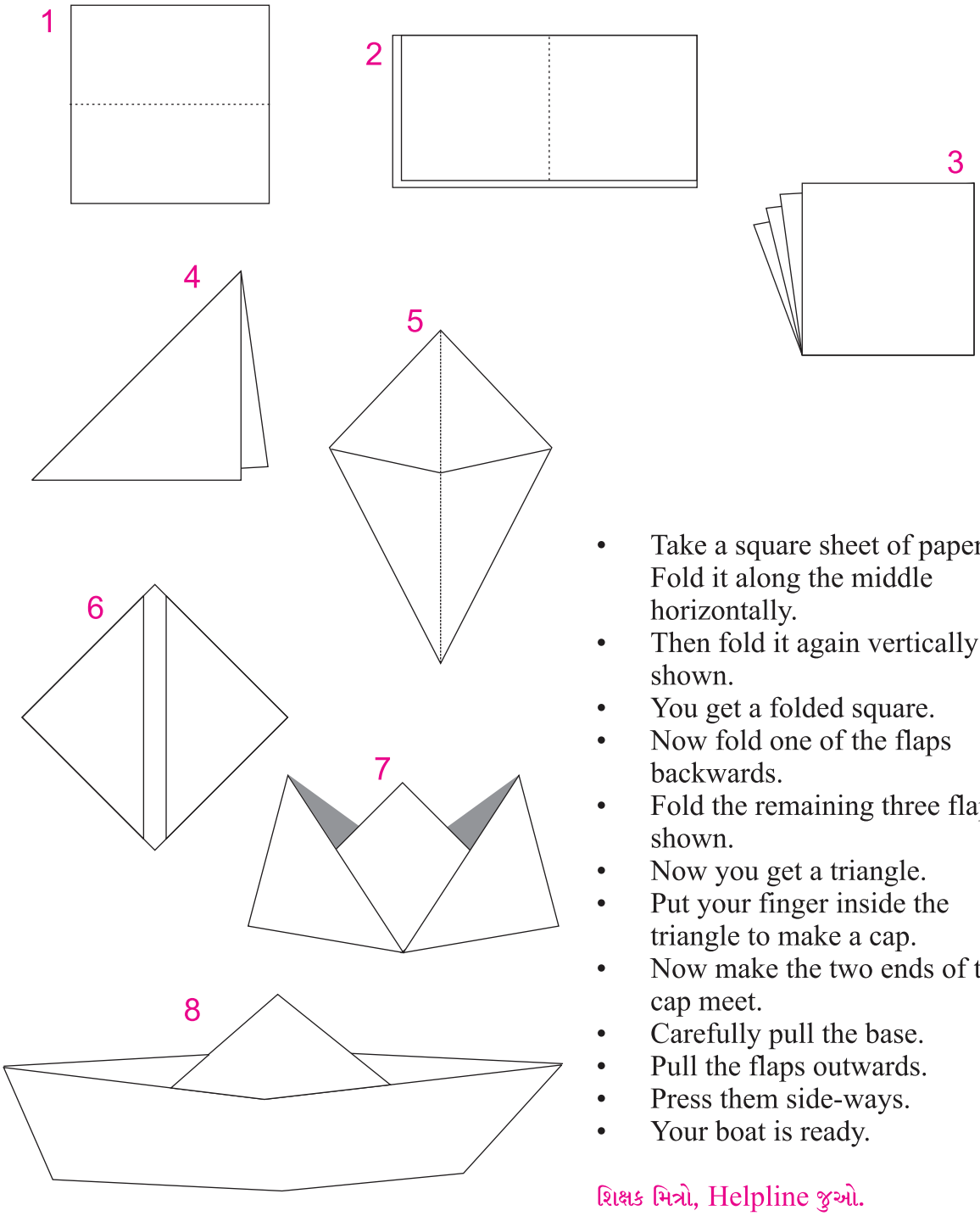
F6U4V2

UNIT - 2 Step by Step

ACTIVITY - 1

Listen and act. Work in a group.



- Take a square sheet of paper. Fold it along the middle horizontally.
- Then fold it again vertically as shown.
- You get a folded square.
- Now fold one of the flaps backwards.
- Fold the remaining three flaps as shown.
- Now you get a triangle.
- Put your finger inside the triangle to make a cap.
- Now make the two ends of the cap meet.
- Carefully pull the base.
- Pull the flaps outwards.
- Press them side-ways.
- Your boat is ready.

શિક્ષક મિત્રો, Helpline જુઓ.

ACTIVITY - 2

[A] Homemade Housefly / Honey bee trap

Mosquitoes and flies are nasty pests. They spread malaria, cholera and typhoid. We have a swarms of flies and mosquitoes in monsoon and winter. We try to kill them. But it is very difficult to catch a fly or a mosquito. So we become the victims of their bites. We apply many insecticides. But they are not much effective. Here is an easy solution. We can prepare a trap to catch and kill the flies and mosquitoes. It is a simple trap.

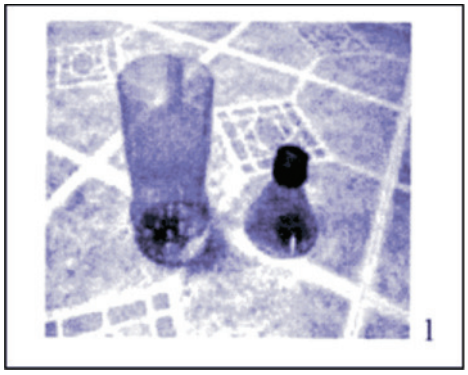
To make this trap we require the following things :

1. An empty plastic bottle of water
2. A pair of scissors
3. Cello-tape / gum-tape
4. Dishwashing liquid and water
5. Food items: Very small pieces of apple, 5 grams of sugar and a few drops of lemon juice

Follow the instructions:

1. Take a plastic bottle. Cut it into two pieces as shown in the picture.
2. Remove the cap first. Turn the small piece upside-down. Put the neck part into the bottle.
3. Attach the two parts with the staple or a piece of tape.
4. Put/drop the food at the bottom of the bottle.

Our device - the mosquito trap is ready. Hang it inside your house or room.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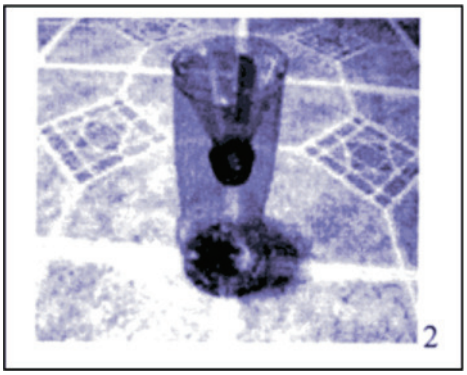
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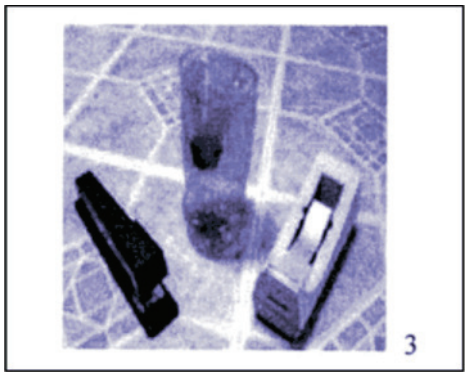
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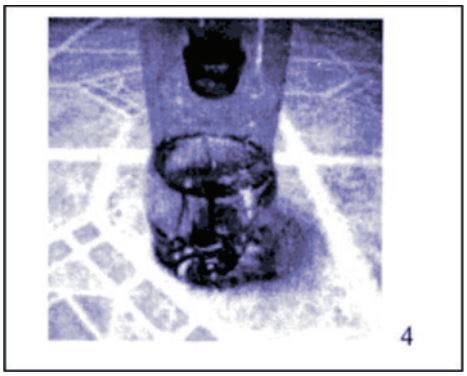

4

How it works:

Sugar water, dish washing liquid and other food items will attract the flies and mosquitoes. They will enter the trap. They will fall into the liquid. Their wings will be wet. They will not be able to fly back.

Note: The distance between the upside-down neck and the liquid at the bottom should not be more than 2cm.

[B] Write 'T' or 'F' in the box. Correct the false statements and write them.

1. Mosquitoes and flies are our competitors. ☐

   _____

2. Mosquitoes prepare a simple trap to kill man. ☐

   _____

3. Don't remove the bottom of the bottle. ☐

   _____

4. Two parts of the bottle are attached. ☐

   _____

5. Use scissors to cut the food item. ☐

   _____

[C] Fill in the blanks using the words in the brackets.

Mahesh prepared a mosquito trap. He is describing the steps :

I_____ a bottle. I _____ the bottle with _____ .

I _____ the cap. Then I put the part _____ on the bottle.

I _____ both the parts with a _____ . My trap was ready.

(took, scissors, cut, upside-down, removed, sticky tape, stitched)

[D] Make a device to catch the mosquitoes and flies. Your teacher will help you.

(આ પ્રવૃત્તિ કરવા માટેની સૂચનાઓ Helpline માં આપેલી છે.)

ACTIVITY-3

Read the process- *Stitching Buttons*

Things required:

• needle • thread • buttons • piece of cloth

Steps :

- Take a needle. Take a piece of thread.
- Put through the pointed thread in the needle eye.
- Match both the ends of the thread. Make a knot.
- Put a button at the proper place of the cloth.
- Pierce the needle from beneath the cloth.
- Match the button hole and needle point.
- Pass the needle through the button hole.
- Stretch the needle to the full length.
- Pierce the needle beneath the button hole.
- Pierce it upward and downward for three to four times.
- In the end, bring the needle beneath the cloth.
  Tie knot beneath the cloth and cut the thread.

ACTIVITY-4

Read the dialogue:

Mahesh wants to open an account in a bank. He goes to the bank. He meets the manager.

Mahesh : May I come in, sir?

Manager : Yes, you may. What can I do for you?

Mahesh : I want an SD account to be opened in the bank.

Manager : OK, take this form. Fill in the details.

Mahesh : Sir, I have filled up the form.

Manager : Now, paste your photograph and sign it.

Mahesh : Here it is.

Manager : How much money do you want me to deposit?

Mahesh : ₹ 500/-

Manager : Ok, now give your form and money to the cashier.
He will give you a passbook.

Mahesh : Thank you, sir.

ACTIVITY- 5

Study the form. Fill in the details. Your teacher will help you.

Students' Bank of India

(For office use only) CIF No. ☐☐☐☐☐☐☐☐☐☐☐

Account No. ☐☐☐☐☐☐☐☐☐☐☐

Branch to affix rubber stamp of name and code No.

Date : D D M M Y Y Y Y

Self / First Applicant

1.Please, fill up in BLOCK letters only and use black ink for signature. Please leave one box blank between two words. Tick (✓) the appropriate boxes.

2.Fields marked asterix (*) are not mandatory.

3.Please affix a passport size photograph in the box provided. Also enclose another photograph for affixing in the pass book.

4.For opening account of minors, where proof of identity/address is available, the same will be provided by Father/Mother and Natural Guardian.

5.In case of illiterate customers. Left Thumb Impression (LTI) to be affixed and verified.

Personal Details

Customer Type : ☐ Public ☐ Staff Senior Citizen : ☐ Yes Minor : ☐ Yes

☐ Mr. ☐ Ms. ☐ Mrs. Other _____

Name :

(First Name) (Middle Name) (Last Name)

Name of Father / Husband / Guardian : ☐ Mr. ☐ Ms. ☐ Mrs. ☐ Other _____

(First Name) (Middle Name) (Last Name)

Date of Birth : d d m m y y y y Gender : ☐ Male ☐ Female Nationality _____

Mother's Maiden Name : ☐☐☐☐☐☐☐☐ Marital Status : ☐ Married ☐ Unmarried ☐ Others

UID : ☐☐☐☐☐☐☐☐☐☐☐☐ UID of Father / Mother (in case applicant is a minor): ☐☐☐☐☐☐☐☐☐☐

Correspondence Address (Current Residential / Office)

Landmark / Street:

City : PIN: State:

Telephone no. Mobile No.

Additional details (Wherever applicable)

Income: _____ ☐ Monthly ☐ Annually **Assets (approximate value) Rs.:**_____

*Religion : ☐ Hindu ☐ Muslim ☐ Christian ☐ Sikh ☐ Other _____

*Category: ☐ General ☐ OBC ☐ SC ☐ ST

Educational Qualification: ☐ Non-Graduate ☐ Graduate ☐ Post Graduate ☐ Other _____

Occupation Type : ☐ Salaried ☐ Self-employed ☐ Business ☐ Retired ☐ Student ☐ Others_____

Organization's Name: _____ * Designation / Profession : _____

Any one document from each of the mentioned two columns for a photo-identity and proof of address.
(Please tick the appropriate box and give details below).

Proof of identity

A) Passport where the address differs ☐

B) Voter ID card ☐

C) PAN card ☐

D) Govt./Defence ID card ☐

E) ID card of a reputed employer ☐

F) Driving License ☐

G) Photo-ID card issued by Post Office ☐

H) Photo-ID card issued by University/Institute approved by UGC/AICTE ☐

I) Letter from a recognized public authority or public servant verifying the identity and residence of the customer. ☐

Proof of address (of Correspondence Address)

A) Creadit card statement ☐

B) Salary slip (with address) ☐

C) Income tax/Wealth tax assessment order ☐

D) Electricity bill ☐

E) Telephone bill ☐

F) Bank account statement ☐

G) Letter from a reputed employer ☐

H) Letter from any recognized public authority ☐

I) Ration Card ☐

J) Copies of Registered Leave & License Agreement/Sale Deed/Lease Agreement ☐

K) Certificate issued by warden of hostel of University/Institute (approved by UGC/AICTE) where the student reside ☐

L) For students residing with relatives, address proof of relatives along with their identity proof. ☐

Introduction Details

I _____ having CIF no. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐ confirm that I am a holder of account number ☐☐☐☐☐☐☐☐☐☐☐ of Student Bank of India for the past _____ months / years and personally know the applicant (s) for more than _____ months/years and confirm his/her/their identity and address as stated above.

Date. d d m m y y y y

_____
Signature of the introducer

_____
Sign verified by (Sign. SS no. stamp)

With Student Bank of India agreeing to open my Small Deposit account under liberalized KYC norms specified by RBI, I undertake to submit the required KYC documents as and when the balance or total annual transaction in my account exceed the stipulated limits in this regard. In the event of non compliance the Bank is within its rights to stop operations in account after advance notification as RBI instructions.

_____
Signature of the Applicant

(See the Helpline)

ACTIVITY - 6

[A] Work in pairs.

Laxman prepared a set of cards to show how to make lemon-sharbat. But he forgot to write the instructions for each card. Write the instructions in the blanks.

(Mix)

1 _____

(Cut)

2 _____

(take out seeds)

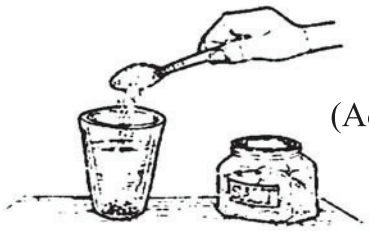
3 _____

(Pour)

4 _____

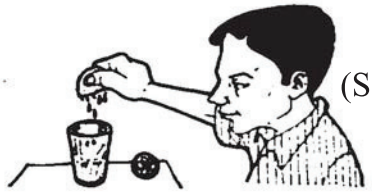
(Add)

5 _____



(Add)

6 _____



(Squeeze)

7 _____

[B] Arrange the sentences. Read the process of lemon sharbat.

1. Laxman poured some water in the glass.

2. _____. 3. _____.

4. _____. 5. _____.

6. _____. 7. _____.

[C] Answer the following questions.

1. What did Laxman use to mix sugar?

Ans. _____.

2. How much of sugar did Laxman add?

Ans. _____.

3. At what time did Laxman use a spoon?

Ans. _____.

4. What did Laxman do after squeezing the lemon?

Ans. _____.

5. Why did Laxman add salt in it?

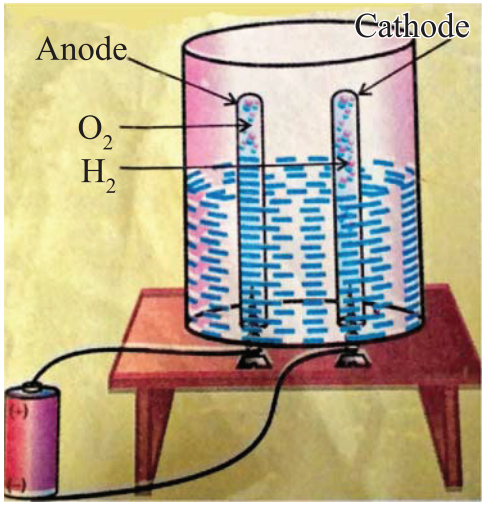
Ans. _____.

ACTIVITY - 7

Read the process.

Materials:

Half cut plastic jar, two screws, copper wire, two test tubes, dry battery cell or 6 volte battery and sulfuric acid.



Procedure:

- Take a plastic jar (half cut) as shown in the figure. Make two holes at the bottom. Fit the holes with the screws. Remember, there should not be any water leakage.
- Join the outer ends of the screws with a battery or a dry cell. This is our voltameter.
- Now, fill half of the voltameter with pure water.
- Add four or five drops of sulfuric acid.
- The water will become a good conductor.

(See the Helpline)

ACTIVITY - 8

[A] Mega Ride

Gujarat is a progressive state. Ahmedabad is the largest city and center of business in Gujarat. Gandhinagar is the capital of Gujarat. About 50,000 people everyday travel between these two capitals -old and new. So, we need a good transport facility.

The Government of Gujarat planned for a new railway project. The government started a ₹ two thousand crores (200,00,00,00,000) company for that project. The name of the company is MEGA : Metro-Link Express for Gandhinagar and Ahmedabad. The cost for this project is about ₹ one thousand two hundred crores (12,00,00,00,000).

MEGA
METRO - LINK EXPRESS FOR GANDHINAGAR AND AHMEDABAD
(A Government of Gujarat Undertaking)

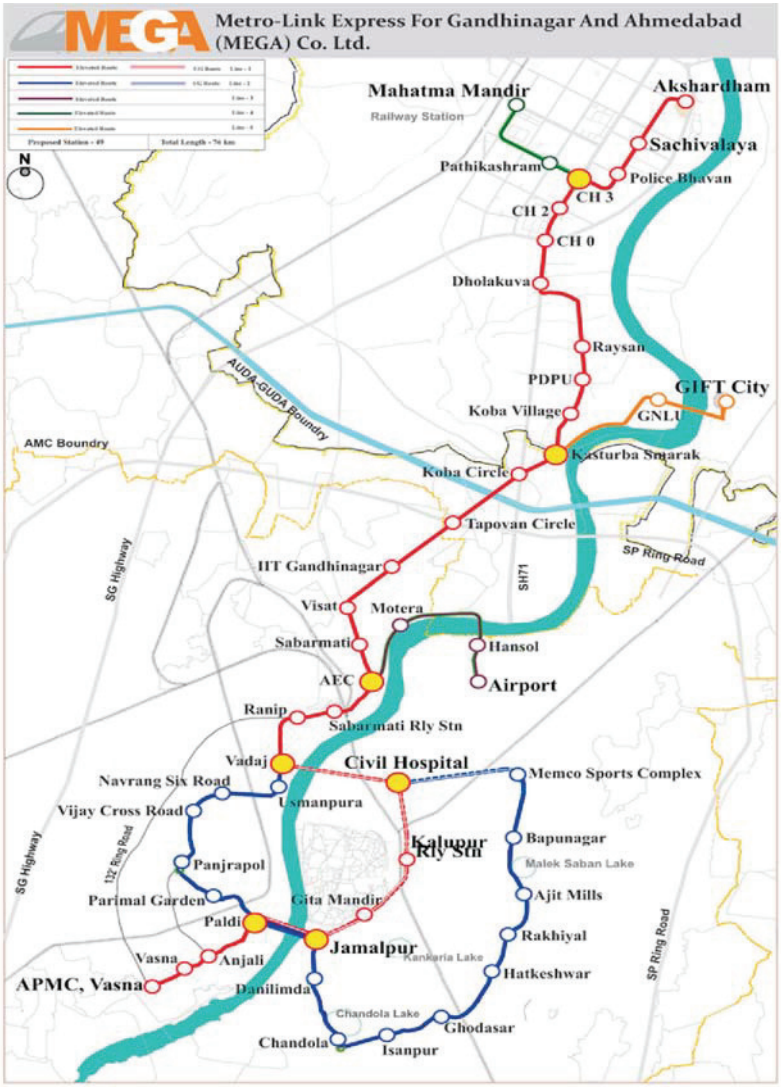
This metro-rail project has two phases. In the first phase, there will be three lines : North-South corridor, East-West corridor and underground corridor. Total length of all the three lines will be 76 k.m.

The North-South corridor will connect Ashram Road to Gandhinagar. This corridor will be 32.65 mts long. It will start from APMC Vasna on National Highway 8A. It will pass through Vasna, Paldi, V.S.Hospital and Town Hall.

This line will cross the East-West corridor at Income-tax Junction. It will turn a little left near Coba circle and will run towards Gandhinagar. There are two more junctions on this line : Info city and GIFT city. There will be 31 stations on this corridor.

Now, let us go on the East-West corridor. It will start from Kalupur. It will run through the main areas of Ahmedabad. Then the line will turn south towards IT circle. It will go towards commerce crossing. Thaltej crossing will be the last station of this route. It will be the terminus on East-West corridor. Total length of this line will be 10.90 kms. It will connect the eastern and western Ahmedabad.

Most of the metro route will be on pillars and over bridges. This will be called elevated route. The travellers will enjoy the beautiful scenes in the town. It will be a lovely view to see metro-trains running on elevated tracks.



regular train on track

metro rail on elevated track

underground metro

You will be able to travel without tickets in this metro rail. You can use smart-card facility. You can enter a station with your smart card. You swipe the smart card at your exit station. The system will automatically count the travel charges. The trains will run without drivers. But you need not worry. Technology will take care of your safety. CBTC (Communications-Based Train Control) signaling technology will make your travel safe.

All the metro-cars will be air conditioned . The train will travel at the maximum speed of 110 km per hour.

Ready for the ride ?

[B] Put a cross on the wrong option and make the statement true. Read aloud.

1. **East-West / North-South** corridor will connect two parts of Ahmedabad.
2. Travellers will travel in MEGA trains with **a ticket / smart card.**
3. Most of the metro trains will run on **underground / elevated** route.
4. The MEGA trains will run **with / without** drivers.
5. The terminus for East-West corridor will be **Thaltej crossing / Kalupur.**

[C] Answer the questions.

1. How many lines will be in the first phase of MEGA ? Name them.
2. Which line will connect eastern and western Ahmedabad ?
3. What will be the total distance between Kalupur and Thaltej crossing ?
4. What does it mean by elevated route ?
5. Write three specialities of MEGA trains.

[D] Former President of India, Dr. APJ Abdul Kalam will meet students at Mahatma Mandir on 15th January. You will reach Ahmedabad from your place. Which MEGA route will you take to reach Mahatma Mandir?

ACTIVITY - 9

[A] Work in groups of four. Plan a one-day trip with low cost and lots of fun. Select an option for each question.

1. Where will you go?
   (A) nearby farm (B) nearby bazar (c) nearby water park
2. How will you go?
   (A) on the bicycle (B) by shared rickshaw (c) by friend's car
3. What will you carry?
   (A) fruits (B)ready-made snacks (c) raw material for cooking
4. What will you do there? _____
   _____
5. What will be the cost of your trip ?

1. Ticket from my city / town / village	₹ _____
2. Food items on the way	₹ _____
3. Lunch	₹ _____
4. Sight seeing tickets	₹ _____
5. Shopping	₹ _____
6. Auto fares	₹ _____
7. Miscellaneous expenses	₹ _____
Total	₹ _____

(B) You have started a company of biscuit/chocolate/ bike/cloths. Prepare a logo for your company.
બિસ્કિટ, ટુથપેસ્ટ, દવા વગેરેનાં રેપર્સ એકઠા કરો. તેમના પર આપેલા કંપનીના લોગોના ચિત્રો જુઓ અને તમારા શિક્ષક સાથે લોગોના ચિત્રની ચર્ચા કરો.

HELPLINE

Activity-1

પાંચ વિદ્યાર્થીઓનાં ગ્રુપ બનાવો. દરેક ગ્રુપમાંથી એક વિદ્યાર્થીને સૂચનાઓ વાંચવા કહો. ગ્રુપના અન્ય વિદ્યાર્થીઓ સૂચના પ્રમાણે પ્રવૃત્તિ કરશે.

Activity-2 D

જરૂરી સામગ્રી : બોટલ, ગ્રુપની સંખ્યા મુજબ

Food items: sugar, water, piece of apple, dish washing liquid, scissors, cutters, knives etc.

પાંચ વિદ્યાર્થીઓનાં ગ્રુપ બનાવો. દરેક ગ્રુપને બોટલ કાપવા જુદી જુદી વસ્તુઓ આપો, જેવી કે કાતર, કટર, છરી વગેરે. આજ રીતે બોટલના બે ભાગને જોડવા માટે સ્ટેપ્લર, યુ-પિન, ક્લિપ જેવી વસ્તુઓ આપો. એકાદ ગ્રુપને બન્ને બોટલ જોડવા બોટલની સાઈડમાંથી બન્ને બાજુ કાણા પાડી તેમાં પાતળો સળીયો ભરાવવાનું પણ કહો. Mosquito trap માં food item માં અલગ અલગ વસ્તુઓ આપો જેમ કે sugar, water, piece of grapes/apple etc.આમ કરવાથી દરેક ગ્રુપનું વર્ણન અલગ અલગ થશે. દરેક ગ્રુપ પાસે Mosquito trap ની process નું વર્ણન કરાવો.

Activity-5

જુદી જુદી બેંકના આવા બેંકખાતા ખોલાવવાના ફોર્મ વર્ગમાં લઈ જઈ વિદ્યાર્થીઓને બતાવો.

Activity-7

ધોરણ - ૭ પ્રથમ સત્ર વિજ્ઞાન અને ટેકનોલોજીના પાઠ ૪ નો સંદર્ભ વિદ્યાર્થીઓને આપો. તેની ચર્ચા કરો.

Recite, sing and enjoy.

Treehuggers

Release it now, just like a big balloon...
A prayer to reach the mountains of the moon
To citizens of Earth alas we say
Go find yourself a tree to hug today!

And if a grownup says Don't be a fool!
Or Is that what they're teaching you in school
Just find this poem and read this simple rhyme
It's cool to HUG a TREE from time to time!

Children this is how the world can be
Making Earth plan A and not plan B
Wear Change! Share Change! Sing Change! Bring Change
And start by hugging a tree!

U8C4T7