

1. Need-based Activities

1. Introduction to the World of Work and Culture



Sources of Information : (Newspapers, Radio, Television, Internet)



- (1) Making a collection of news items from newspapers.
- (2) Listening to news on the radio, and sharing it with friends.
- (3) Watching the news on television and writing a report of the news on ones favourite subject.

• Types of news

Cultural, informative, environment-friendly, educational, science-related and news that motivates and inspires.



My Activity :

1. Giving or reading selected news items to friends using correct pitch, pronunciation and pace.
2. Have I read the information given on the school noticeboard?
3. Write down any one item of news or information in your notebook.

- ◆ Explain what is meant by a source of information? Give each student a chance to present some news or information. Explain the difference between news and rumour.

2. Water Literacy



2.1 Uses of water

Water is life. Living things need water. Water is used for various purposes. We get all the water we need in the whole year, during the four months of the rainy season. For this water to last for the whole year, it must be used in a proper and planned way.



My Activity :

Create slogans and sayings related to water and display them in proper places.

**Obtain more information about
World Water Day.**



- ◆ Conduct a picture-reading and discussion session about 'uses of water'. What are the **errors** shown in the picture? Ask about the remedies for such errors. Discuss what steps can be taken in order to ensure that water is used according to a plan. Undertake the project 'My water savings bank' to teach how water can be used economically/ sparingly.

2.2 Methods of purifying water

Pure water is necessary for good health. Water may appear to be clean but may not be good for drinking. Pure water does not have any smell or taste. Water that contains germs, chemicals, salts or bits of other rubbish is said to be impure.

Do you know?

Impure water can cause several serious diseases such as infectious diseases, jaundice and other stomach disorders.

- **Some methods for purifying water at home**

- (1) **Settling** : Swirl a piece of alum in muddy water and allow it to stand still. The impurities will settle to the bottom.
- (2) **Filtration** : Filter i.e. strain the water through four layers of clean cotton cloth.
- (3) **Boiling** : Boil the filtered water and allow it to cool.



Settling



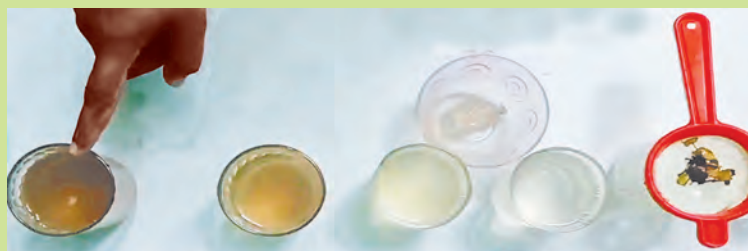
Filtration



Boiling

My Activity :

- (1) Obtain information about diseases caused by drinking impure water.
- (2) Which method would you use to purify water at home?
- (3) Try to carry out the following methods.



Muddy water settling swirling alum filtration

- ◆ Organize a visit to a water purifying centre in the neighbourhood.

3. Disaster Management



‘A disaster means a crisis situation and management means the proper way of handling it.’

- **Types of Disasters :**

(1) Natural disasters (2) Man-made disasters

(1) Natural Disasters

Earthquakes, storms, floods, forest fires, droughts are natural disasters. By proper disaster management the effects of a disaster can be reduced or mitigated and human life can be made easier.

(2) Man-made Disasters

Man-made disasters are caused by our careless and irresponsible behaviour. That is why these disasters are said to be man-made. For example, not observing traffic rules, driving too fast, wasting water, not turning off lights and fans and water taps.



**Picture
Reading**



My Activity : Explain what precautions you would take in a crowded place.

- ◆ Discuss disaster management through a picture-reading session. Ask what is expected to be done in the events shown in the pictures. Explain what needs to be done to prevent man-made disasters.

2. Activities of Interest

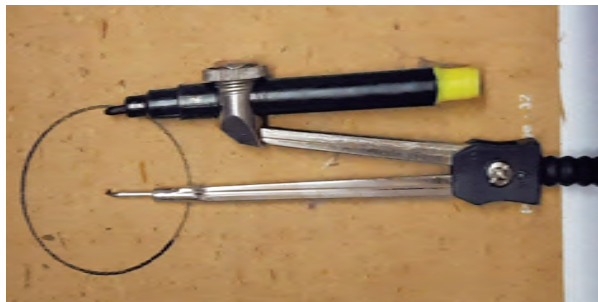
2.1 Whirligig



Tools and materials : Cardboard, toothpick or a long nail, beads, pieces of coloured paper, scissors, glue, etc.

Procedure :

1. On the cardboard, draw a circle of radius 2cm and cut it out. Using the nail, make a hole at the centre of the circle.
2. Pass a toothpick or nail through a bead and stick this bead near the top.
3. Now pass the cardboard disc through the toothpick/nail so that it is under the bead and stick it in place.
4. Now take another bead and stick it to the other side of the disc. (You can use little balls of paper instead of beads.)
5. Now hold the top of the toothpick between your finger and thumb and place its pointed end on a smooth floor or other surface. Give the top a twist and let it go. See how it spins!



My Activity : Use the lid of a bottle to make a whirligig at home.

- ◆ Conduct the required group work for the activity of making a whirligig and give the guidance needed.
- ◆ Show how to spin the whirligig.

2.2 A Clown

Tools and materials : Empty matchbox, drawing paper, pieces of coloured paper, pencil, sketch pens, scissors or paper cutter, ice-cream sticks, glue, etc.

Procedure :

1. Draw a picture of the head, neck, arms, hat of a clown and colour them.
2. Stick one end of the ice-cream stick to the middle of the back of the inside drawer of the matchbox.
3. Stick the picture of the clown to the other side of the drawer.
4. To the outer part of the matchbox stick the clothes and legs of the clown made from coloured paper.
5. Now pass the free end of the ice-cream stick through the matchbox carton so that the clown's picture on the drawer fits on the clothes on the carton. (See picture.)
6. Move the ice-cream stick up and down to see how the clown's arms move. Cut out the shape of a window in the inside drawer.
7. As shown in the picture, stick a strip of instructions, etc. on the inside of the matchbox carton using other strips of paper.



- ◆ Instruct the children about the precautions they must take while using scissors/ cutters. Give help and guidance as required.

2.3 Garlands of Flowers



Tools and materials: Different types of flowers (Marigolds, Chrysanthemums, Tuberoses, Lilies, Asters, etc. mango or ashoka leaves. Thick thread, a long needle, scissors, etc.

Procedure :

1. Thread the needle with 2 strands of the thread using a length that is some what longer than the length of the required garland.
2. First, thread 4 or 5 flowers of the same kind. Then thread groups of 2 to 3 flowers each group being of a different colour.
3. Fold 2 or 3 leaves and thread them between the groups of flowers.
4. Now repeat the same sequence of groups of 4-5 flowers till you have a garland of the length that you want. Knot both ends of the thread. Now you can use the garland for decoration.



My Activity :

- Observe the flowers shown in the picture below and understand the different types.



- Name some uses of flowers.

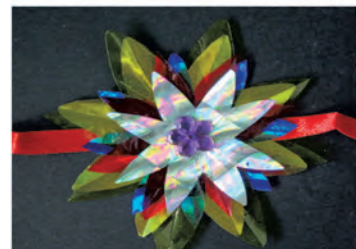
- ◆ Tell the children what precautions they must take to prevent anyone getting poked by the needle.
- ◆ If possible, arrange a visit to a flower market. Or, conduct an interview session with someone who uses flowers for decoration.

3. Skill-based Activities

3.1 Rakhi



Some samples of *rakhis* have been shown in the picture below. Make one *rakhi* of your choice.



My Activity : Make *rakhis* using shiny, coloured silken tassels.



- ◆ Show various kinds of *rakhis* to the class. Let the children make different kinds of *rakhis* rather than all of the same type.

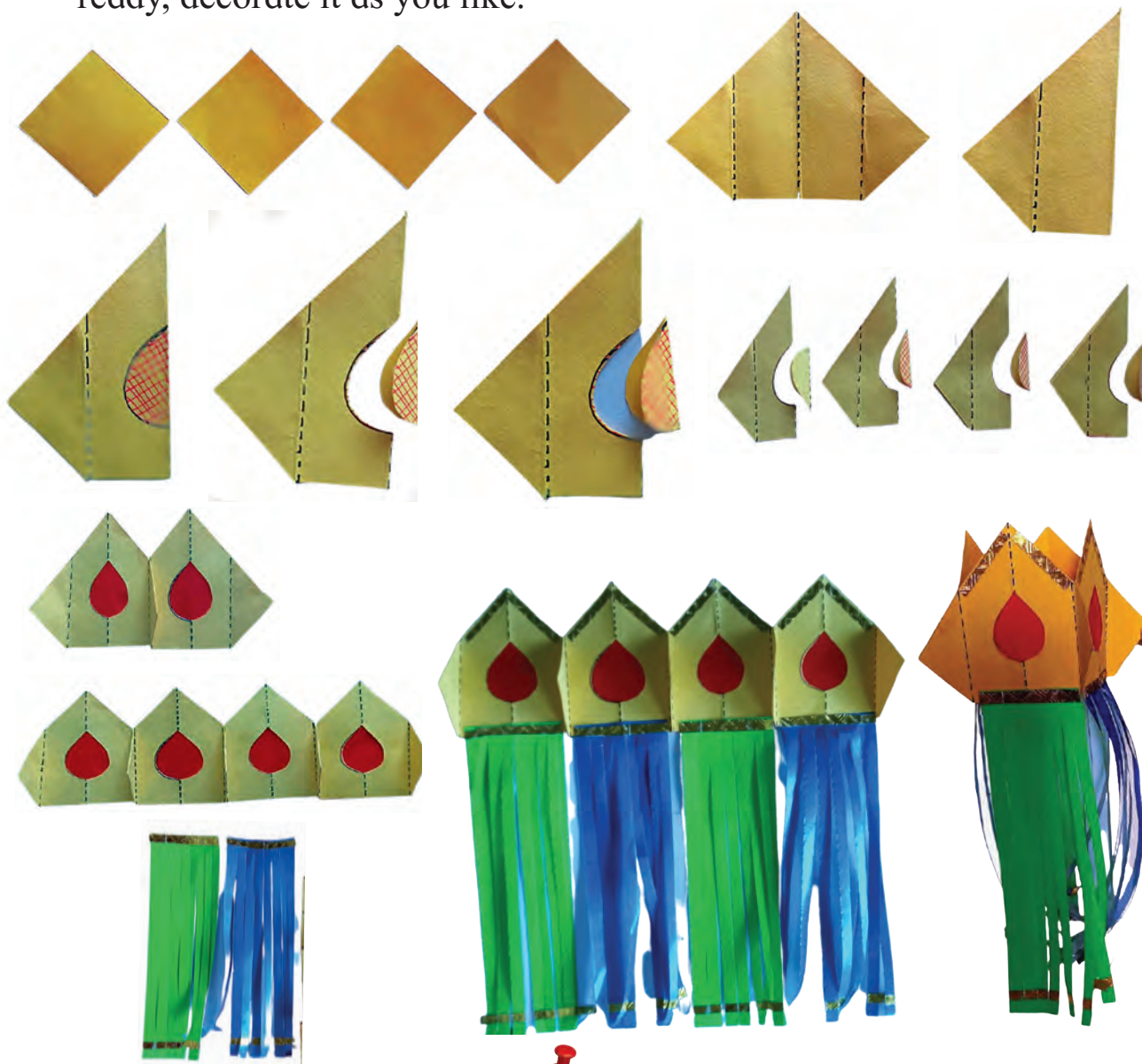
3.2 Paper Lantern



Tools and materials : Coloured cardsheet, kite paper, thread, scissors, glue, measuring tape, etc.

Procedure :

1. Cut out four 7 x 7cm squares from the cardsheet.
2. Follow the steps as shown in the pictures below. Your paper lantern is ready, decorate it as you like.



My activity : Draw a picture of a paper lantern.

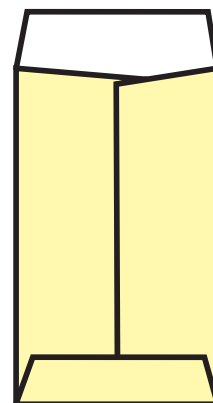
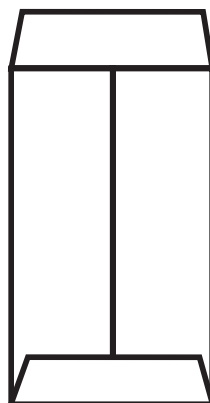
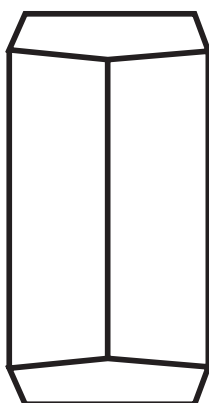
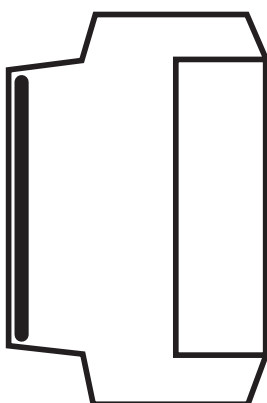
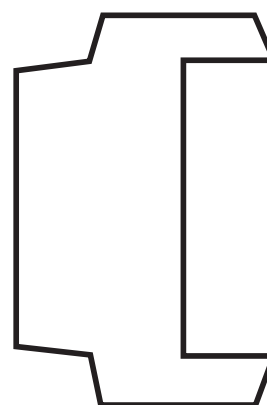
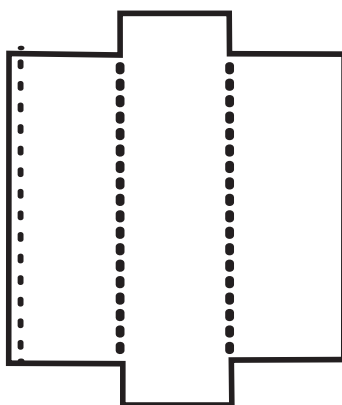
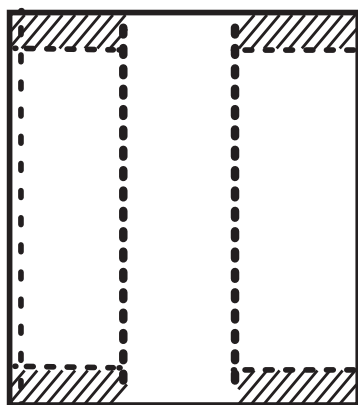
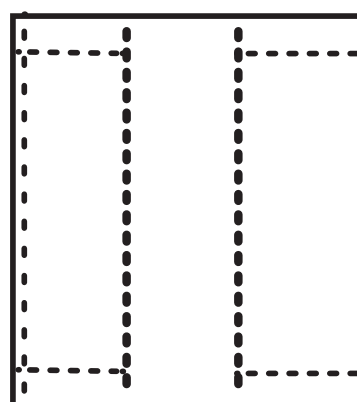
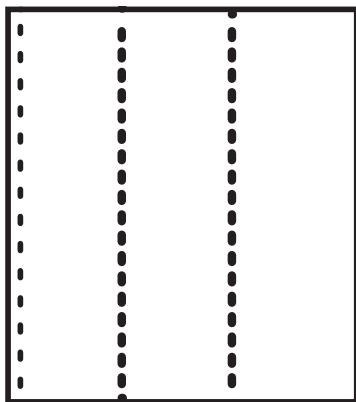
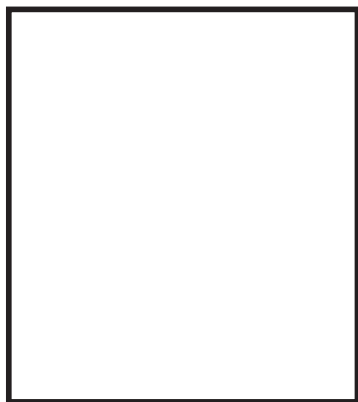
- ◆ Show various samples of paper lantern.

3.3 A Paper Envelope



Tools and materials : A sheet of A4 size paper, scissors, glue , etc.

Uses : To send *rakhis*, greeting cards by post.



- ◆ Show different kinds of envelopes in the class.

4. Optional Activities

1. Area : Food

1.1 Kitchen Gardening

Planting the seedlings

- **When are seedlings ready for planting?**

When we plant seeds of vegetables, we will see them grow to a height of about 10 to 15 cm in 4 to 5 weeks and grow three or four leaves too. Such seedlings are said to be ready for planting.

Planting the seedlings

Seedlings of vegetables are planted in different kinds of beds depending upon what they need for their growth. Generally, a bed is 2 to 3 metres long and 1m wide. Some cow dung manure or compost fertilizer is also added to the soil while preparing the bed. The seedlings are uprooted gently, taking great care not to damage their roots, and are planted in the prepared bed.

Types of beds

- (1) **Flat bed** - This bed is flat and is used for planting vegetables like fenugreek, spinach, varieties of Amaranthus greens (*Maath*), cowpea greens (*Chawali*), coriander.
- (2) **Ridged bed** - This bed is raised and has a height of about 15 to 20 cm above ground level. It is used for growing seedlings of cabbage, green chillies, brinjals, cauliflower, knol khol, onion, garlic, etc.
- (3) **Raised bed** - Tomato, as also brinjals, chillies, potato and cabbage are grown in this kind of bed.
- (4) **Circular bed for climbers** - Vegetables like pumpkin, cucumber, bitter gourd, bottle gourd, snake gourd etc. that grow on climbers are planted in this kind of bed.



My activity : Plant vegetables around your house, in the balcony or terrace.

- ◆ If there is place on the school premises, prepare beds there and plant vegetables suitable for local conditions. Arrange a visit to observe a plant nursery in the neighbourhood.

1.2 Pot Culture

• Filling the pot

Plants in pots beautify a garden or the surroundings. A pot must be filled in the right way to ensure that a plant grows healthy and strong.

Tools and materials :

Sickle, spade, watering can, a pot with one or two holes in the bottom, loam soil, sand, fertilizing mixture, small brickbats, coconut shavings, dry grass, leaves, etc.

Procedure :

1. Place some brickbats over the holes in the bottom of the pot without blocking the holes.
2. Cover the base with some dried garden waste, coconut shavings etc. then half fill the pot with the soil mixture. Press this mixture down a little. Now place the seedling with a ball of soil around its roots on the soil in the pot.
3. Now fill more soil around the seedling up to 3 to 5 cm from the brim of the pot.



My activity : (1) Draw pictures of pots and a watering can.
(2) Why are holes made in the bottom of the pot?

- ◆ Show how to decorate one's surroundings by planting ornamental plants in empty paint cans, water bottles, and other containers.



4. After planting the seedling, water it gently. Take care to see that the seedlings get some sun but are not exposed to harsh sunlight.



◆ **Colour the letters.**

Plants in pots make a beautiful garden.

- ◆ Explain the care to be taken before and after planting a seed or seedling. Discuss the different shapes of pots.
- ◆ Arrange a visit to a plant nursery in the surroundings for the children to make their observations.

1.3 Fruit Processing

- Importance of fruits in our diet :**

Fruits have an important place in our diet. We get nutrients like vitamins, carbohydrates, water, fibre, iron, calcium from fruits. The fibre in fruits helps in the digestion of food.

	Fruits	Product of fruit processing	Nutrients obtained from the fruit
	<i>Amla</i> (Myrobalan)	<i>Amla</i> candy, <i>amlasupari</i> , juice, jam, pickle, etc.	Vitamin C
	Lemon	Lemon oil, lemon juice, pickle and <i>sherbet</i>	Vitamin C
	<i>Bor</i>	Bor meal, pickle, chutney, syrup, candy	Vitamin C
	Orange	Tinned slices, jam and jelly, <i>sherbet</i>	Vitamin C
	Pineapple	Jam, <i>sherbet</i>	Fibre

	Jackfruit	<i>Phanaspoli</i> , wafers	Vitamin A
	Banana	<i>Sukeli</i> , wafers, milkshake	Carbohydrates
	Water-melon	Candy, juice, <i>sherbet</i> , syrup, jelly, toffee	Water
	Grapes	Juice, <i>halwa</i> , raisins	Water
	Papaya	Pulp, milkshake	Vitamin A
	Mango	Juice, pickle, jam	Vitamin A

- ◆ Ask the children what they know about the locally available fruits. If possible, arrange a visit to a fruit market. Tell them about the processing of available fruits.

1.4 Pisciculture



- **Living things in the seas, rivers and lakes**
- **Types of water**

(1) **Saline water** - Sea (2) **Fresh water** – rivers, wells, lakes, dams, canals (3) **Partially saline water** – bay water, etc.

We find a variety of living things in the various water bodies mentioned above. They can be divided into two types.

(1) **Those found in saline waters** (2) **Those found in fresh waters**

Living things in the sea

Conches, shells, crabs, lobster, fish, starfish, pomfret, etc.

Living things in fresh waters

Tortoise, frogs, shrimps, *katla*, etc.



My Activity : Tell whether each of the living things in the picture is found in sea water or fresh water.



- ◆ Explain the meaning of the terms saline water, fresh water and partially saline water. If possible, visit an aquarium nearby.

2. Area : Clothing

2.1 Cloth Production



• Using a spindle to draw yarn from a sliver of cotton

Tools and materials : a sliver of cotton, spindle, a small piece of cardboard, some fine *rangoli*, a mat to sit on, etc.

Procedure :

1. Place your mat on the floor in a well-lit place but where the light will not fall into your eyes and where there will be no draught from the side you are facing. Sit in *sukhasan* on the mat i.e. sit comfortably.
2. Hold the spindle in one hand and place it on the cardboard. Now turn the spindle slowly and steadily. Smear your fingers with the *rangoli* before you start so that the spindle does not slip out of your fingers.
3. Once you have enough practice in holding the spindle upright and turning it on the cardboard, try the next step. Do not hurry. Put the spindle down on the cardboard and taking the sliver in one hand, from its lower end pull out a little cotton and gently draw it out into a long thread. Give it a little twist.
4. Hold the thread with both hands and wrap it around the stick above the spindle's disc leaving 20 to 25 cm of the thread free. Now wrap this free thread around the spindle till its tip and fix it in the hook.
5. Holding the attached sliver in one hand, turn the spindle gently with the other. As you do so, steadily raise the hand holding the sliver allowing the thread to get drawn from it.
6. When you have drawn out a long enough thread, wrap it around near the disc.
7. Practice the above actions till you can keep control of the sliver and pull the yarn out evenly. You can knot the thread together where it breaks. This sequence of actions carried out smoothly and repeatedly is called 'spinning yarn'.



- ◆ Demonstrate how to spin yarn and give some information about it. Arrange a visit to a spinning mill or centre nearby.

2.2 Elementary Needlework



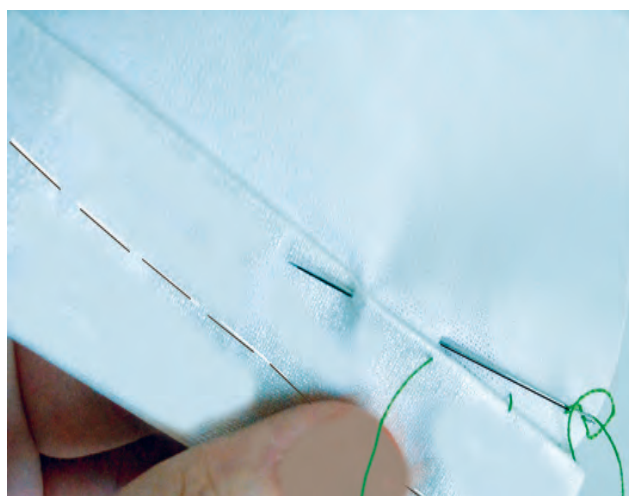
- **Cutting out a square handkerchief, folding its four sides and hemming/ stitching them.**

Tools and materials :

One 25 × 25cm piece of cloth, needle, thread, etc.

Procedure :

1. Make a 0.5 cm fold on one side of the cloth. Fold this over once again. Keep this fold in place using the running stitch. Repeat this for all three sides.
2. Now thread the needle with a thread of the colour of the cloth.
3. Now use 0.5cm long hem stitches to finish the fold.
4. When all sides are finished pull out the thread of the running stitch.



My Activity :

1. Observe the different kinds of cloth in your house. Observe all the places where the hem stitch has been used.
2. Practice the running stitch.
3. What precaution will you take to ensure the needle does not prick you?

- ◆ Get the children to practice the hem stitch. Explain where it is used.

2.3 Doll Making



(A) Using socks to make a doll

Tools and materials :

One black sock, thick paper, scissors, sketch pen, colours, coloured *tiklis*, coloured paper, pictures from magazines/ newspapers.

Procedure :

1. Cut out a disc from the thick paper. Draw any face you like on the round piece of paper or paste a picture of a face on it.
2. Insert your hand into the sock and mark the positions of the base of your thumb and little finger. Cut out small holes in the sock on these marks. You can stick your thumb and finger out of the sock through these holes.
3. Stick the picture of the face on the outside of the sock where your other three fingers would be.
4. Make a pretty dress using coloured paper and stick it on the sock below the face.



My Activity : Use sock to make birds and other animals in the same way.

- ◆ Use these dolls to help with teaching.

(B) The dolls face using a matchbox

• Making the doll's face

Tools and materials : An empty matchbox, white paper, coloured paper, sketch pen, glue, ice-cream stick, scissors, etc.

Procedure :

1. Take an empty matchbox. On its broad side make the dolls dress.
2. Cut out a picture of a doll's face from a magazine or draw a doll's face on a cardsheet and cut it out. The size should be about half the size of the matchbox.
3. Paste this face on the flat surface of the matchbox tray.
4. Make a hole to fix the ice-cream stick to the tray. Thus, you can move the dolls face up and down. Decorate it as you like.



My Activity : Make dolls using a variety of pictures and cartons.

- ◆ Make a collection of cartons and get the children use them to make dolls. Show the children how the dolls can be used to play games or tell stories.

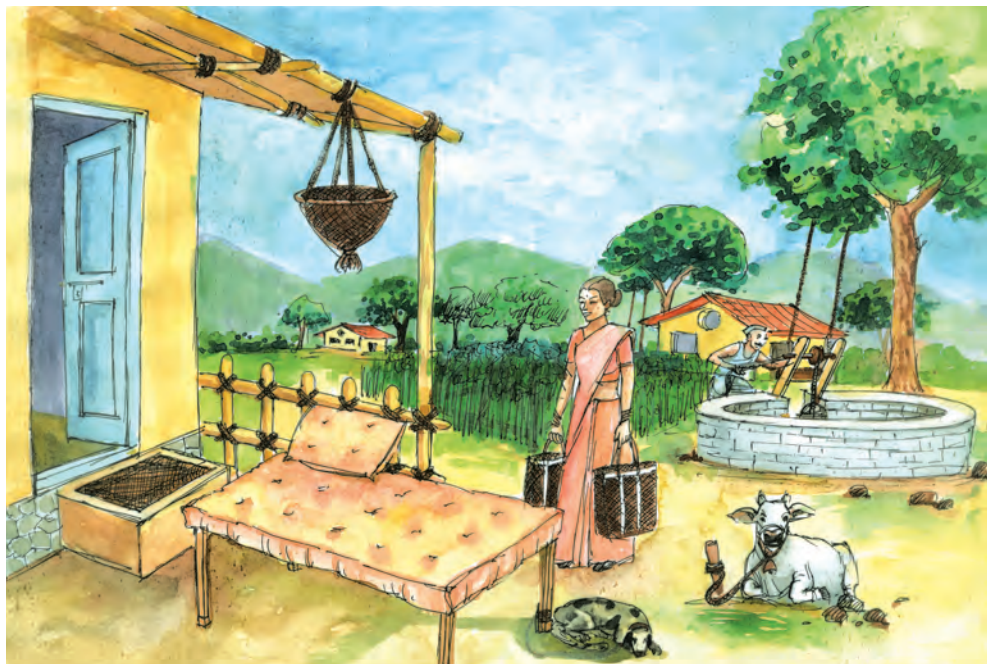
2.4 Coir Work



- **Articles of household use made from coir**

We see numerous articles made from coir in day-to-day use, for example, string, ropes, bags, cushions, mattresses, doormats, baskets, slings, etc.

Observe the picture below and identify the things in it that are made from coir. Also tell what purpose these things are being used for.



Pincushion

Tools and materials : Waste coir, small plastic box, coloured cloth and lace, glue, needle, thread, etc.

Procedure :

1. Press the coir into a tight ball. Press this ball into a piece of coloured cloth and stitch the cloth around it so that the coir ball is held tight.
2. Apply glue to the stitched edges of the cloth and fit the ball into the plastic box by pressing it hard into the box. Paste the coloured lace to the sides of the box to beautify the pincushion you have made.
3. Once the pincushion is ready, you can use it to hold your pins.



My Activity : Making a list of coir articles being used at home or in the surroundings.

- ◆ Arrange a visit to a coir works or an exhibition of coir articles nearby.

3. Area : Shelter

3.1 Clay Modelling

Skit : The Importance of Clay

(Place : Open play area. Ramesh, Santosh and Bharati are playing.)

Ramesh : I say, Santosh, we have learnt to draw letters in the soil. We could draw animals and flowers too, couldn't we?



Santosh : Good idea, come on, Ramesh, Bharati, let's all draw pictures!

Bharati : Ok, but what if the picture is all wrong?

Ramesh : No problem, it can easily be wiped out!

Bharati : Oh, yes, of course! And we can write names and spell other words in the soil too.

Santosh : But this year I'm going to make a clay statue.

Bharati : From where will you get the clay?

Santosh : From our own fields. It has great black soil. That's why we get good crops of vegetables and rice also.

Ramesh : Bharati, do you see that rock? Do you see anything growing on it?

Bharati : No, nothing.

Ramesh : Do you know the reason? Because there's no soil there.

(Enters Sachin Sir)

Sir : Hey, what you are doing in the soil?

Santosh : We're drawing pictures, Sir, just like you taught us to draw letters.

Bharati : Sir, we love to play in the soil.

Sir : You know, don't you, that we get the food we eat only because of soil. If there weren't any soil, we wouldn't have any food crops, isn't it!

Ramesh : Yes Sir, soil is a great boon for us. It is soil that gives us food grains, vegetables and even flowers.

Sir : That's right! And that's not all... Take a look at the houses around us. Their walls are made of soil. The bricks used to build them are made from clay. That is why we must take care of it. We must not allow it to flow away.

Ramesh : Truly Sir, we use soil for so many purposes! What can we do to safeguard it?

Sir : We can plant trees, we can build small bunds so that the soil does not get eroded. The smell of the soil after the first rain is very pleasant. I love that scent.

Santosh : Soil gives colour to flowers and fills them with fragrance.

Bharati : Sir, from this day on, we shall be friends of the soil because we now understand its importance.

Santosh : Sir, you have told us about the importance of soil. Now, we will give this message to all our friends.

Sir : Right away, then!

“Let us conserve soil. Like a mother, it fulfils all our needs”.



My Activity : Make models of things like kitchen utensils, animals, birds, from wet soil, that is, mud, and colour them.

- ◆ Have the children write and present a skit about the importance of soil.
- ◆ Arrange a visit to a potter or someone in the neighborhood who does clay modelling, in order to conduct an interview with him/her and to observe the articles they have made.

3.2 Bamboo and Cane Work



Materials and tools required for bamboo and cane work

Scythe /Sickle - to break or cut bamboo and to obtain long strips from the bamboo stem.

Knife - to obtain thin strips and cut small pieces.

Scissors - to cut the ends of the strips of bamboo.

Hacksaw – to cut bamboo and the bamboo strips.

Measuring tape – to measure sizes of things.

Stick-pin – to make holes in the bamboo strips, fix and hold them down.

Bucket – to hold the water required while doing bamboo work.

Wooden hammer – to finish the edges of the articles made from bamboo.

Emery paper – to rub and smoothen/ polish the bamboo strips.

Container – to prepare the colour for colouring/ dyeing the bamboo strips.



Scythe / Sickle



Knife



Hacksaw



Wooden hammer



Stick-pin



Measuring tape



Container

My Activity : Organize a visit to an exhibition of handcrafted bamboo articles and observe how these tools are used.

- ♦ Arrange visit to an exhibition organized by a bamboo centre.

3.3 Growing Flowering and other Ornamental Plants



Flower arrangements

Tools and materials : a variety of flowers and leaves, needle and thread, etc.

Procedure :

1. Collect a variety of flowers and leaves and spread them on a sheet of newspaper.
2. Make an attractive arrangement of your choice with them and use it for decoration.



My Activity : Make attractive flower arrangements on birthdays and other school functions.

- ◆ Get the children in groups to make flower decorations. If possible, show them video clips of attractive flower decorations and arrangements.

5. Other Area

Animal Husbandry

The cow is a domestic animal that everyone is familiar with. Let us get to know the different varieties of cows.

Varieties of cows

(1) *Khillari cow*

Found in : Western Maharashtra

Colour : White

Body shape : Elongated

Horns : Pointed and curved forward

Milk : About 3 to 4 litres daily



(2) *Gir cow*

Found in : Saurashtra (Gujarat), Maharashtra

Colour : Red/ Brown

Body shape : Tall and big, long ears

Horns : Thick, short and curved outwards

Milk : About 7 litres daily



(3) *Gavla cow*

Found in : Vidarbha

Colour : White

Body shape : Medium sized

Horns : Short

Milk : About 3 to 5 litres daily



(4) Holstein cow

Found in : India and other countries

Colour : Black and white

Body shape : Large size

Horns : Very small

Milk : About 10 to 12 litres daily



(5) Jersey cow

Found in : India and England

Colour : Light brown

Body shape : Large

Horns : Thin and pointed

Milk : About 10 to 12 litres daily

Varieties of chickens

(1) White Leghorn

Found in : Italy

Colour : White

Produce : 200 to 250 eggs per year



(2) Brown Leghorn

Found in : Italy

Colour : A mixture of yellow, black, red and grey

Produce : 200 to 225 eggs per year



(3) Black Minorca

Found in : Spain

colour : Black

Produce : 120 eggs per year

(4) Rhode Island Red

Found : on Rhode Island in America

Colour : Red or brown

Produce : 200 to 300 eggs per year
(brown colour)



(6) Pure White American chicken

Found in : America

Colour : White

Produce : About 180 eggs per year

(5) Broiler chicken

Colour : White

Produce : Yields a large quantity of meat in a very short time. This variety is used for eating chicken. Their meat is tender and juicy.



- ◆ Explain how income can be enhanced by raising animals and birds. Give information about the varieties of cows and chickens seen in the surroundings.

Information Technology

- **Know your desktop**

(a) **Icon** (b) **Wallpaper** (c) **Task-bar**

- **Desktop**

We cannot give a command to a computer the moment the power is switched on. First the computer needs time to retrieve the operating system from its memory. This process is called 'booting'. The screen we see once booting is completed is called 'starting desktop'.



Now we can start doing any tasks we want using the computer. The tasks are represented by little pictures called icons. We can see these icons on the monitor. That is why it is called a desktop. Shortcuts to the programs which we use to do various tasks are already there on the screen in the form of pictures or, they can be created. The pictures in the form of shortcuts, are called 'icons'. In order to start any programme or application we must use the mouse to double click on the corresponding icon.

Wallpaper :

The picture that we see in the background once the computer has booted, is called the **wallpaper**. You can even use photograph or a picture that you have made as the wallpaper.

Taskbar :

Icons of the windows of the tasks that the computer is doing can be seen on a strip called the taskbar. The **taskbar** appears at the bottom when the computer is booted.

Introducing the Calculator :

A **calculator** is used to do calculations accurately and quickly. To carry out mathematical operations while using the computer we need a calculator.

Types of Calculators

(1) **Standard Calculator** (2) **Scientific Calculator**

Calculator :

Start – Programs—Accessories—Calculator



My Activity : Start the computer and observe the details on its desktop.

Road Safety



Stop



Slope ahead



School ahead



Railway crossing



Ascent / rise ahead



No parking. Do not park your vehicle here.



Left turn
Turn left.



Blow horn.



Go straight ahead.



Right turn
Turn right.



Towards hospital



Parking
Park your vehicle here.



My Activity : Describe your experience of the information technology that you have used for online studies.