

The Earth

Syllabus: Karnataka State Board

Subject: EVS

Grade: 3

Textbook Name: ENVIRONMENTAL STUDIES - Text cum Workbook (Revised) - Third Standard

Chapter Number & Name: 23. The Earth – our home

1. OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

Objective

- Understand the shape of the earth
- Explain the changes in the weather and understand the terms
- Understand directions with the position of sun

Prerequisite Concepts

- Concept of day, night, sun, moon, stars, names of directions

EVS Grade 2 – Karnataka Textbook Syllabus – Chapter 18 – In the Sky

Content Index

OVERVIEW

1.1 OBJECTIVE AND PREREQUISITES

LEARN

2.1 KEY POINTS

2.2 LEARN MORE: NA

ENGAGE

3.1 INTEREST GENERATION ACTIVITY

INTRODUCTION TO THE TOPIC

Activity 1: Identify shapes of sun, moon and star *

2.2 CONCEPT GENERATION ACTIVITY

EARTH

Activity 2: Our planet earth *

Activity 3: North pole, south pole, longitudes and latitudes *

Activity 4: Hydrosphere and Geosphere

CHANGES IN WEATHER

Activity 5: Story of Chitti and Chinni (changes in weather) *

Activity 6: Time and weather changes (writing, HW suggestion) *

DIRECTIONS

Activity 7: Find out the directions *

Activity 8: Names of directions (writing) *

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE

EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT

Activity 9: Benefit of different weathers (writing, HW suggestion)

4.2 IMPORTANT GUIDELINES

*Note: The fields marked with * are mandatory*

2. LEARN

2.1 KEY POINTS

The shape of Earth is closest to a sphere. Other space objects like the sun, moon and the planets, all appear spherical. The stars, which are very far away, do not appear round. They seem to have protruding corners with sharp edges. There are some imaginary horizontal and vertical lines across the globe. The horizontal lines are called latitudes and the vertical lines are called longitudes. These lines help people to know the time of a place and the distance between two places. The portion of the earth which is filled with water or ocean is called the hydrosphere and the portion of earth where there is land is called the geosphere. The weather keeps changing frequently. There may be several types of weather in a single day. A compass helps us understand directions by pointing it's needle towards the north.

2.2 LEARN MORE: NA

3. ENGAGE

3.1 INTEREST GENERATION ACTIVITY

INTRODUCTION TO THE TOPIC

Activity 1: Identify shapes of sun, moon and star *

Materials required: Tactile diagram of the sun, moon and a star in correct proportion

Prerequisites: NA

Activity flow:

Start with a discussion by asking whether they know about the sun, moon and the star.

Allow them to share their knowledge about those. Discuss what they understand by day

and night and relate that to the objects in the sky. Inform that stars are balls of fire, the moon is a natural satellite and the sun is a star closest to our planet earth.

Introduce the tactile diagram. Ask them to observe the difference between the size of each object. Further, discuss the shape of each object.

Alternatively, if a tactile diagram is not available, the teacher can bring objects like balls or fruits and vegetables or such as oranges, grapes, star fruit for students to understand the size and shape of these objects. Ensure that the proportion of sizes between these objects should be close. To give them a real idea about the size, give examples of real objects like the teachers table as sun but round and a small bean as earth.

2.2 CONCEPT GENERATION ACTIVITY

EARTH

Activity 2: Our planet earth *

Materials Required: Tactile globe, four or five fruits, orange (or any other round fruit), other fruits like mango, banana, apple, papaya, grapes

Prerequisites: NA

Activity Flow:

Inform that we are going to discuss our planet earth. Distribute the fruits and ask them to identify the shape which resembles the shape of our planet earth. Discuss that the orange is the one which resembles the shape of the earth as it is round. Ask them to observe the two tips of the orange. The earth, where we live, also has two tips. They are northern tip and southern tip. As in the case of the orange, the north and south tips of the earth are mostly flat. The earth has its own specific shape. This spherical shape of the earth is called geoid shape.

Introduce the tactile globe to children and inform them that this globe is a miniature model of our planet earth and it is used to locate the positions of different continents and countries. Hold their hands and make them understand the difference between land and water on the globe. The earth appears blue because of the presence of water on the surface of the earth.

Ask students to notice how the shape of the orange is similar to the globe.

Ask children to think about the uses of the globe. Children can discuss this in the group and can share their thoughts with the class.

Activity 3: North pole, south pole, longitudes and latitudes *

Materials required: Few oranges and globe (more than 1 if available)

Prerequisites: NA

Activity flow:

Distribute the oranges. Inform that they already know that the globe is a model of the earth. It is easy to learn more about the earth with the help of a globe. Take the globe. Help them observe its flat tips. The top tip is called north pole and bottom tip is called south pole.

Inform that there are some imaginary horizontal and vertical lines across the globe. The horizontal lines are called latitudes and the vertical lines are called longitudes. These lines help people to know the time of a place and the distance between two places.

Explain that with the rotation of the globe, the time at different places changes. For example, in India, when time is 2 O'clock in the afternoon, in Britain, the time will be 8:30 in the morning.

Activity 4: Hydrosphere and Geosphere

Materials required: Tub filled with big stones and water. The water level should be lower than the stone's height; globe or world map made for children with visual impairments (with details of continents and oceans)

Prerequisites: NA

Activity flow:

Make students sit in a circle and put the tub in the center.

Ask them to share what they think the earth is like. How much land and ocean is there?

Which is more, land or ocean?

Allow them to touch the stones and water present in the tub and share what they observe.

Ask them to note if the water is above the level of all the stones or some parts of stones are outside the water.

Explain that the part of the tub which is filled with water is representing the ocean on earth and it is called the hydrosphere. The part where the stones are above the water level represent the continents or land where we live and it is called the geosphere.

Now ask students to touch the map or globe and help them to identify the oceans/hydrosphere part of earth and continent/geosphere part of the earth.

CHANGES IN WEATHER

Activity 5: Story of Chitti and Chinni (changes in weather) *

Materials required: Few oranges and globe (more than 1 if available)

Prerequisites: NA

Activity flow:

Narrate the following story:

There was a beautiful forest. A deer was living with two fawns. It was early morning.

The mother deer called out, "Chitti, Chinni, get up, it is dawn."

"No, ma. It is too cold. I won't get up." replied Chitti.

Mother deer made them get up and they set off to search for food.

"Ma, it is too hot now. I won't come." said Chitti.

"Hey you said that it is cold in the morning. Are you saying hot now?" Chinni asked Chitti.

While they are searching for food, the mother suddenly called out, "Chitti, Chinni, look there. It is cloudy. It will rain now."

"Ma, it was cold in the morning, then it was hot. Now it may rain. What is the reason for this change?" asked Chinni.

"Yes children, cold, hot, cloudy, windy and rainy are the changes in the atmosphere in a day. This is called weather. It is cool at night, hot when sun rises, and rains when clouds get dark." Mother informed.

Then, it started raining. After some time, a rainbow appeared in the sky. "Ma see! what is that? It is a colourful one!" Chitti asked. "Oh! that is a rainbow. It appears when it rains in the sunlight," replied mother deer.

When it stopped raining, the deer and fawns came back home. "Chinni, today's excursion was very nice, wasn't it?" Chitti asked Chinni. "Yes, Chitti, ma has told us about the weather. I felt very happy."

Chitti and Chinni started to go out. "Hey! Where are you going?", asked ma. "Ma, we would like to tell all our friends about the weather."

After the story, ask students what they understand from the story. Summarise their responses by saying that in a day, the weather can change several times. Discuss the different colours of the rainbow with children, which are V-violet, I-indigo, B-blue, G-green, Y-yellow, O-orange, R-red. The colours in the rainbow can be remembered in abbreviation form called VIBGYOR.

Activity 6: Time and weather changes (writing, HW suggestion) *

Materials required: 2 different varieties of bindis

Prerequisites: Comfortable writing in braille

Activity flow:

Ask students how they are feeling right now. Is it cold or is it hot? Ask them if it will remain the same all day. Will it be the same for the entire week?

What are the different weather names you can think of?

Summarise the weather names: hot, cold, cloudy, rainy, windy

Help students learn these names with spellings in their writing sheet.

Inform that they are going to make a note of the weather for the next 1 week. They would maintain one sheet where they would write what the weather was like once in the morning and once in the evening for the next few days.

They would write in the following way:

Monday

morning – sunny – evening – rainy

Tuesday

Alternatively, students can also use 2 different types of bindi for this activity. They can use one type for a sunny day and another type for a rainy day and use both if the day is partially cloudy and partially rainy.

After the task completion, ask children to observe their sheet and ask to find if there is any pattern in the weather change. How similar or different are their observations with their peers.

Explain to children that hot, rainy, windy, cloudy, cold are the factors of weather. These are the factors that change every day. These changes may occur in a day also. The changing atmospheric condition from day to day and hour to hour is the weather. The intensity of sun rays may be more in the afternoon in comparison to morning and evening.

DIRECTIONS

Activity 7: Find out the directions *

Materials required: Compass

Prerequisites: NA

Activity flow:

Have a general discussion by asking how much the students know and understand directions. Which direction the sun rises and which direction the sun sets? Summarise by saying that the sun rises in the east and sets in the west direction.

Explain this by asking all the students to extend both of their hands parallel to their shoulder. Now, if the tip of the right hand is pointing towards the east then the tip of the left hand would be the west. Ask students to visualize the sun rising from the east, going over their head and setting in the west.

Now, the direction ahead of their face would be north and behind their back would be south. Encourage them to think about where northeast would be. It will be in the direction

between east and north. Similarly, let them think of other directions like north west, south east and southwest.

Introduce the compass. Explain how a compass functions by showing the needle of the compass which always points towards the north direction. Thus, once we understand which direction is north, we can identify other directions as well.

Play a small game using the compass. Pass the compass to a child. Ask the child to turn around in his place a few times and stop. Now the child would read the compass and turn his body in the direction of the north. This can be repeated with other children as well.

Activity 8: Names of directions (writing) *

Materials required: small items like round beans to understand direction and a flat hard cardboard, writing materials

Prerequisites: Comfortable writing in braille

Activity flow:

Place the board on a flat surface. Stick four beans opposite each other in such a way that they represent the four directions. If compass is available, place the board in such a way that the north is in the direction as shown by the compass. Allow students to feel the beans and get an understanding of the four directions.

To make students more involved in this activity, ask them to stick the beans for other in-between directions such as northeast, southeast, northwest and southwest.

Help students write down the names of each direction on their writing sheet.

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE

Thinking Time: Have a discussion about what will happen if the weather does not change at all. Allow students to think what are the advantages and disadvantages they would face and share their thoughts.

4. EXERCISES & REINFORCEMENT

4.1 REINFORCEMENT

Activity 9: Benefit of different weathers (writing, HW suggestion)

Materials Required: Writing material

Prerequisites: Should be comfortable writing sentences in braille

Activity:

Ask students to think and discuss the uses of:

- A sunny day – example, clothes dry up quickly
- A rainy day – example, plants grow well

Have a discussion on that with the whole class. Instruct them to write a few sentences after the discussion. They may add their own sentences if they want to.

- (HW suggestion) Students may be asked to think about the uses mentioned in the activity, at home and write them down in the class.

Teaching Tips

NA

References

NA

4.2 IMPORTANT GUIDELINES

Exercise Reading

It is very important that the children practice their learnings as well as their reading. Hence have the children read out the newly learned concepts from their textbooks or other available resources.

Perform Textbook Activity

It is good practice to have the children perform the textbook activities. Your textbook activities might not be accessible hence go through this resource to learn how to make textbook content accessible.

Provide Homework

To evaluate their understanding and to help the student revise and implement the new learnt concept ensure to provide them with homework. Students should perform one or two of the questions mentioned above or from the textbook exercises with the teacher in class and the remaining may be given for homework. Also, ensure that the student knows their special skills linked to independently using their accessible books as it will be critical to doing homework independently.

End of Document