Vision Empower & XRCVC Teacher Instruction KIT Shelter-Its-Variety

Syllabus: Karnataka State Board Subject: Environmental Science Grade: 4 Textbook Name: Karnataka State Board Chapter Number & Name: 10. Shelter-Its-Variety

1. OVERVIEW

1.1 OBJECTIVE

Objective

- To understand the changes in the construction of houses from time to time.
- To identify the differences between houses in urban areas and in the rural areas.
- To know the variety in habitats and shelters of animals.
- To identify the variety in the nests of birds and dwellings of animals and in the material needed to build them.

Prerequisite Concept

- Shelter- EVS , Grade 3, Chapter 8: Let us build a house
- House EVS , Grade 3, Chapter 9: Pretty house

Content Index

Kindly Note: Activities marked with * are mandatory

LEARN

KEY POINTS LEARN MORE

ENGAGE

INTEREST GENERATION ACTIVITY

Activity 1: Story - The three little pigs

CONCEPT INTRODUCTION ACTIVITIES

Activity 2: Types of houses

Activity 3: Habitats and shelter of animals

Activity 4: Animal habitat project

LET'S DISCUSS: RELATE TO DAILY LIFE*

EXERCISES & REINFORCEMENT

Activity 5: Shelter and it's variety IMPORTANT GUIDELINES* Exercise Reading Perform Textbook Activity Provide Homework

2. LEARN 2.1 KEY POINTS

Types of houses

Houses made up of stones: People use stones to construct houses because of the availability of stones, their durability , they resist fire, wind, water and termites. Stones are also good insulators so it does not allow heat and electricity to pass. People build the houses using Shahabad stones or slabs of stone. The roof is constructed with wooden planks. Over it they put mud. Some people place stone slabs on it.

Mud houses: suitable where rainfall is less. These roofs provide insulation against heat and keep the building cool and comfortable. Cheap and widespread availability.

Houses with sloppy: sloppy roofs do not let water or other dirt accumulate by allowing them to simply slide off. Some people use hard red bricks to build walls and make the sloppy roof with tiles.

Roof with Hay: Hay (dry grass) is cheap and easily available in most of the places. It conducts heat rapidly and is suitable for hot climates. It has to be renewed periodically. Wind or accidents easily damage them as they are very light in weight.

Multi-storeyed buildings: Now-a-days people are constructing houses one above the other. These are called multi-storeyed buildings. Burnt bricks or bricks made of cement and steel rods are used for the construction. Flooring is done with colourful tiles or marble. There is a facility of staircases along with lifts. To construct such multi-storied buildings huge machines such as cranes and mixers are needed.

Multi storied buildings save space and accommodate more residents as compared to shorter buildings. The higher floors are relatively more airy and receive more sunlight. Disadvantages of multi storied buildings:

- It is challenging to evacuate your place due to emergencies, such a natural disaster or fire.
- It's challenging trying to move or remove furniture up and down stairs in high rise buildings, and the space of hallways and corridors can be small.
- The foundations of very tall buildings with smaller construction land are under tremendous load and failing of soil may lead to collapse of the building.

Slums: The houses in slums are very small. Houses are built with bricks, dry leaves and tin sheets. The roof is either thatched with dry leaves or covered with tin sheets. A few people put tiled roofs. As there is no drainage, the waste water from washing the clothes, bathing etc., stagnates in front of the houses. Therefore mosquito threat is common. In a small area, hundreds of houses are built close to one another. Therefore there is no proper ventilation and lighting facility. And also the people who stay there, do not keep their surroundings clean. They dump the waste materials everywhere and dunghills have been created there. The housefly and other insects sit on the dunghills and spread diseases.

2.2 LEARN MORE None

3. ENGAGE

3.1 INTEREST GENERATION ACTIVITY

Story

Activity 1: Story - The three little pigs Materials required: None Prerequisites: None

Activity Flow

Read the following story in the class and discuss their understanding about the story. Then relate this story to this chapter.

Once upon a time there was an old mother pig who had three little pigs and not enough food to feed them. So when they were old enough, she sent them out into the world to seek their fortunes.

The first little pig was very lazy. He didn't want to work at all and he built his house out of straw. The second little pig worked a little bit harder but he was somewhat lazy too and he built his house out of sticks. Then, they sang and danced and played together the rest of the day.

The third little pig worked hard all day and built his house with bricks. It was a sturdy house complete with a fine fireplace and chimney. It looked like it could withstand the strongest winds.

The next day, a wolf happened to pass by the lane where the three little pigs lived; and he saw the straw house, and he smelled the pig inside. He thought the pig would make a mighty fine meal and his mouth began to water.

So he knocked on the door and said:

"Little pig! Little pig! Let me in! Let me in!"

But the little pig saw the wolf's big paws through the keyhole, so he answered back:

"No! No! No! "

"Not by the hairs on my chinny chin chin!"

Then the wolf showed his teeth and said:

"Then I'll huff and I'll puff and I'll blow your house down".

So he huffed and he puffed and he blew the house down! The wolf opened his jaws very wide and bit down as hard as he could, but the first little pig escaped and ran away to hide with the second little pig.

The wolf continued down the lane and he passed by the second house made of sticks; and he saw the house, and he smelled the pigs inside, and his mouth began to water as he thought about the fine dinner they would make.

So he knocked on the door and said:

"Little pigs! Little pigs!"

"Let me in! Let me in!"

But the little pigs saw the wolf's pointy ears through the keyhole, so they answered back:

"No! No! No!"

"Not by the hairs on our chinny chin chin!"

So the wolf showed his teeth and said:

"Then I'll huff and I'll puff and I'll blow your house down!"

So he huffed and he puffed and he blew the house down! The wolf was greedy and he tried to catch both pigs at once, but he was too greedy and got neither! His big jaws clamped down on nothing but air and the two little pigs scrambled away as fast as their little hooves would carry them.

The wolf chased them down the lane and he almost caught them. But they made it to the brick house and slammed the door closed before the wolf could catch them. The three little pigs

were very frightened, they knew the wolf wanted to eat them. And that was very, very true. The wolf hadn't eaten all day and he had worked up a large appetite chasing the pigs around and now he could smell all three of them inside and he knew that the three little pigs would make a lovely feast.

So the wolf knocked on the door and said:

"Little pigs! Little pigs!"

"Let me in! Let me in!"

But the little pigs saw the wolf's narrow eyes through the keyhole, so they answered back:

"No! No! No!"

"Not by the hairs on our chinny chin chin!"

So the wolf showed his teeth and said:

"Then I'll huff and I'll puff and I'll blow your house down".

Well! he huffed and puffed. He puffed and he huffed. And he huffed, huffed, and he puffed, puffed; but he could not blow the house down. At last, he was so out of breath that he couldn't huff and he couldn't puff anymore. So he stopped to rest and thought a bit.

But this was too much. The wolf danced about with rage and swore he would come down the chimney and eat up the little pig for his supper. But while he was climbing onto the roof the little pig made up a blazing fire and put on a big pot full of water to boil. Then, just as the wolf was coming down the chimney, the little piggy pulled off the lid, and plopped it! fell the wolf into the scalding water.

Boiled wolf was in pain, ran from that place and then did not come to the pig's house again. From then on the pigs were happy.

3.2 CONCEPT INTRODUCTION ACTIVITIES

Types of houses Activity 2: Types of houses Materials required: None Prerequisites: None

Activity Flow

- Ask the students what are the things which we need to survive? And from all the answers pick shelter as one and then ask the following questions about the types of houses:
 - What do you understand by the word shelter?
 - Type of houses in which they live?
 - What material is used to construct that house?
 - Why do you think your house is constructed with such materials and in such a way?
 - Are there any changes being done in the last few years?
- After the discussion, explain to them that houses are made up of different materials, in different shapes as per the area, resources, etc.
- And then to know more about types of houses children will be doing a role play.
- Each student will be assigned one role and they will read their lines from their textbook.
- Total 5 characters are there: Sangeetha, John, Haseena, Vivek , Venkajii.
- Each of them will read their dialogues from the textbook and at the end of the role play questions will be asked as to what differences children got to know about different houses and material used.
- And then discuss the following questions with the children:
- Why do people use stones to construct houses? Because of the availability of stone, durability, they resist fire, wind, water and termites, good insulators.
- Why is mud used for roofing? Suitable where rainfall is less. These roofs provide insulation against heat and keep the building cool and comfortable. Cheap and widespread availability.
- Why are the roofs of the houses sloppy? For sloped roof teachers can even use a folded paper and put it on the table or above some objects as a slope on both sides to show how sloppy roofs look like. Do not let water or other dirt accumulate by allowing them to simply slide off.
- Why is hay (dry grass) used for the roof? Cheap and easily available in most of the places, it conducts heat rapidly, suitable for hot climate, and has to be renewed periodically. Wind or accidents easily damage them.
- What are the advantages of multi-storey buildings?

Save space and accommodate more residents as compared to shorter buildings. The higher floors are relatively more airy and receive more sunlight.

Habitats and shelter of animals

Activity 3: Habitats and shelter of animals

Materials required: None Prerequisites: None

Activity Flow

- Ask the students if they have any pets in their home/hostel?
- What do they think animals need to survive?
- Have they seen the living places of any animals?
- Now you know what materials we use to construct our houses, what do you think what materials animals use to make their house?
- And then explain to them that the environment in which an animal lives (its habitat) must provide water, food, shelter, and space. It's home must also make the animal feel protected from predators, harsh weather, and other threats.
- The structure of an animal's home depends on the type of animal, the environment it lives in, and what it needs to survive. Some homes are for just one animal or for a mother and her babies. Other homes are for a large group of animals to all live together. Some examples:
 - Webs: spider spins webs to live in.
 - Caves: lions, tigers, bears and wolves make their homes in caves.
 - Nests: birds make nests to lay their eggs in. Nests can be built in the branches of a tree. If possible, show a real nest to the children.

Animal habitat project

Activity 4: Animal habitat project

Materials required: None Prerequisites: None

Activity Flow

- Animal names: bird, tiger, dog, honey bees, rats, cats, frogs, cows, snakes, fish.
- Ask each of the students to pick one animal name and find out its shelter and what material it uses to build its shelter.
- Then the next day all of them can share what they found about that animal. And then each of them would be working to make a model of that animal's habitat by using

locally available materials. And in this project teachers should help and provide materials to form those models.

3.3 LET'S DISCUSS: RELATE TO DAILY LIFE*

Shelter separates people from their surroundings. It provides a place for families to cook, eat, sleep, and raise their children. It protects them from extreme temperatures, strong winds, and storms. Shelter provides privacy and safety from human and animal enemies. It also protects belongings, such as clothes, dishes, books, and pictures. Domestic animals, food supplies, and tools may be kept in the shelters occupied by their owners or in separate shelters, such as barns and granaries.

4. EXERCISES & REINFORCEMENT

4.1 EXERCISES & REINFORCEMENT

Shelter and it's variety Activity 5: Shelter and it's variety Materials required: None Prerequisites: None

Activity Flow Read the extra information about the shelter and it's variety in the class.

All over the world animals and people spend a significant amount of time and energy providing shelter for themselves. Animals use many kinds of shelters. Foxes burrow into the ground. Beavers build mud-and-stick lodges in shallow streams. Some bears hibernate through the winter in the hollows of rocky cliffs or in holes in the ground. Apes build themselves nests of twigs in trees for protection while they sleep.

Human shelters also take many forms. People may build huts of mud and branches roofed with leaves. They may live in houses of wood, brick, or stone, or in huge apartment buildings of steel, concrete, and glass. They may use movable shelters such as tents, houseboats, and trailers or even recreational vehicles (RVs).

WHY PEOPLE BUILD SHELTERS

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storms. Shelter provides privacy and safety from human and animal enemies. It also protects belongings, such as clothes, dishes, books, and pictures. Domestic animals, food supplies, and tools may be kept in the shelters occupied by their owners or in separate shelters, such as barns and granaries.

CULTURE AND TECHNOLOGY AFFECT HOUSE FORM

Differences in the way people live around the world—cultural differences—account for much of the variety in the form of human dwellings. Differences in occupation are an important factor. Farmers and city workers, for example, need permanent homes that are easy to reach from their fields or factories and offices. Nomads, who shift from place to place herding animals or hunting game, need portable shelters such as tents.

https://kids.britannica.com/students/article/shelter/277027

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

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