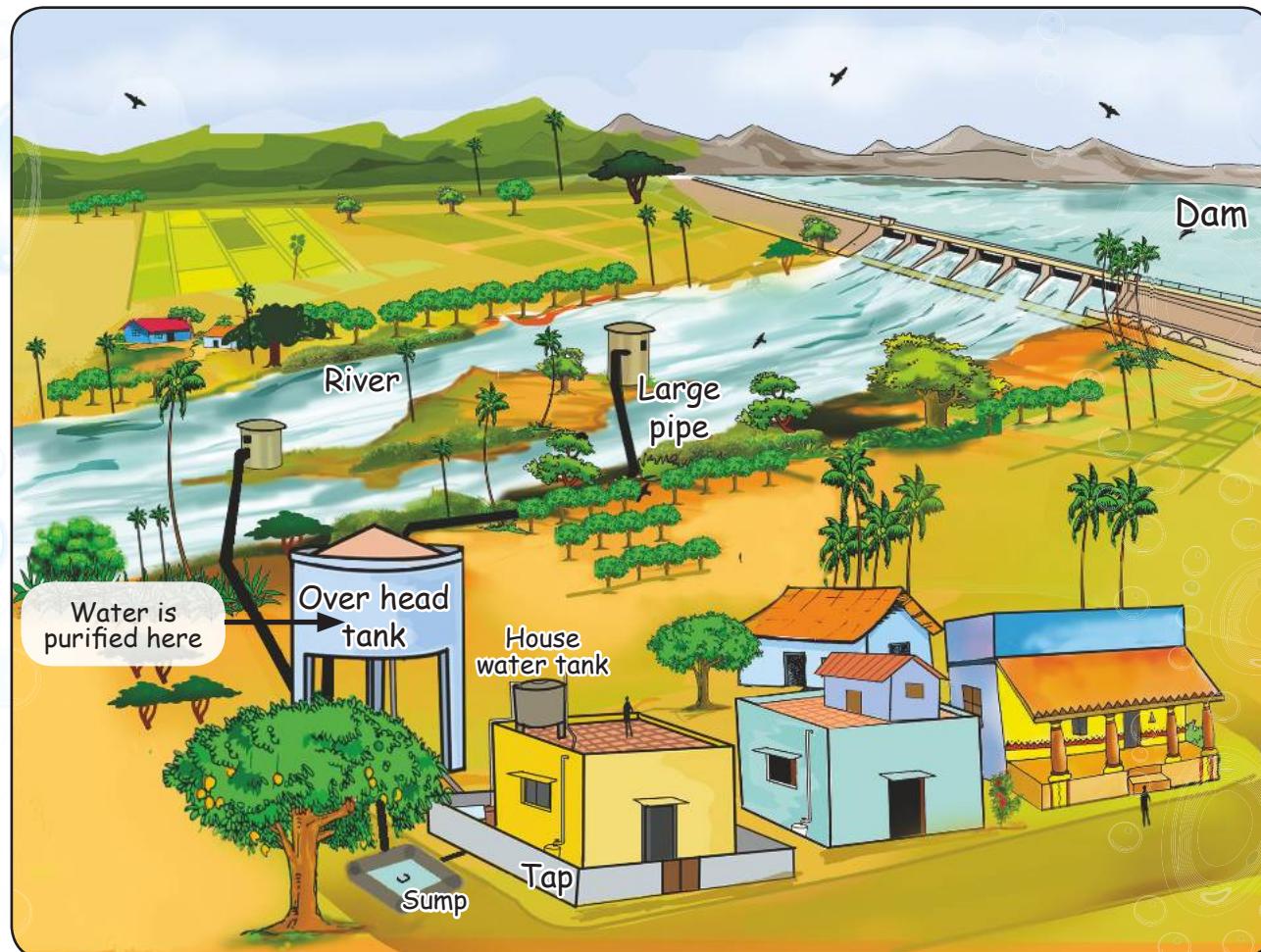


I am a raindrop. I fall on the **earth** and fill **ponds**, **lakes** and **rivers**. Rivers flow while lakes and ponds do not. Lakes are bigger than ponds.

I fall on the ground and seep **underground** too. People dig **wells** and **borewells** to reach me. They also use **pumps** to lift me up from the ground. People use me for their needs.

Think! Why do lakes and ponds have less water in summer? Discuss.

Water: From the River to the House



River / Lake / Dam → Large pipes → Over head tank →
Sump → House water tank → Tap



If you have fever, be sure to drink a lot of water; it will help to bring down the fever.





Let Us Discuss



What are the sources of water
for your house?

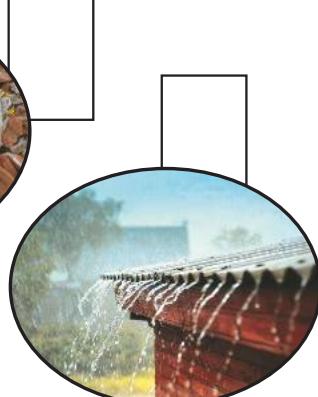
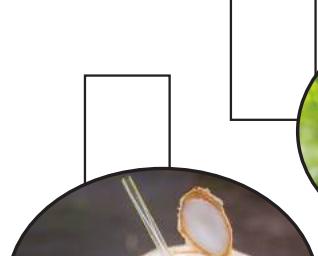
Draw an arrow to indicate the direction of the flow of
water/juice.



Top to Bottom



Bottom to Top





Evaluation



1. Name the pictures.

(River, Waterfall, Lake, Pond, Glacier, Sea, Stream, Well, Hand pump)



2. Fill in the blanks.

(sea, rain, hand pump, glacier, waterfall)

1. _____ is the main source of water.
2. A river flows down as a _____.
3. A _____ is a block of ice.
4. A river finally reaches the _____.
5. A _____ is used to lift water from the ground.



3. In the crossword, circle the words given below the pictures.



RAIN



RIVER



WELL



STREAM



HAND PUMP

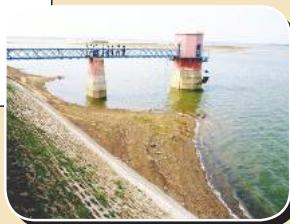
A	O	R	I	V	E	R	C	S
P	R	A	I	N	G	M	T	R
O	C	X	S	T	R	E	A	M
H	A	N	D	P	U	M	P	P
D	K	M	L	A	K	E	U	O
A	S	L	L	Y	D	A	Y	N
V	W	E	L	L	S	E	A	D



POND



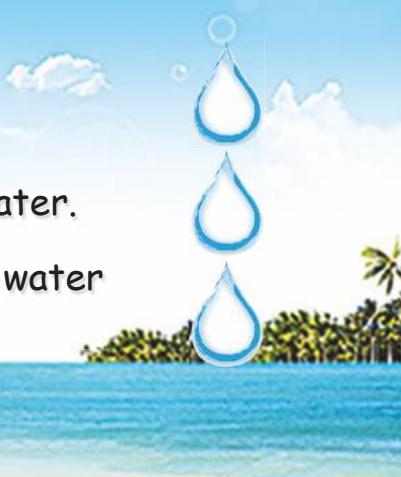
SEA



LAKE

Self Evaluation

- ❖ I know about the journey of rain.
- ❖ I know about the various sources of water.
- ❖ I can identify the sources that supply water to my neighbourhood.



Unit
3

Our Society



Festivals

Let Us Discuss

What festivals do you celebrate? What do you do on those days?

Festivals are days of celebration and sharing. Festivals can be religious or national.



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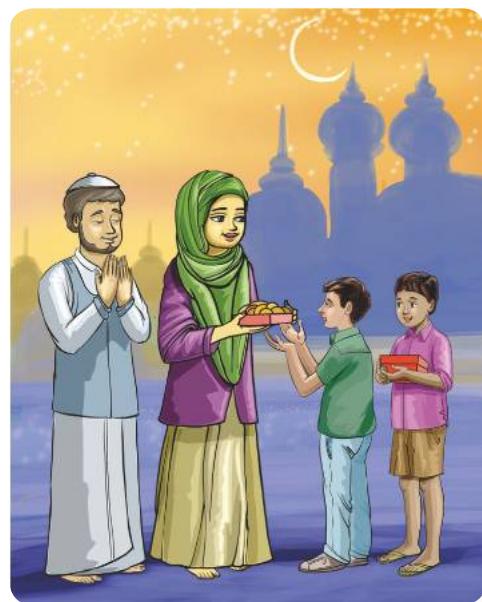


Religious Festivals

Karthigai Deepam is a **festival of light**, celebrated in the Tamil month of Karthigai (mid November to mid December) on the **full moon day**.



Light removes darkness. It brings brightness and cheer to our lives. Rangoli or kolams are drawn and houses are decorated with lamps.



Eid-ul-Adha is commonly called **Bakrid**. It is a festival of thanksgiving. The spirit of sacrifice is honoured; so it is called a **festival of sacrifice**. On that day, people prepare special meat dishes and sweets and share them with all.



Easter is celebrated on the Sunday following Good Friday in March/April. It follows a period of 40 days of fasting and prayer called Lent. It is a festival of hope. Decorated eggs and sweets are shared as gifts.



Mahaveer Jayanthi



Onam



Guru Nanak Jayanthi

Diwali, Christmas, Ramadhan, Mahaveer Jayanthi, Buddha Purnima, Onam and Guru Nanak Jayanthi are some of the other religious festivals celebrated by us.

Religious festivals are days of prayer and are happy occasions to bond with the people around us and enjoy the special dishes that are made.

National Festivals

National festivals give us a feeling of oneness. These festivals are celebrated by people all over India. On these days, we hoist our National Flag with due respect, in all public buildings and schools. We are proud to be Indians.

Some of the national festivals are...

Independence Day



India got its freedom on this day-15th August

Gandhi Jayanthi



Birthday of Mahatma Gandhi-2nd October

Republic Day



Indian Constitution (laws) came into force-26th January



Write 'N' for the national festivals and 'R' for the religious festivals.



Note for the teacher: While hoisting the flag, students should stand in attention and salute the flag with their right hand.

Folk Arts



Let Us Discuss

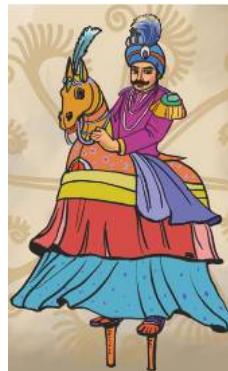
Many of us enjoy dancing and singing, don't we? Look at the pictures. Have you seen these dances? Can you name them?



Karagattam



Oyilattam



Poikkal
kuthirai attam



Silambattam

Folk arts include **folk songs (Nattupurapadalgal)**, **dances, stories, puppets** and more. People have developed and followed these art forms over many years.

There are many kinds of dances in Tamil Nadu. The special costumes worn by the dancers are colourful.



Artists make their own costumes and ornaments from locally available natural materials. They are handmade.



"We dance Kummi during festivals and in the harvest season".

Kummi dance (rhythmic clapping with Kummi songs)

Let us learn to sing this lullaby.



Tha le lo Tha le lo (2)
Sleep little one (2)
As mother sings and swings
Forward and backward
Goes the cradle
Sleep without fear
Smiling all the way
Sleep little one (2)
Tha le lo Tha le lo (2)

Match the following.





Our Friends



Malar's father is a retired **soldier** who worked hard to protect our country. Her family is shifting to a new house. They are travelling by bus to see their new home.

Malar : "What a smooth and enjoyable drive!"

Father : "Yes! Let us thank the **driver** for a safe journey".

Mother : "Let us also thank the **conductor** who gave everybody their tickets with a smiling face".

Malar and her family go around their new house.



"Amma, the house is looking beautiful! All the taps and fans are working".



"That's good. The **mason**, **plumber** and **electrician** have done their jobs well".



"Amma, this window is damaged".



"Okay, let us call a **carpenter** to repair it".

Father : "We also need to find a **tailor** to stitch some curtains for the doors and windows".

Malar : "Amma, where can we buy fruits and vegetables?"

Mother : "Since it is a village, we can buy fruits and vegetables from the **farmers** directly. They grow them in their fields".

The mason, driver, conductor, plumber, carpenter, electrician, soldier, tailor and farmer are our friends. They help us to make our life comfortable and happy".



Tick (✓) the people who help to construct a house.



Driver



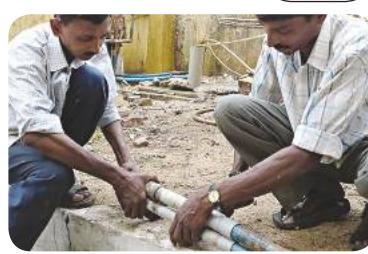
Conductor



Farmer



Carpenter



Plumber



Electrician



Tailor



Mason



Soldier

The Science Exhibition



Teacher: "Every year we celebrate **February 28th** as **National Science Day**. As you know, there will be a Science Exhibition on this day in our school. We have been preparing for it".

"Can all of you explain your projects?"





"This is a plant. It has shoot and root systems".



"I have prepared a chart of different kinds of leaves".



"I have made a chart to explain the role of the internal organs".



"Good work children! You all have done well".

Will the given objects sink or float?



A. Guess and answer.

Objects	Sink	Float
Leaf		
Plastic ball		
Pencil		
Eraser		
Stone		
Chalk		
Paper		
Coin		
Key		

B. Do and answer.

Objects	Sink	Float
Leaf		
Plastic ball		
Pencil		
Eraser		
Stone		
Chalk		
Paper		
Coin		
Key		



Evaluation



1. Write the names of the folk arts.
(Silambattam, Karagattam, Poikkalkuthirai, Oyilattam)



2. Group the festivals.
(Diwali, Independence day, Onam, Mahaveer Jayanthi, Republic Day, Pongal, Gandhi Jayanthi, Bakrid)

Religious Festivals	National Festivals



3. Who am I? (Plumber, Soldier, Conductor, Carpenter, Tailor)

- I make things out of wood._____
- I repair a leaking tap._____
- I stitch your dresses._____
- I guard the nation._____
- I issue tickets in a bus._____

4. Choose and write the correct answer.

- Festivals help us to meet and _____ our friends. (greet / leave)
- We are _____ to eat the special food. (sad / happy)
- We hoist our National Flag on _____ festivals. (national / religious)
- Easter is celebrated on _____. (Monday / Sunday)
- When we drop a coin into the water, it _____. (sinks / floats)
- National Science Day is celebrated on _____. (February 24 / February 28)

Self Evaluation

- ◆ I know the differences between religious and national festivals.
- ◆ I appreciate our folk arts.
- ◆ I value our helpers.
- ◆ I realise that science is related to my everyday life.



Unit
4

The Pancha Bhutas

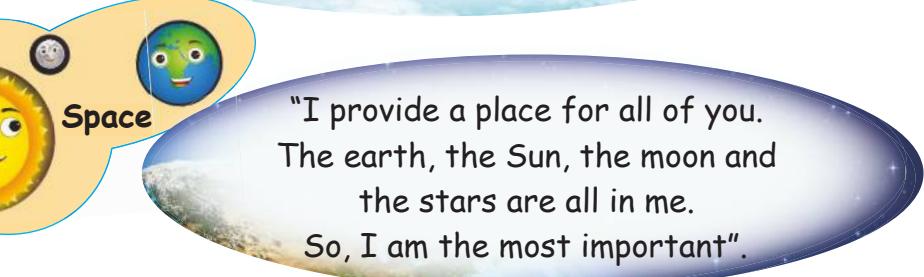
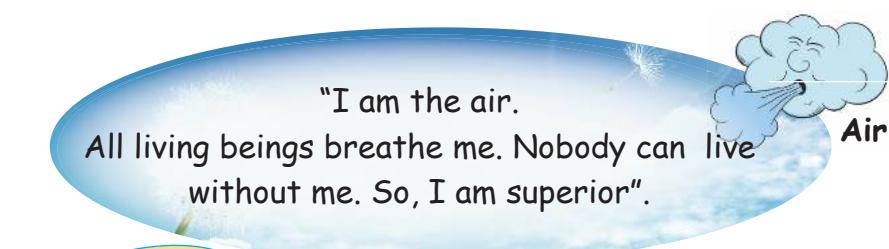
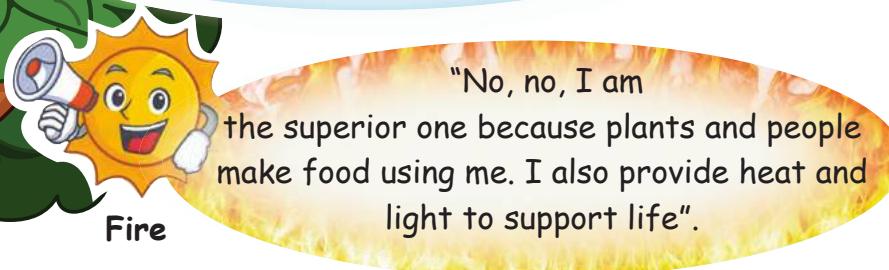
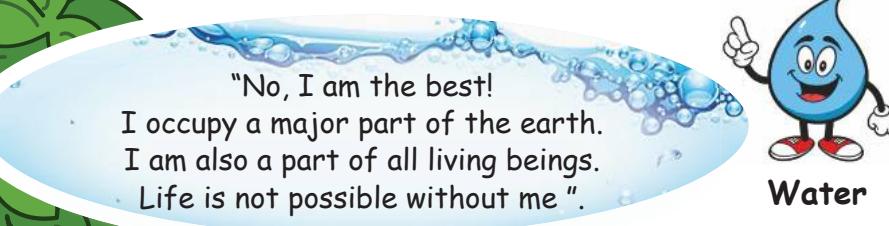
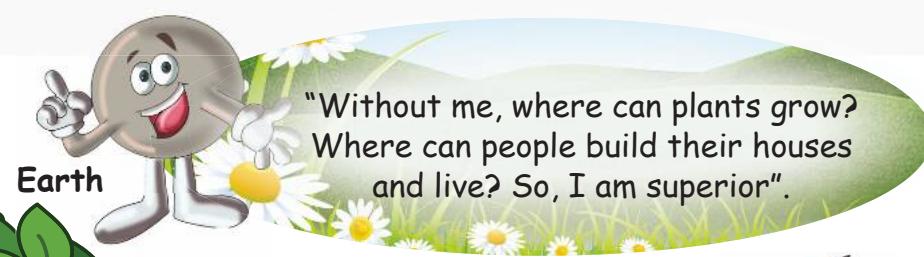


You will learn about

- ❖ Earth, Water, Fire, Air, Space



One day loud sounds were heard near the huge banyan tree. **Earth, water, fire, air and space** (the Pancha Bhutas) were **quarrelling** there about who was the most important of them all. Let us hear what they had to say.





On hearing all of them, the banyan tree said, "No life is possible without any one of you. So, none of you is superior to the other".

The Pancha Bhutas realised that all of them were necessary for life on earth. They stopped quarrelling and greeted each other happily.



The potter is making a pot. Shall we see how he makes it? Fill in the blanks with the words. (water, clay, air, fire, wheel)



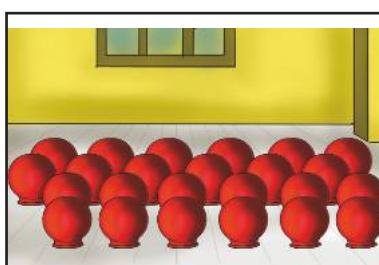
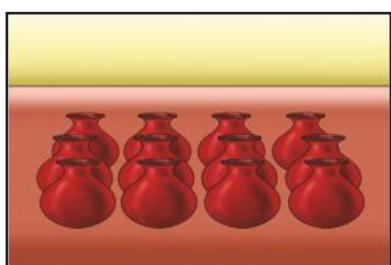
There is a heap of _____.

His helper pours _____ over it.



The potter mixes both the water and clay.

He makes pots using a _____.



After that he leaves them to dry in the _____.

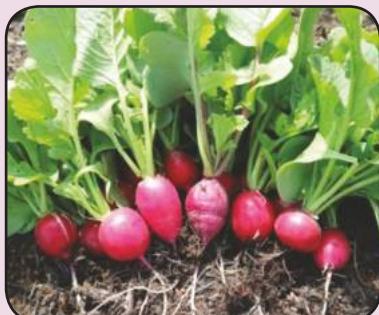
Then he bakes them in the _____.

Now the pots are ready.



Earth

The earth is the home for plants, animals and for all of us. We grow our food on the land. We move from place to place on the land and play on it. The land gives us all we need to make the different things that we use.



Avoid Using Plastic



Water

Water occupies a major part of the earth. All living things in the world need water to live. We get water from the rain. Water is used to drink, cook, clean things, bathe, swim and grow crops. Can you swim? Learn to swim with the support of your elders.

Many kinds of plants and animals live in water.



Starfish

Seahorse

Lily

Lotus



Think Zone

Every drop of water is precious.
Do not waste it.



Which is the right way to get more rain? Put a tick (✓) in the box.



Fill in the blanks with the given words.



(road, tracks, field, play ground)

a. I  games in the _____.

b. I  the bicycle on the _____.

c. The  moves on the _____.

d. The  is working in the _____.

Air



Observe and Discuss.

What do you see in these pictures?



Air is everywhere around us. We cannot see the air because it has no shape or colour but we can feel it. Without air, living things cannot breathe.



We can smell things and hear sounds because of air.



Birds and aeroplanes move in the air.



Moving air helps us in many ways.



To dry our wet clothes

To get electricity from windmills



During storms and cyclones the wind speed is very high.

Cyclones damage our buildings and trees.

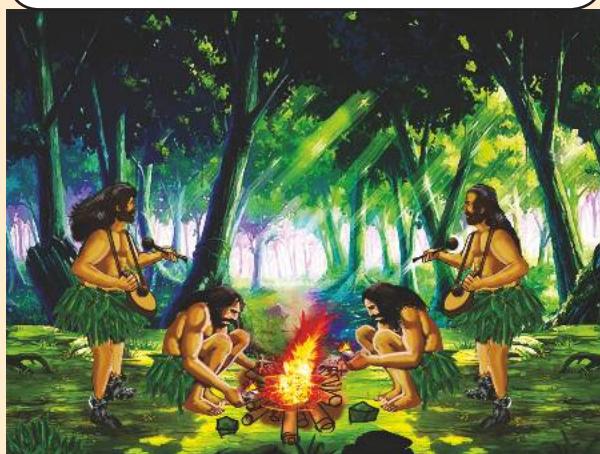


Note for the teacher: Explain precautions to be taken during natural disasters.

Fire

Early man discovered that he could make fire. He used it to get heat and light for his daily needs.

Making fire using stones

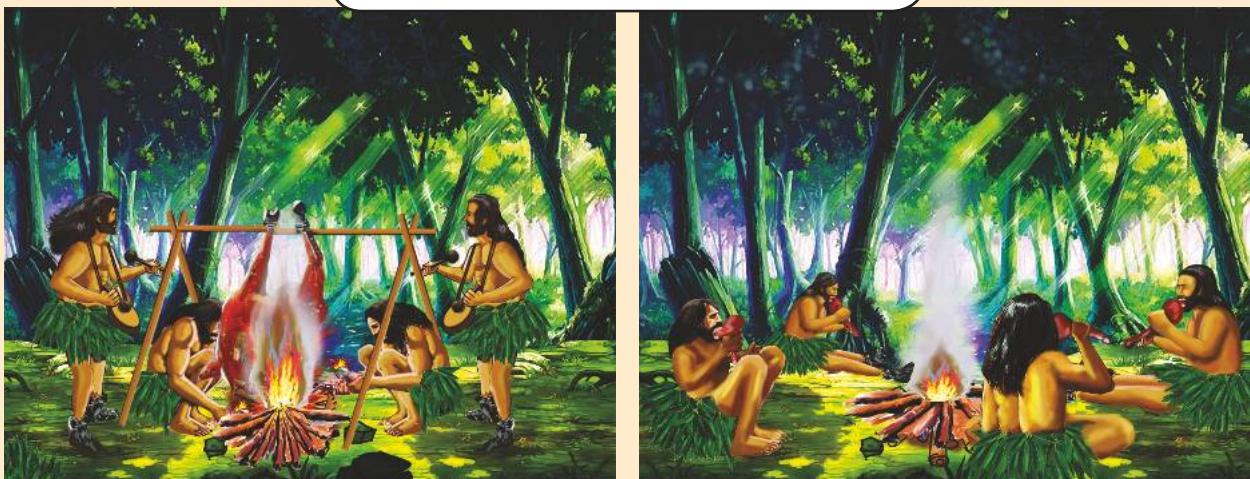


Using fire lamps to give light





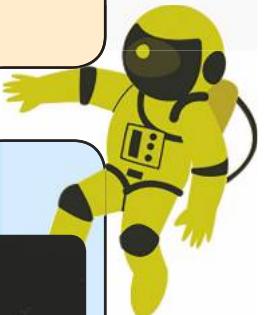
Cooking the hunted animals using fire



Today we also use fire to make a variety of things.

Space

Space is that within which everything exists.



Put a tick (✓) mark at the places where fire is being used.





Evaluation

1. Match the following.

a.



b.



c.



d.



e.



2. Write the names of the Pancha Bhutas related to the pictures.

(Space, Air, Land, Water, Fire)





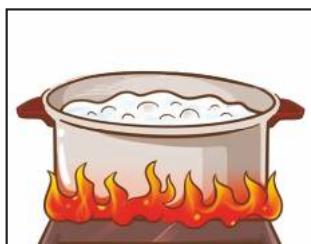
3. Where do you see the Pancha Bhutas in the picture?
Circle and write their names.

(Space, Air, Land, Water, Fire)



4. Two Pancha Bhutas are shown in each picture.
Choose the correct pair and fill in the blanks.

(water and soil, fire and water, water and air)



Self Evaluation

I realise the importance of the Pancha Bhutas-earth, water, air, fire and space and their role in my everyday life.



Class II, Environmental Science (Term-II)

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