Environmental Science

Term-3
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UNIT 1  Materials Around Us

Let Us Talk
Observe the picture and talk about the different objects and what they are made of.

All the objects that we use are made of different kinds of materials.

Wood

Meera is colouring with a pencil.

Grand father is sitting on a chair.

Books are arranged in the bookshelf.

Vimal is playing with a doll.

Learning Objectives

The Learners
❖ Identify the different materials around them
❖ Differentiate between the materials
Wood is a material got from the trunk and branches of trees. We make many things such as chairs, toys, pencils, ladders, cricket bats, matchsticks, doors and bookshelves from wood.

Can you identify the things made of wood in your classroom?

Tick (✓) the things made of wood.
Soil is a mixture of clay, sand, small pieces of rock and dried leaves. Clay is sticky. It has the ability to absorb water.

Bricks are made of clay.

Many more things can be made using clay.

Pot  Clay Stove  Lamp  Roof Tiles

Rajan collects wooden toys. Kamala collects clay toys. How many toys do each of them have? Count and write.
Sandiya and Kaviya are playing with pebbles.

Pebbles are a type of stone. Stone is a hard substance found on earth. There are many kinds of stones. We use stone in many ways.

Stones are used to build houses. Marble is a kind of stone. It is used to make floors and buildings. Small stones called gravel are used to make roads.

Stones are used to make statues. Red stone is also a type of stone used in many buildings. We can make jewellery using precious stones called gems.
Sand is mixed with cement to construct buildings. Sand is also used in making glass. Beautiful sculptures can be made with the sand. This is called sand art.

Ravi and Prabu are playing in the sand. Do you like playing in the sand?

Sand is formed from broken pieces of rock over a long period of time.

Sand clocks were used to measure time in the olden days.

Shall we make a sand clock?

- Take two similar bottles.
- Make a hole on the lid of both bottles with the help of your teacher.
- Fill one half of one bottle with sand.
- Paste both bottles with tape as shown in the picture.
- Now the sand clock is ready.
Surya is riding a bicycle. Bicycles are made of metal. Metal is a hard and shiny material. We use metals in our daily life in many ways. Look at the following examples.

Circle the things made of metals.

Let us play with a sand clock
Find out how many times you can jump by the time the sand moves from one bottle to the other. Use the clock to measure the time taken for other activities.
1. Which material is used to make the given objects? Enter the correct number in the circle.

(Sand - 1, Wood - 2, Clay - 3, Stone - 4, Metal - 5)

2. Find and circle the hidden words.
3. Connect the objects to the materials they are made of.

4. Put a tick (✓) mark on the correct material.

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<td>Plastic</td>
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**Self Evaluation**

- I can identify the different materials around me
- I can differentiate between them
Our Neighbourhood

Learning Objectives
The learners
- Describe their neighbourhood
- Know about different habitats
- Adopt safe practices

Poonjolai is a beautiful town. Cheenu lives there with his parents. He stands in the balcony and looks around. What does he see?

Observe the picture and discuss.
Now talk about your own neighbourhood.
Our **neighbourhood** is the area around our house. People who live in the neighbourhood are our **neighbours**. They are known to us.

We can get all the things we need from our neighbourhood. We must take care of our neighbourhood and keep it clean.

Trees and animals are part of our neighbourhood.

Where should Cheenu go to get the things inside the circle? Connect by drawing lines.

**Cheenu** : “Where do my cousins Ram, Ramya, Rekha, Ragav and Raghu live?”

**Mother** : “They live in different places. I will show you the pictures.”
“Ram lives in a village.
This is his house.
He has cows and hens too.
The cowshed is by the side of his house.”

“Ramya also lives in a village.
She has a vegetable garden behind her house.”

“Rekha lives in a city on the third floor in a tall building. She likes her pet dog very much.”
Cheenu: “Even I want a pet dog.”
Mother: Ok, Cheenu.

Mother: “Ragav lives in a hill station.
He is fond of flowers. He has a beautiful flower garden in front of his house.”

“Raghu lives by the side of a river.
There are many coconut trees around his house.”
Cheenu: “I like the sound of the river.”

Our houses should always be kept clean and tidy. Houses protect us from heat, cold, rain, storm and wild animals.

Let us learn to write our address

Name : ____________________
Door number : ____________________
Name of the street : ____________________
Name of the village/town/city: ____________________
Observe the pictures of a village and a town. Talk about what you see. What differences do you observe?
Put a blue star (★) on three things common to the town and the village.

In the village, if you are going from the school to the temple, what will you see on the way? ☛

Put a red star (☆) on three things that are different in the town and the village.

Name the places that you see in the town.
Directions
Observe the picture and talk about it.

Connect the dotted lines and name the directions.

Note for the teacher
Ask students to name friends sitting to their right, left, front and back.

Safety at School

- Use a pencil sharpener to sharpen the pencils. Do not use a blade.
- Do not jump on desks/chairs.
- Form a queue to get into the bus.
- Do not harm each other.
- Do not put your hand or head out of the moving bus.
Safety at Home

Do not put any object into your nose and ears

Never touch switches/plugs with your hands, with leaves or with twigs

Do not play on the banister or balcony

Do not play near the stove

Do not comb your hair in the kitchen

Do not catch any insects

Never play with fire

Do not play with sharp things - knives/ blades
If the action is Safe put a (√) and if the action is Unsafe put a (X).

1. Write "T" if true and "F" if false.
   a. We can buy vegetables and fruits from a market.  
   b. We can get money from the ATM.  
   c. We can play with sharp objects .  
   d. We should not play on the road .  

2. Colour the star green (★) for the correct action and red (☆) for the wrong action.
3. Cross (X) out the objects that you should not play with.

- [ ] Football
- [ ] Knife
- [ ] Balloons
- [ ] Cat
- [ ] Fork
- [ ] Pen

4. Write the name of the places located in your neighbourhood.
   (Police Station, School, Bus stand, Market)

   - [ ] Police Station
   - [ ] School
   - [ ] Bus stand
   - [ ] Market

---

**Self Evaluation**

- [ ] I can describe my neighbourhood
- [ ] I know about different habitats
- [ ] I adopt safe practices
UNIT 3

Transport

Learning Objectives

The Learners

- Identify the kinds of transport developed over the years
- Know about road safety

Let Us Discuss

What are the different vehicles that you see?
How do you come to school?

Transport means movement of people and goods from one place to another.
Today we travel by road using scooters, auto rickshaws, cars, buses, vans, trains. A train can carry many more people than a bus or a van. We travel in the air using aeroplanes and helicopters and on water using ships and boats.

We can travel long distances in a short time using these modes of transport. They need fuel (petrol or diesel) to move.

The fire engine and the ambulance are special vehicles. A fire engine helps us to put out fires. An ambulance helps to take sick people to hospital.
Tick (√) the vehicles that use fuel to move.

In early times man walked, used palanquins or animals like elephants and horses to travel from one place to another.
Elephants were used to travel across thick forests and were trained to carry loads and people.

Then man invented the wheel. No vehicle on the road can move without the wheel. Man used the wheel to make carts. He used animals like horses, bullocks and donkeys to pull carts with loads and to travel.

He made chariots and bicycles using the wheel. Then came all the vehicles that we see today – cars, buses, trains and auto rickshaws.
Colour the circle for the two wheelers in blue and for the four wheelers in red.

Bicycle  Car  Motorbike  Van  Push Cart

All of us love to ride this vehicle. Can you guess what it is? Yes! It is the bicycle. The bicycle has changed from olden times to the present day.

Parts of a Bicycle

Seat  Handle bar  Wheel

Chain  Pedal
Connect the parts of the bicycle with their names.

Seat  Handle bar

Chain  Pedal  Wheel

Road Safety

To be safe on the road, we must follow some rules.
1. Follow the signal.
   - Red - Stop
   - Yellow - Get ready
   - Green - Go

2. Always walk on the footpath.

3. Cross the road only at the zebra crossing. Cross when the symbol of a person walking turns green.


5. Never run or play on the road.

Think and Answer
We should cross the road only at a zebra crossing. Why?

Why is it called a 'zebra' crossing?

Tick (√) the correct word/phrase.
1. Go when the yellow / green light is on.
2. Walk on the footpath / road.
3. Cross at the zebra crossing / any other place.
1. Tick (✓) the correct one.

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Image 1</th>
<th>Image 2</th>
<th>Image 3</th>
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<tr>
<td>Ambulance</td>
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<tr>
<td>Bicycle</td>
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<td><img src="image2" alt="Bicycle Image" /></td>
<td><img src="image3" alt="Bicycle Image" /></td>
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</tbody>
</table>

2. Number the vehicles from one (least) to four (most) based on the number of people they can carry.

1. [ ] Train
2. [ ] Bicycle
3. [ ] Bus
4. [ ] Car
3. Match the words with the pictures.

- Fire engine
- Ambulance
- Car
- Train
- Lorry
- Bike
- Bicycle
- Aeroplane

4. Identify and tick (✓) the modes of transport used in earlier days.

[ ] [ ] [ ] [ ]

5. Tick (✓) the correct actions.

[ ] [ ] [ ] [ ]

Self Evaluation

- I can identify the different kinds of transport - old and new
- I can follow road safety rules
Mother: "Kanmani, Kannan wake up. Come and see the sunrise. The sky looks beautiful."

Kannan and Kanmani: "Yes, Mother."

What do they see? Can you look at the picture and describe it?

The Sun is a star. We get light and heat from the Sun. There can be no life on earth without the sun.

The sunflower buds turn and face the Sun.
Dawn is the early morning just before sunrise. It is good for health to wake up at this time.

Morning follows the dawn. It’s the time to get ready, eat breakfast and go to school.

Lunch is at noon. The time that follows noon is called afternoon.

Evening is play time. Then the Sun sets.

**Evening Activities**

- Birds returning to their nest
- Cows returning to their shed
- Children playing outdoors

Twilight is the time after sunset, just before the night.

The time between dawn and sunrise is also called Twilight.

Night is the time to sleep.

**Vocabulary**

Sun, earth, light, heat, dawn, morning, noon, afternoon, evening, twilight, sky, day

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Write “M” for the morning and “E” for the evening activities.

Mother: “It is a lovely cool night. Let us have our dinner outside in the moonlight.”

Vocabulary
- moon
- star
- cool
- night

Kannan: “Why is the moon not as bright as the Sun?”
Kanmani: “I know why. The moon has no light of its own unlike the Sun. It gets its light from the Sun.”

Kannan: “I’ll tell you about the stars. See, there are so many stars in the sky. The stars shine at night. They have their own light. They look small because they are very far away.”

The Owls and Bats are active at night.

Mother: “Come, it’s getting late. Let us go to bed. Early to bed and early to rise is a good habit.”
Identify and tick (✓) the odd one.

1. 
2. 
3. 

Rain, Thunder and Lightning

Vocabulary
rain, rainclouds, lightning, thunder, rainbow

Kannan and Kanmani loved to watch the sky.
Kanmani: “Today the sky is full of rainclouds.”
Kannan: “It has started to rain.”

Suddenly they saw a flash of light in the sky followed by loud sounds.

Mother: "It is thunder and lightning. Both occur on a rainy day."
After a while, the rain stopped. Kannan and Kanmani saw a beautiful rainbow in the sky.

When there is thunder and lightning,
1. Do not stand under the trees and under electrical wires.
2. Do not touch cut and hanging wires.
3. Do not touch electrical plug points.

Cross (X) the actions that should not be done when it rains.

Evaluation

1. Write “T” if True and “F” if False.
   a. The Sun is a star.  
   b. The moon shines with its own light.  
   c. We can count the stars in the sky.  
   d. A rainbow is seen on a rainy day.  
   e. The Sun gives us heat and light.
2. Connect the pictures related to day and to night by drawing a line.

3. Find and circle the given words.
   (LIGHT, STAR, DAY, MOON, NIGHT, SUN)

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Self Evaluation

- I know the differences between the day and night
- I can describe the Sun, moon, stars, lightning and thunder
UNIT 5

Science In Everyday Life

Learning Objectives
The learners
- Name different kinds of clothes
- Recognise the importance of clothing
- Identify the types of clothes to suit different weather conditions

Salim: "Parveen! What are you looking at?"
Parveen: "I am looking at the dresses."
Salim: "Which is your favourite dress?"
Parveen: "I like skirts. What about you?"
Salim: "I like shirts and shorts."
Father: "Come, let us look at various kinds of clothes and buy what we want."

Material that is used to make dresses, towels and bedsheets is cloth.

Dresses that we wear either stitched (e.g., shirt, skirt) or unstitched (e.g., dhoti, saree) are clothes.
The following items are made from cloth.

Bag  Handkerchief  Bedsheet  Curtain

Bandage  Kitchen towel  Bath Towel

Match the related pairs and name them.
The clothes we wear nowadays are made of different materials like cotton, wool and silk.

We get cotton from the cotton plant, from which we make cotton clothes.

We get wool from sheep, from which we make woollen clothes.

We get silk from the silkworm, from which we make silk clothes.
Match the following.

Why do we wear clothes?
We wear clothes to protect our body from heat, cold, rain, dust, insects, germs and small injuries. We wear different types of clothes in different seasons.

During summer the days are hot. We wear cotton clothes to keep us cool.
During winter the days are cold. We wear woollen clothes to keep us warm.

Some days of the year are rainy. We wear raincoats to keep as dry. We also use an umbrella.
Father: "Hi Salim, you are looking very smart in this dress."

Salim: "Thank you. This is my new uniform. All students wear uniforms when they go to school."

Father: "Good. Have you seen any other people wearing uniforms?"

Types of Clothes

You are going to the hills where it is very cold. What special kind of clothes will you need there? Put a tick (√) mark.

Write "W" for the winter clothes and "S" for the summer clothes.
The clothes we wear should be neat and clean. When we dress neatly, we look smart.

**Steps of washing**

- Soaking in water
- Applying soap
- Washing
- Rinsing
- Drying

Match the people with their uniforms by drawing a line.
People in different parts of India wear different kinds of dresses.

You are given a towel. How can you use it? Show the various actions- for example, wiping, wearing it as a dhoti, turban, etc.
1. Tick (✓) the correct answer.
   a) Clothes **protect/harm** our body.
   b) We wear **cotton/wool** in summer.
   c) We must wear **dirty/clean** clothes.
   d) Mary wears a **uniform/frock** to school.

2. Circle the odd one.

   a.

   ![Skirt](image1)
   ![Sweater](image2)
   ![Dress](image3)
   ![Scarf](image4)
   ![Cap](image5)

   b.

   ![Shirt](image6)
   ![Glove](image7)
   ![Skirt](image8)
   ![Saree](image9)
   ![Skirt](image10)

   c.

   ![Jacket](image11)
   ![Dress](image12)
   ![Umbrella](image13)

3. Look at the pictures. Find and circle the given words.
   *(SHIRT, GLOVE, CAP, SKIRT, SAREE)*

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**Self Evaluation**

I can name different kinds of clothes
I can recognise the importance of clothing
I can identify the types of clothes to suit different weather conditions
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