

My World

(Environment Studies)

For class IV



Punjab School Education Board

Sahibzada Ajit Singh Nagar

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Foreword

The Punjab School Education Board has been continuously engaged in developing syllabi, producing and renewing text books according to the changing educational needs at the state and national level.

This book has been developed in accordance to the guidelines of National Curriculum Framework-2005 (NCF) and PCF-2013, after careful deliberations in workshops involving experienced teachers and experts from the board and field as well. All efforts have been made to make this book interesting with the help of activities and coloured figures. This book has been prepared with the joint efforts of subject experts of Board, SCERT and experienced teachers/experts of environment studies. Board is thankful to all of them.

The authors have tried their best to ensure that the treatment, presentation and style of the book in hand are in accordance with the mental level of the students of class IV. The topics, contents and examples in the book have been framed in accordance with the situations existing in the young learner's environment. A number of activities have been suggested in every lesson. These may be modified, keeping in view the availability of local resources and real life situations of the learners.

I hope the students will find this book very useful and interesting. The Board will be grateful for suggestions from the field for further improvement of the book.

Chairman

Punjab School Education Board

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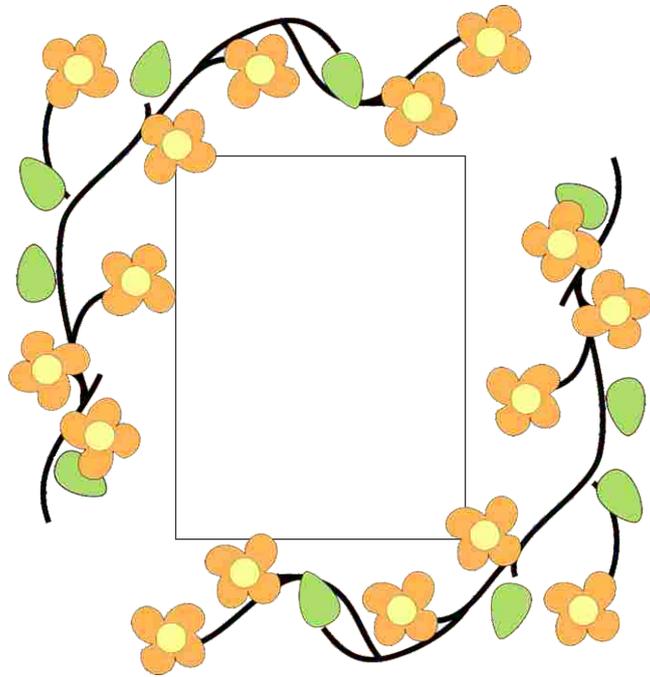
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Name.....

Class..... Section.....



A few days ago, Deepu's sister took birth in his family. Today on her 'Namakaran' Ceremony, her bua and other relatives have gathered. The new born baby was named as 'Anu'. Deepu was really happy to see his bua at home. Before her marriage when his bua ji was with Deepu's family, she used to love and take care of Deepu. That's why Deepu loved his bua a lot. Deepu's mother said to his bua, "Sister, Deepu feels very happy on your visit. He missed you a lot".

- Bua** – I too miss this place and family members a lot. Here, we have a big family which includes your family, elder brother's family, my mother and children. There in the city, earlier we were only two persons, Deepu's uncle and I. Due to his job, we could not stay with our joint family in the village. You know very well that we did not have a child, so we have adopted Sonu as our son. Now we are enjoying a very happy life.



Mother: In the old days, there were only joint families. It was very easy to bring up children in a joint family, and living together was a great fun too. The elders had their hold on the family and children didn't get spoiled. They learnt here to live in society.

Q.1. Fill in the blanks :

(company, family, affection)

- a. Ours is a very big here.
- b. The children do not get spoiled in the of elders.

Bua – Bhabi ji, I always wished to live in a joint family but due to my husband's job, I could never live with my family. Here it is a big family and there we are a family of three members only.

Mother – Anyway, you have done a good job by adopting Sonu. He is a very sweet child.

Bua – Yes, now we are very happy. He does not misbehave unlike other children. We really love him. I never feel that I have not given birth to him.

Meanwhile Deepu's elder aunt (Tai ji) and her daughter Suman came. Suman teased Deepu's sister Anu and she started crying. Deepu's mother took her in her lap.

Q.2. Write any two benefits of a joint family.

.....
.....

Activity 1 : Draw a family tree of your present family members.



Anu stopped crying. Deepu's mother and aunts resumed their conversation. Deepu's bua said, "In my in-laws house, there is a modular kitchen but you don't have even an exhaust fan." Deepu's mother told her that she had also asked her husband many times for exhaust fan but he did not care. He spends his income in his own way.

Bua said, "This is not fair. If he earns and goes to office, you also don't sit idle for the whole day. You do all house hold jobs. The home should be run according to the consent of all. I think, you should buy a sewing machine, because you are expert in stitching and tailoring. You can earn something for yourself. It will help you to fulfill your own needs".

Deepu's mother replied, "Sister, you are right. I also think like this, but at present Anu is too young to be left alone. When she grows up a little, I will start stitching".

After sometime, Deepu's friend, Happy, came there. Happy and Deepu started taking food together. On seeing this, Deepu's grandmother started grumbling. Deepu's mother said, "Maa ji, why are you getting upset ? Happy is a nice boy, he is very good at studies. I feel that Deepu should live in his company so that he can become a nice boy".

Grand Mother : But I have come to know that he belongs to a different caste. I do not like Deepu sharing food with him. In our times, it was not allowed.

Mother :

Maa ji, now the time has changed. His friends should be good irrespective of their caste and religion. It hardly matters who is born in which religion or caste.



Things to remember

- There is an increase in the number of family members due to birth or adoption of child.
- When a girl gets married, the number of members in family decreases. With the coming of newly wed, after the marriage of a boy, number of family members increases.
- It is more beneficial and secure to live in joint families.
- We should spend with the consent of the family.
- Women are also participating like men in every work.
- There is a lot of work for home-makers.



Q.3. Fill in the blanks with appropriate words:

(happily, nice, bad, sadly)

- Our friends should be
- Birth of a girl child should also be celebrated

Q.4. How many members are there in your family ?

.....
.....

Q.5. Who earns money in your family ?

.....
.....

Q.6. Who is your best friend ?

.....
.....

Q.7. Write any good habit of your friend.

.....
.....

Q.8. Why was the aunt living separately from joint family ?

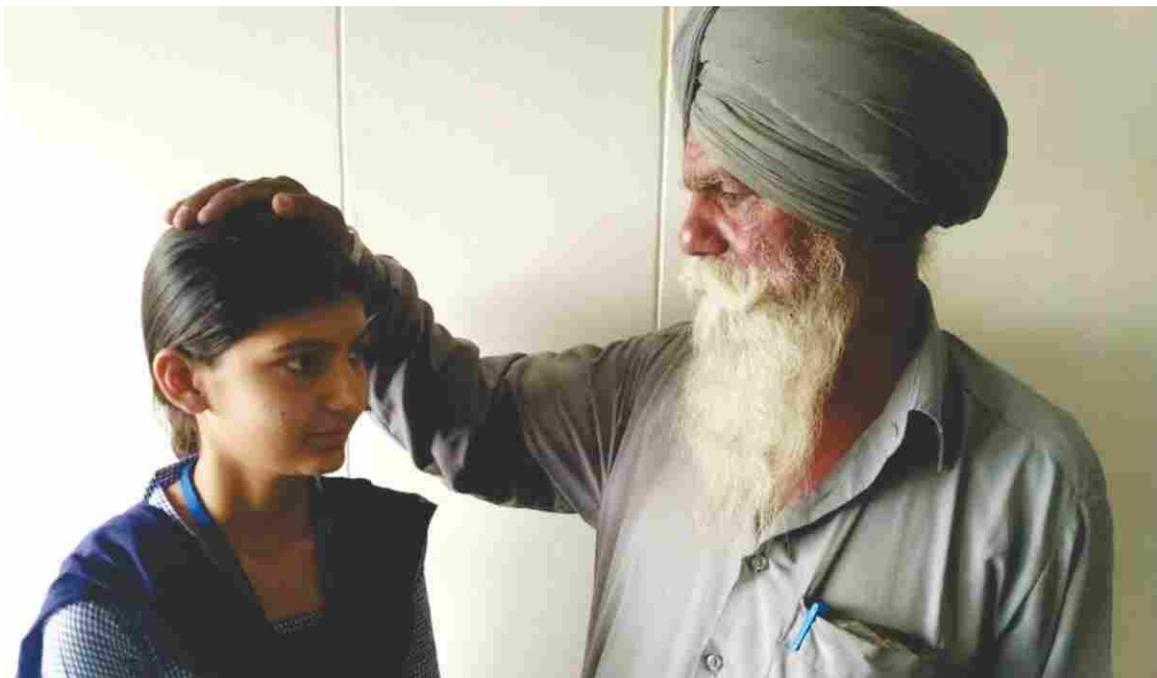
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Dear Children, we deal with many things in daily life which we recognise quickly. Do you know, that we can identify these things not only by seeing, but our skin, nose and ears also play a great role in doing so. We can even recognise something by touching, smelling or by hearing its sound with our closed eyes. Let us try to understand the experiences shared by children while walking in a park.

Today, Kiran was very happy as she stood first in her class. On reaching home, she put her school bag aside and ran to her father to give good news. Her father happily patted Kiran's back and appreciated her. Kiran really liked that. Kiran's father called her mother and said, "Look, our daughter has stood first in her class".

Yesterday, Kiran was constantly busy in making mischiefs. She spilt tea on her clothes. So, her mother got irritated and scolded her. That is why Kiran was unhappy with her mother and was not talking to her. But when her mother hugged her and kissed her affectionately, she forgot her anger and became happy.



She also promised her mother not to be negligent while doing activities which could harm her or anybody else. Father told that ‘Anger’ and ‘Happiness’ are feelings felt by our mind.

Q 1. How do you feel when somebody pats your back ?

.....
.....

In the evening, Kiran and her elder brother Raju went to the park to play. Near the gate, the gardener was digging wet ground to make flower beds. From the newly dug ground, a typical pleasant smell was coming. They went ahead and saw many different flowers in their full bloom due to spring season. Kiran took her brother to the rose plants and said, “What a pleasant smell is coming from these flowers!”. Raju said, “Yes, it is good but the white flowers on the other side have very nice smell, which I like very much.”

Q.2. Make a list of some flowers the fragrance of which you like the most.

.....
.....

When both of them were busy in smelling the flowers, one of Raju’s friends came from behind and covered Raju’s eyes. Raju just touched and felt his hands with his own hands and at once shouted, “Arshdeep!”. Arshdeep removed his hands from Raju’s eyes and said, “Very Good ! I thought you will not recognize me and I will tease you”. Raju said, “Arsh, your hands are rough and fingers are very fat. So by the touch only I guessed that these were your hands”.

Activity 1 :

One child will sit in the class with his back towards the students. One student from the class will close his/her eyes. The sitting child will try to recognize/guess him/her by touching his/her hands, arms, clothes, fingers etc. This action will be repeated with other students also.

Today Arshdeep has brought his dog also with him. Raju was scared of his dog and he rushed inside. Arshdeep said, “Don’t get scared of my dog, it won’t harm you. I gave him a bath with soap, just touch and see how soft is its fur !”

So, Raju started patting the dog. Its fur was very soft. Raju liked it. Raju moved his fingers on its back lovingly and the dog too liked his action and started wagging its tail. Arsh said, "See! You were getting scared of it unnecessarily; it is looking at you friendly and lovingly." Then Raju remembered that whenever he pats his cow's calf at home, it too starts licking his hand.

He understood that animals, like humans, also feel emotions and touch. In the mean time, gardener of the park also came there and he told Arsh that Dogs were prohibited in the Park and so he should take it out. Arsh didn't like what he said but afterwards, he realised his mistake.

Activity 2: Some pieces/articles of iron, wood, plastic, brick, stone, clay, rubber, etc., will be kept on the table. The students, with their eyes blind folded, will try to recognize the material of these pieces by touching them only.

Both the friends were lost in gossiping, they forgot about Kiran and walked away from her. Kiran sat down on a bench near the flower beds. A man was already sitting on the bench. He moved towards Kiran and engaged her in his talks. He started asking about her class, home etc. He also gave a toffee to kiran. While talking, he started moving his hand on her back. Kiran became very uncomfortable due to his behaviour. She got up at once and ran towards her brother. She told Raju that a bad man is sitting on the bench. Raju and Arshdeep ran towards the bench but by the time the man had gone away from there.

Children, whenever somebody touches you or talks to you in the manner not liked by you or teases you, move away from that person and immediately tell your elders.

Then they drank cool water from the water cooler situated in a corner of the Park. The Sun was setting, so they started back to home. There was a huge heap of garbage in the corner of the park. It was stinking badly. Kiran closed her nose. Raju said, "Just now we have been enjoying the fragrance of the flowers and here it smells bad." Arsh said, "If garbage is removed daily, it will not smell foul. When it remains here for many days, it gets decayed and gives such a foul smell".

We should produce minimum garbage. We should reduce the usage of polythene bags which produce garbage.



Heap of garbage in the corner of a park

Kiran and Raju reached home. A lovely aroma was coming from the kitchen. Both of them went straight to the kitchen.

Kiran – Mummy, what are you cooking ? It smells so good.

Mother – You do guess.

Raju – From aroma, it seems to be Halwa.

Mother – Very right.

Kiran – Mummy what is this ? It also smells very nice.

Mother – These are mint leaves, I will prepare tasty 'chutney' with it.

Raju – Mummy, the nice smell of food has made us very hungry. Please give us food quickly.

Mother – O.K., wash your hands. I make food for you.

Then whole family ate 'Hot Halwa' in food.



Things to Remember

- We should not do such mischievous activities which could cause harm.
- We can identify things not only by seeing, but also by smelling, touching and hearing their sound.
- Many flowers bloom in spring season only.
- Animals, like humans, feel emotions and touch.
- If behaviour of any known or unknown person is not liked by us, then we should tell elders.
- We should produce minimum garbage.
- We can feel different types of tastes with tongue.



Q.3. Fill in the blanks with suitable word :

(man, fur, loved, happy, fragrance, flowers)

1. Father was very
2. Mummy Kiran by taking her in lap.
3. Many bloomed due to spring season.
4. How soft is the of dog !
5. Another was also sitting on the bench.

Q.4. Tick (✓) the correct and cross (×) the wrong sentence :

(a) All flowers give same fragrance.

(b) Garbage must be managed daily.

Q.5. Tick (✓) the right sentence :

(a) **The fur of dog was very**

Hard

Soft

Thick

(b) **If somebody's touch is not liked by you, then**

tell the elders

hide from the elders

should not do anything

(c) **Stink was coming from**

Heap of soil

Heap of flowers

Heap of garbage

Q.6. Write the name of any two stinking things.

.....
.....

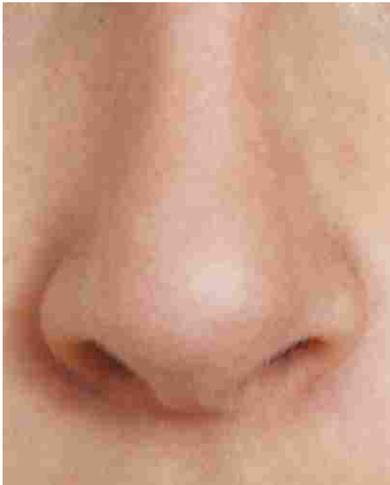
Q.7. Write the name of any three flowers which give fragrance ?

.....
.....

Q.8. Write the name of organ below the pictures :



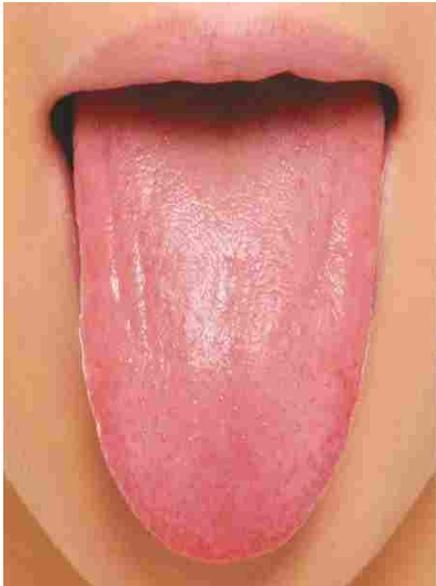
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Simran was hiding her kites at different places. She had made kites with great efforts. Today, there was a Kite Flying Competition in her school. She was really afraid that her younger brother might spoil her kites. Her mother felt it strange that girls fly kites. Her father said, "If girls can fly aeroplanes why can't they fly kites ? There is nothing to worry. The competition is being organized in school's ground. It is really safe to have 'kite flying' in an open space instead of flying on roof tops.

Basant festival comes once in a year. Her brother said, "Papa, this means that today we are not going to the Shalimar Garden to see fair ?" His mummy said, "Why not ? Today I have prepared yellow sweet rice for you. First have this, then after dropping Simran at her school, we will go to Shalimar Garden. While returning from Shalimar Garden, we will pick her up from the school."

There are many dangers of kite flying on roof tops :

- 1. Danger of falling off from the roof top.
- 2. Danger of getting electric shock.

Q.1. Why is it dangerous to fly kites on the roof tops ?

.....
.....

Q.2. On which particular day is it a tradition to cook yellow rice ?

.....
.....

Do you know ?

Fairs: Many kinds of fairs are organised in Punjab. Festival of Basant Panchami is celebrated with great zeal in Kapurthala (Kapurthala is a district also). This fair is being organised for approximately 100 years. Can you guess when did this celebration start ? This festival is held in city's famous Shalimar Garden. A variety of stalls like toys and eatables can be seen here to attract the children.



Likewise, the festival of Maghi is celebrated with great enthusiasm and dedication in Sri Muktsar Sahib. People take bath on Maghi (On Sangrand of Magh month) in the Holy Sarovar, one day after 'Lohri'. This festival is celebrated every year in the month of January, in the memory of '40 Muktas'. It continues for many days. The entire city adorns a festive look. Huge crowd can be seen in markets. There is a variety of stalls. Not only from Punjab but

vendors come from all over India to participate in the festival. There are many means of entertainment in the festival. Many people are seen waiting for rides but some people feel scared of riding on Giant Wheel. Everyone enjoys watching circus. Nihang-Singhs show skills of Gatka.



Scene of Mela Maghi at Sri Muktsar Sahib

Do you know that the old name of Sri Muktsar Sahib was 'Khidrane Di Dhab'. Try to find out if your city, town or village earlier had some other name also.

Q.3. Which fairs have you seen or visited ?

.....
.....

Sports: Not only fairs but sports are also means of our entertainment. Besides fun, games provide mental and physical health also.

We play different types of games, e.g., Ludo, Carrom-board, Hide & Seek, Chor-Sipahi, etc., at home with our friends or siblings. Some children play cricket which need bat, ball and wickets, etc., in streets or parks. Hockey is our National game in which hockey stick, ball, net and helmet are used by Goalkeeper. We play Kabaddi, Kushti (Wrestling), Races, Long-jump, Kho-Kho

etc. Kabaddi, Kushti and Kho-Kho are played in playground. Races are run on the tracks. Ribbon and whistle are required for these games. Shot put and Football are also played in some schools.

Today, there is Sports Day in Jeeti's school. Let's see in which game Jeeti is participating !.

On seeing Jeeti running ahead of all, the students started clapping with joy. To everybody's surprise, a loud roar, "Happy wins", "Happy wins" went the sky. "Jeeti wins" was the counter side's claim. So, there were two groups of students. One group was supporting Happy and the other group was with Jeeti. Finally students turned to their teacher, Ms. Sukhdeep who smilingly said, "Participation in games is more important than to lose or win, and Happy is the winner of this race". At this announcement, most of the students unanimously shouted, "Madam, but Jeeti was ahead, all the time, how could Happy be the winner ?" The teacher said, "No doubt, Jeeti was running ahead of all the competitors in the race but in the last part of the race, Happy took rapid strides and touched the ribbon. So dear children, there are some rules that help us to play the games properly. It becomes easy to decide the winner with the help of these rules."

Referee or the Umpire settles the disputes during the games.

Q.4. What is the importance of game rules ?

.....
.....

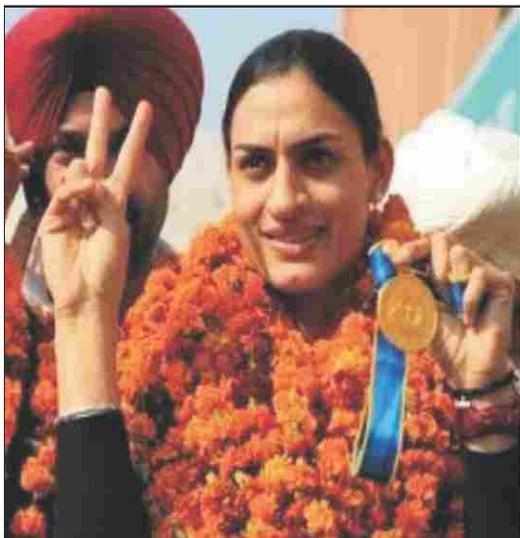
Below are given the pictures of some Indian players who have brought laurels to their parents and to themselves because of their consistent hard work and commitment. Now a days girls, like the boys, also take part in all games. Now many Indian girl and boy players earned name & fame at National and International level.



Sunita Rani
Field- Athletics
Honour- Padamshri



Dr. Rupa Saini
Field- Hockey
Honour- Arjuna Award



Manjeet Kaur
Field-Athletics
Title- Golden Girl



Milkha Singh (The Flying Sikh)
Field- Athletics
Honour- Padamshri

Activity 1 :

Who is your favourite sports star ? Cut his/her picture from the newspaper or magazine and paste it in the given box.



Things to Remember

- Basant Festival of Shalimar Bagh in Kapurthala city is world famous.
- Khidrane Di Dhabh is the old name of Shri Muktsar Sahib, famous for Maghi festival.
- There are different rules for different games.
- Participation in games is more important than to loose or win.
- Games provide physical and mental fitness along with entertainment.



Q.5. Fill in the blanks with suitable words :

(gatka, Participation, games, girls, healthy, fairs)

- (a) Not only fairs but are also our source of entertainment.
- (b) is more important in games than to loose or win.
- (c) Nihangh Singhs show their skills.
- (d) If can fly aeroplanes then why can't they fly kites.
- (e) Many are held in Punjab.
- (f) Games Keep us

Q.6. Tick (✓) the right and cross (x) the wrong sentences :

- (a) Basant Panchmi fair is held in Kapurthala City.
- (b) There are some rules for every game.
- (c) Games teach us to fight.
- (d) Basant comes after winter season.
- (e) Maghi Festival is held a day after Lohri.

Q.7. (a) To which game Milkha Singh is related ?

Cricket Hockey Races

(b) **What do the games teach us :**

Fighting Coordination Jealousy

(c) **Where is the Maghi Festival held ?**

Sri Anandpur Sahib

Sri Muktsar Sahib

Jalandhar



In third class, we have made introduction to a few professionals. Let's now acquire some knowledge about some more professionals and instruments used by them.

Next week, there is annual function in Rajju's school. On that day, there will be a fancy dress competition also for the children. Rajju wants to act as a doctor in that competition. She said to her mother, "Mummy, please stitch a doctor's coat for me to wear in the competition."

Her mother refused and said, "Dear Rajju, I don't know how to stitch a coat." "Mummy, once you stitched a beautiful 'Salwar Kameez' for me," Rajju said. "Dear, your (grandmother) Nani had trained me in stitching salwar kameez only," mother replied.

"Did Nani know everything?"

"Yes, she used to knit carpets and thick sheets very beautifully. Today also, She has kept her *Charkha* and its *hathha* with tender love". "Then my coat.....," Rajju was sad.



Charkha

Tapestry beater
(hathha)

Her mother lovingly touched her head and said, “Don’t get upset dear. Let us go to the tailor and ask him to stitch a coat for you.”

“Yes, It is right, besides, I will buy the apparatus and instruments i.e. thermometer, syringe, stethoscope, etc., used by Doctor,” said Rajju.



Stethoscope



Thermometer



Syringe

Q.1. For what purpose the doctor uses thermometer ?

.....
.....

Q.2. Which Instruments are used to make ‘Carpets’ ?

.....
.....

Rajju’s mother agreed to take her to the tailor. While getting ready she said, “O.K., I will accompany you and get my shoes repaired from Prem (cobbler).” Rajju reached the tailor’s shop with her mother.

Rajju asked tailor, “Uncle, can you stitch a doctor’s coat for me ?”

“Yes, baby definitely.”

“Uncle from where have you learnt all this?”

“I have done two years course in tailoring. Your aunt does the embroidery work,” he pointed towards his wife.

The tailor took Rajju’s measurement with the help of an inches tape.

Rajju carefully observed the tailor’s sewing machine. The tailor’s sewing machine was bigger than the sewing machine at her home. She saw

the embroidery machine for the first time. She had seen the scissors and the inches tape at her home earlier also.

Rajju was very happy to see colourful chalks lying near the tailor. He was marking on clothes with the help of these chalks. There were buttoning and hemming needles also.



Tools used by tailor

Activity 1: Measure your height with inches tape and find out how feet tall you are. feetinches.

There are 12 Inches in a feet.

On their way back, Rajju's mother gave her shoe to the cobbler for repair. With the help of different tools, he mended the shoe.

Let us learn about cobbler's tools.

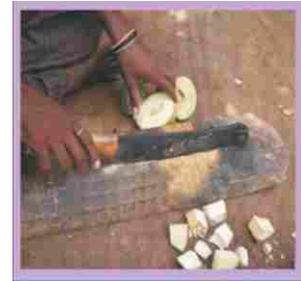


Brush

Iron Tripod

Needle

Rajju and her mother started back to their home. On the way, seeing Soni's shop, suddenly her mother remembered that she had to buy the pickles for home too. Rajju's mother told Rajju that Soni's mother prepared pickle herself. As it is very tasty, all villagers buy pickle only from Soni's shop.



Fruit Cutter

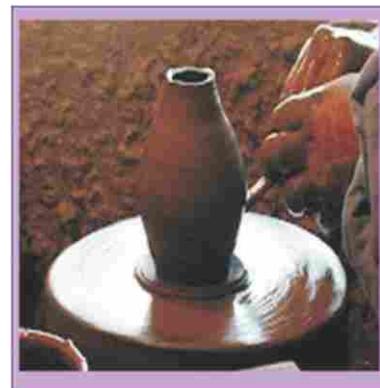
A fruit cutter was lying there which Rajju has seen for the first time.

For the teacher : The teacher should discuss in class about the different fields in which women are working.

Q.3. How many of the following jobs have you seen being done by women? Tick (✓) the right answer:

1. Rearing of cattle.
2. Weaving of carpets and thick sheets.
3. Driving of buses.
4. Making clay pots.
5. Working in armed forces.
6. Managing hotels/dhabas.

Then they purchased a pot from a Potter, sitting in a decorated shop near road. Rajju asked the potter, "Uncle, how can you prepare round clay pots and from where have you learnt it ?" Rajju spoke in a single breath.



Potter replied, "Clay is prepared by kneading it properly. Utensils are prepared with the help of Potter's Wheel. Then these are dried and hardened in the furnace. This is our hereditary profession. I had learnt this work from my father and grandfather.

Potter's Wheel



Things to Remember

- The professions were learnt earlier from ancestors or Gurus. Now-a-days, they are learnt through professional courses.
- Different tools are used in every profession.



Q.4. Tick (✓) the right and cross (x) the wrong sentences:

- (a) Tailor measures with Inches tape.
- (b) There are 12 inches in one feet.
- (c) Cobbler makes earthen utensils.
- (d) Potter dyes 'Dupattas'.

Q.5. Match the Columns :

(A)
Tailor
Cobbler
Potter
Doctor

(B)
Needle
Syringe
Scissors
Potter's Wheel

Q.6. Which tools are used by a tailor ?

.....
.....

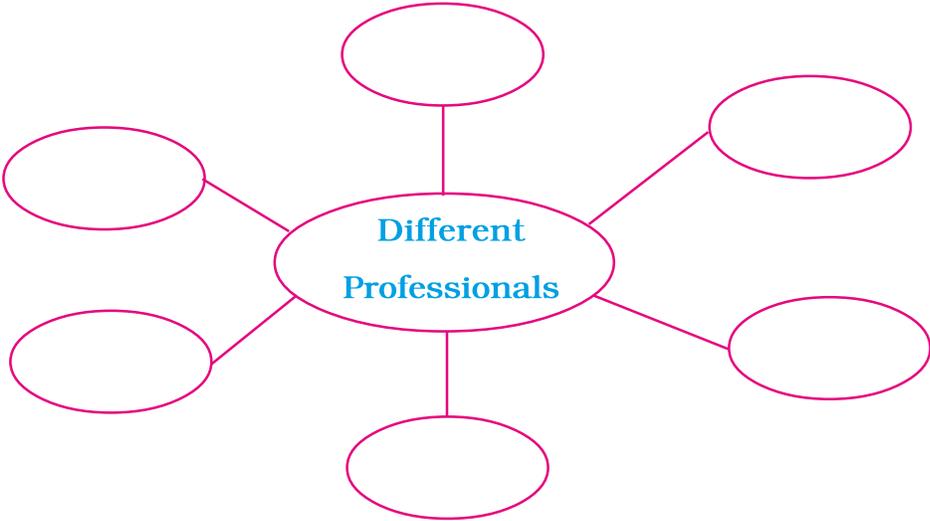
Q.7 Who uses thermometer ?

.....
.....

Q.8 Which are the hereditary professions ?

.....
.....

Q.9. Mind Mapping





Activity 1: In the following pictures young ones of some animals have got separated from their mothers. Let us help these young ones to reach their mothers by matching.



Animals and their young ones

As your parents look after you, similarly animals also look after their young ones. Many birds rear their young ones themselves.

You must have seen pigeons and sparrows looking after their young ones. These birds build nests by collecting straw, grass, etc. Then they lay eggs in the nests. Chicks which come out of the eggs are very weak. They do not have feathers. Pigeons and sparrows bring food for their young ones till they are not capable of finding food for themselves. Their parents protect them from bad weather and enemies till the young ones are not able to fly properly. They also cover them with their feathers to protect them from rain and cold weather.

Activity 2: Get information from your teacher or parents, how the hens look after their young ones in a poultry farm. Discuss about it in the class room.

Some animals give birth to the young ones. Such animals are called mammals. Mammals have hair on their body and they have external ears. New born babies take feed from their mothers's milk. Some animals do not have external ears, e.g., reptiles like earthworms, snakes and lizards. They do not have hair on their body.

Animals not only bring food for their young ones but also protect them. If they feel danger for their young ones then they can even attack, for the protection of their young ones. When we try to touch puppies and calves, their mothers try to oppose us. That's why you should be very careful in this situation. If some animal has given birth to young ones in your house/



neighbourhood, you should go near it only in the presence of your elders.

Most of the animals look after their young ones, but there are some animals who do not care of them. Snake, crocodile, lizard, frog, fish, insect, etc, make a safe place to lay eggs but do nothing to feed or protect their young ones.



We can divide the animals into two groups :

Egg laying animals	Birth giving animals
Crow, Ant, Koel, Parrot, Fish	Lion, Tiger, Deer, Cat, Elephant, Pig

Activity 3: Let us make an album. Take one simple note-book. Divide it into two parts. In the first half, paste the pictures of those animals that look after their young ones and in the second half, paste the picture of those animals who do not look after their young ones. You can take these pictures from old news papers and magazines.

Do you know that like these animals, their young ones also have special names?

Cat	Kitten
Goat	Kid
Bitch	Pup
Sheep	Lamb
Mare	Colt
Buffalo/Cow	Calf



Things to Remember

- Most of the animals take care of their young ones.
- Mammals give birth to their young ones.
- Birds make nests with straws, grass, etc.



Q.1. Fill in the blanks with the help of suitable words :

(birth, feathers, nests, bring-up, Reptiles)

- Most of the animals their young-ones themselves.
- There are some animals who give to their young-ones.
- do not have external ears.
- There are no on chicks hatched from eggs.
- The birds live by making

Q.2. Tick the right (✓) and cross (✗) the wrong sentences :

- Snake does not look after its young ones.
- The birds protect their young ones from enemies.
- All animals lay eggs.

Q.3. Match the Columns :

(A)
Cat
Cow
Bitch
Mare

(B)
Colt
Calf
Pup
Kitten

Q.4. How do the birds make nest ?

.....
.....

Q.5. Write any two specialities of mammals.

.....
.....

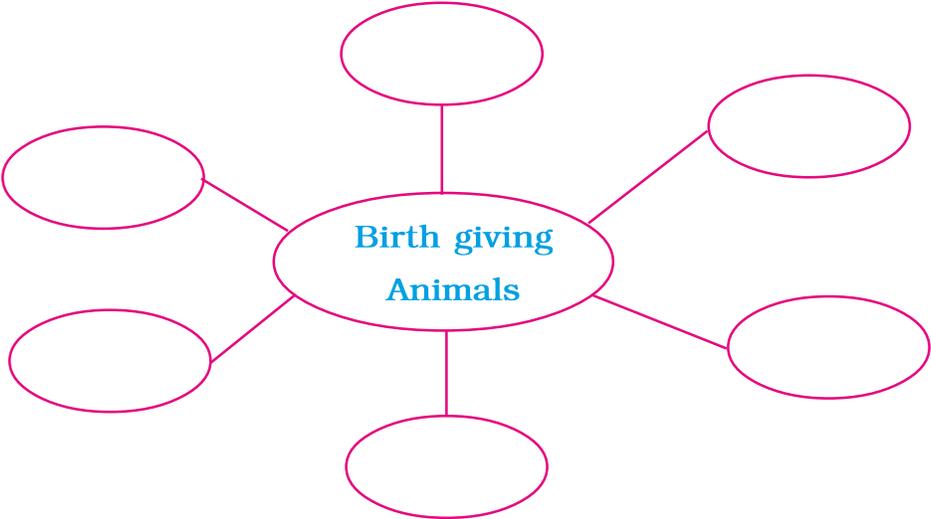
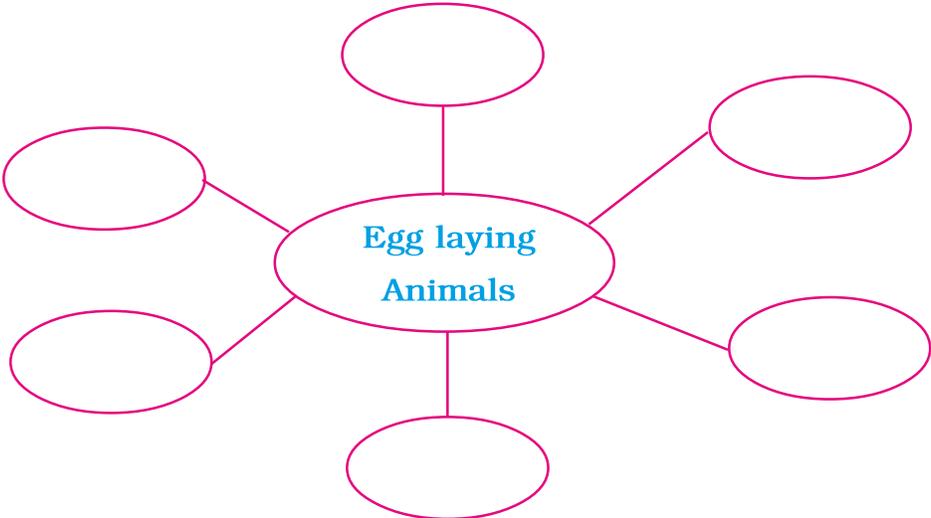
Q.6. Write name of any two crawling animals.

.....
.....

Q.7. What can an animal do if it feels danger for its young-one ?

.....
.....

Q.8. Mind-Mapping





Just as we live in families, similarly some animals also live in groups. They feel secure in their groups. Let us know about these animals.

Ginni is a colourful butterfly. It came out in the forest with its mother for the first time. There were beautiful flowers all around. Ginni was pleased to see them. They both sat on a flower to suck the nectar. Ginni was scared to see a brown thing on the flower. Its mother said, “Do not get scared. It is a honey bee. Like us, it has also come here to suck the nectar from the flowers. Look, there is her house.”



Beehive

“What kind of house is it !” Ginni was looking at it surprisingly. Honeybee said laughingly, “Ginni come, I will show you my house. It is called beehive. Three types of bees live in this house. Every beehive has a queen bee. Its size is bigger than the rest of the bees. Queen bee lays eggs. There are some male bees too. The third type of bees do all kinds of work and are called workers. They make beehives. They also prepare honey from the nectar of flowers.

Ginni said to its mother surprisingly. “Do they all live together ?” The mother said, “There are some other animals also in the forest who live together. Come, I will show you.” The mother said, pointing at a herd of animals, “Ginni my baby, these are horses. They also live together.”



Herd of horses

“Look at that young one. It is Chetak. Chetak is just one year old but it is very charming. Its companion horses love it very much. It is very happy today. It has run a lot of races with its friends and has won all the races. Its friends wanted to go still further in the jungle but Chetak wanted to go back. Chetak knew that everyone would start worrying about them if they do not return soon in their herd. Now they were hungry also. That’s why they had to return to their herd. Their whole herd goes together for grazing and drinking water. Chetak’s mother decides where to go and which way to go. She is the leader of that herd as she is the eldest one.”

Do you know that a horse lives not only with other companion horses but also with other animals and human beings ? It is very intelligent and faithful animal. Its memory is amazing.

Chetak loves to run a race with its companions.

Which game do you like to play with your friends ?

Ginni, pointing to the other side, said, “Mom look, what kind of horses are they ?” Her mother said, “No my dear, they are not horses, they are deer.

They also live in herds. Now their number has decreased a lot due to excessive hunting and shortage of food.”



Herd of deer

Do you know, black-buck is the state animal of Punjab.

For the Teacher : Discuss in the class-room that not only black-buck but also many other animals are endangered. Reasons for their decreasing number are hunting, deforestation and shortage of grasslands for their grazing. Their habitat is also getting reduced.

Elephant is also an animal who lives in herds. Like horses, its relationship with human beings is also very old. In ancient times, horse and elephant used to be the man’s first choice of riding. Many Kings and Emperors used to keep horses and elephants. It was their hobby. Camel also likes to live in herds.

How herding benefits animals :

- They get secured from hunters while living in herds.
- They can get hold on specific areas living in herds.
- They learn the skills to compete and to get secured from enemy.

You have learnt that many animals like to live in herds. Can you tell why animals live in herds. If they donot live in herds in forests then, think,

what would happen ?

We have learnt that many animals like to live in herds. Let us know about the nature of some other animals.

Some animals are shy or fearful by nature. They run away on seeing human beings. A few pictures of such animals are given below. Name these animals in the given spaces.



1.



2.



3.



4.

Shy animals

Do you know something else about the nature of some other animals ?
If yes, then write about its nature.

Name of animal

Monkey
.....
.....
.....

Nature

Imitates
.....
.....
.....



Things to Remember

- It is safe to live in herds.
- Most of the herds of animals have female leaders.
- Black-Buck is the State Animal of Punjab.



Q.1. Fill in the blanks with appropriate words :

(grasslands, black-buck, shy, horse)

- Memory of the is very sharp.
- There is shortage of for grazing of animals.
- Some animals are by nature.
- Numbe of is decreasing due to hunting.

Q.2. Tick (✓) the right answer :

(a) Bees live in?

Beehive Nest pole

(b) State animal of Punjab is?

Black buck Elephant Camel

(c) Which bee lays eggs?

Queen bee Male bee Worker bee

(d) Which is a shy animal?

Dog Monkey Rabbit

Q.3. What work is done by worker bees ?

.....
.....

Q.4. Write two characteristics of the horse ?

.....
.....

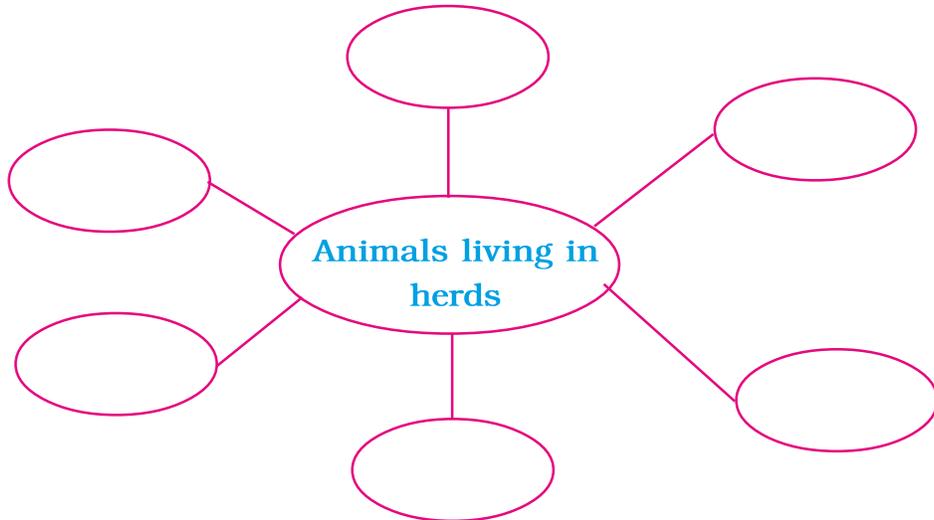
Q.5. Why is the number of black-buck decreasing ?

.....
.....

Q.6. Why do the animals live in herds ?

.....
.....

Q.7. Mind Mapping





Root is the special part of a plant. While roots are important for plants, they are also useful for human beings. Let us have some knowledge about their specialities. The process of making new votes is going on in the school of a village. People are coming and going in the school play ground. The children, who came to play cricket have returned back due to great rush there.

They went to other open place near the village dharmshala for playing cricket. At that place, some small plants were growing. Children pulled out those small plants to clean the place for playing. There was a guava tree also. They tried to pull it out from the ground but they could not uproot it. There came an old man.

“What are you doing ?”, old man said.

“Baba ji, we want to play here but this guava tree is in the middle of the play-ground so we can not play. We tried our best to pull it out but could not do it.” It was all narrated to Baba ji, by Lovepreet.

The old man advising the children said, “Children firstly, it is very bad to cut down trees. **No tree means no human being can survive.** Learn this fact right now and secondly, the guava tree is held strongly by its roots.”

“Roots! what are roots ?” one of the boys asked.

“A plant’s roots are under the soil. They hold the soil strongly,” said Baba ji.

Are these small plants without roots ?” Tirath asked pointing towards those small plants which were pulled out.

“No children, these plants are very small. Their roots are also small. As the small plant grows and becomes a big tree, its roots spread deep in the soil. In this way, the tree is firmly held to the ground and it becomes difficult to

uproot it,” Baba ji replied. “What are the other functions of roots ?,” Sukha asked Babaji.

“When we water the plants, roots absorb it and the trees grow,” Baba ji replied.

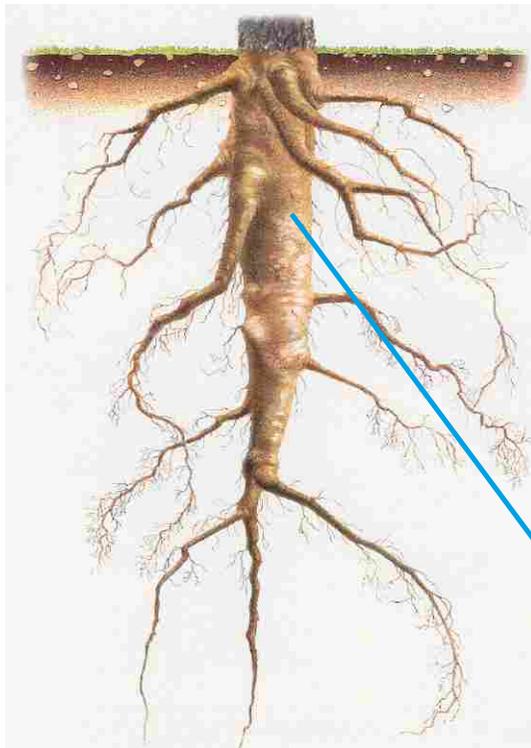


Roots of a tree

Activity 1: Find out the oldest tree in your school ? Give information about it in the following blanks:

Name _____ Age ____ (Approximate) _____

Do you know that one root of a tree is thicker than the other roots. It goes straight under the soil. Other roots come out of it like branches. They are called the tap roots.



Tap root

Tap root

Q.1. Which part of the plant absorbs water ?

.....
.....

Q.2. Write the functions of roots.

.....
.....

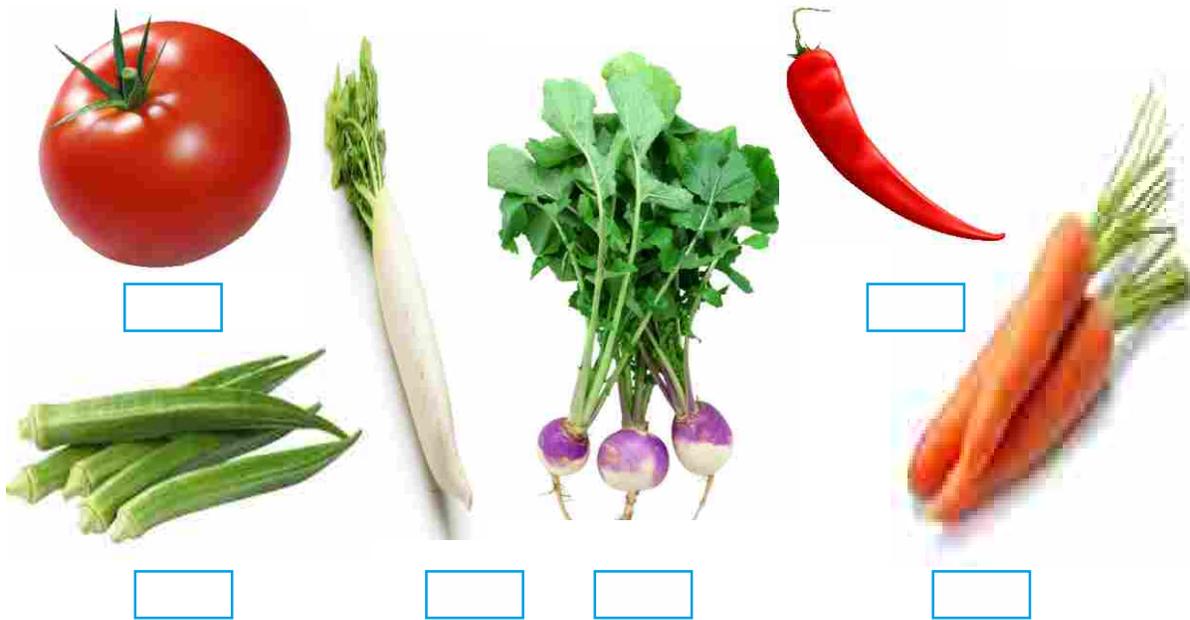
Do you know

Kachalu is a type of a root which is very thick and big. It is eaten as 'chaat'



Picture of Kachalu

We eat some roots in the form of vegetables. Put tick (✓) on such vegetables in the picture.



Pictures of some vegetables

Baba ji enjoyed a lot while talking to the children. He said, “Shall I tell you a story ?”

“Yes-Yes,” the children shouted together.

‘It is an old story. A king sat under a tree to have some rest. A parrot was sitting on that tree. The parrot threw a half eaten berry upon the king. The king got angry. He shot one arrow towards the parrot but the arrow got

stuck in the branches of that tree. The king got annoyed with the tree as well. That foolish king got cut all the trees in his kingdom. After that, there was no rainfall in his kingdom. Some years later, there was shortage of food. People started dying of hunger. They started shifting to far off areas. The king also reached a forest along with his family. They could not find anything there to satisfy their hunger.

While roaming they met a saint there. The king narrated him everything. The saint told the king that cutting of all the trees was a big mistake. Due to that act, the rainfall stopped. He further told them that there were no fruits in the forest at that time which could be eaten so they might eat roots. The king got puzzled and said, "Roots ! I don't understand". The saint described that some kinds of tree roots are edible. He had some roots of 'shtawari' (Asparagus) and sweet potatoes which he offered them to eat after boiling. In this way the king's family started eating the roots and lived near the forest. Ultimately the king felt sorry for his wrong decision of cutting trees. He realized that even the roots of trees are helpful for the human beings.

Do you know ?

This is a banyan tree. Its roots are also under the soil like other trees but the roots are also coming down from the branches. These also give support to the tree. These are called aerial roots. Some people call it 'beard of the banyan tree'.



Picture of a banyan tree

Have you seen any other such tree ? Write its name and place where have you seen ?

Name _____

Place _____



Things to Remember

- Root is a special part of a plant.
- Roots are beneficial for plants as well as humans.
- Roots absorb water from the earth.
- Roots hold the plants in soil firmly.
- Shtavari, Sweet Potato, Kachalu, Carrot and Radish, etc., are edible roots.



Q.3. Make diagram of Taap root ?

Q.4. Fill in the blanks with suitable word :

(root, soil, thicker, water)

- (a) Roots of trees are in
- (b) Kachalu is a
- (c) Roots absorb

Q.5. Why was guava tree not pulled out ?

.....
.....

Q.6. What is tap root ?

.....
.....

Q.7. Which of the plant roots can be eaten ?

.....
.....

Q.8. Why should we not cut the trees ?

.....
.....



“Nana Ji, my exams are over. So, today I am coming to Patiala with my mom”, my son Sukhman was talking to his grandfather on the phone.

It took us just about four hours to reach Patiala from Faridkot. Sukhman touched the feet of his grandfather and grandmother, as he entered the house.

“Nana ji, what are you eating”, Sukhman asked pointing to the dish plate.

“This is called Gulkand, Sukhman”, My mother replied.

Sukhman surprisingly asked, “Gulkand! what is it ?”

“It is prepared from rose flowers, my son”, I tried to convince Sukhman.

“Are flowers eaten ?” Sukhman asked surprisingly.

“Yes, my son, the cauliflower, which you eat as vegetable, is also a flower.”

Do you know ?

Kachnar and Banana flowers are used as vegetables. Pakoras are prepared from the flowers of Moringa. Salad and Vegetable is made from Broccoli flowers. Write the names of following flowers after identifying them with the help of the teacher.



1.



2.



3.



4.

Q.1. Which flowers are cooked as Vegetable ?

.....
.....

Q.2. What is made from broccoli flower ?

.....
.....

“Sukhman my son, flowers are also used for other purposes,” Nana ji said.

“Nana ji, tell me everything,” Sukhman asked eagerly.

“Gulab Jal, Scent and Sharbat are prepared from rose flowers. Jasmine and lavender flowers are used for making scented oil. Flowers of sweet violet (banafshan), kachnar, rose, kikar and aak are used for making certain medicines. Marigold, dhak, hibiscus and rose flowers are used for making colours. Honey-bees and butterflies suck nectar from the flowers”, Nana ji told Sukhman about the flowers in detail.



1.



2.



3.



4.



5.



6.



7.



8.



9.

Write the names of the flowers in the provided space.

Q.3. Give the name and uses of any two flowers in the above picture.

.....
.....

Sukhman said firmly, "Nana ji, I want to see all the flowers."

"Son, let us go to Baradari garden. There, we shall be able to see many kinds of flowers," my papa told Sukhman.





Scene of flowers at Baradari Garden

They all reached Baradari Garden. It seemed as if there were colourful carpets of various flowers. Sukhman was extremely happy.

“Mom, take me to garden at least once in a month,” Sukhman requested.

“Son, all flowers do not bloom at same time. Many flowers bloom during December to March e.g. dahlia, pansy, aster, etc. Some flowers bloom throughout the year, e.g., motia and sadabahar. Some flowers bloom during summer, e.g., lily, cock’s comb, zinnia, etc.,” I said.

Some flowers blossom at night only, e.g., as night blooming Jasmine plant.

“Nana ji what is this ! Some flowers are growing on small plants and some are on creeper which is hanging from the wall !” Sukhman asked.

“Sukhman, some flowers grow on small plants, e.g., poppy, pansy, etc. Some flowers grow on creeper like jhumka vine, some on big trees like gulmohar but lotus flower blooms in water,” Nana ji answered.



Poppy



Jhumka



Gulmohar

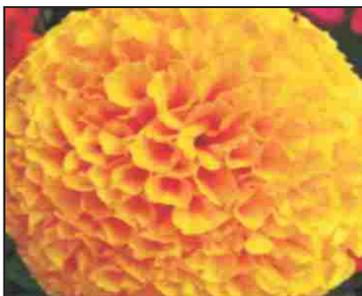


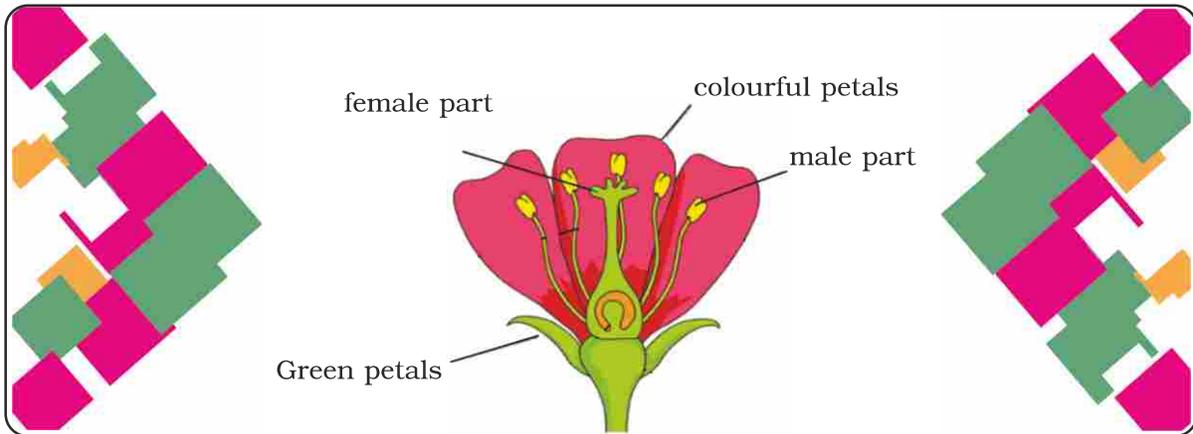
Lotus

Sukhman said, pointing towards flowers, “Mom, look at these flowers. Some are bell shaped and a few flowers look like a ‘Rakhi’.

Activity 1: Some items and flowers are given in the picture. Match, which flower resembles which item ?

Match the following





Different Parts of a Flower

Activity 2: With the help of teacher, visit a garden and get knowledge about parts of flower.

“Nana ji, I want to know more about flowers,” Sukhman asked as he never wanted to go home.

“Son, rest of this will be told by your mother”, papa replied.

Activity 3: Sukhman’s mother played a game with him. You can also play this game. Choose any three different flowers and tell.

Name of the flower	1	2	3
Colour of the flower	1	2	3
Number of the petals	1	2	3

After answering all questions Sukhman said, “Mother, can I take these flowers home ?”

“No, my son, we should not pluck the flowers. They add to the beauty of our surroundings”, I advised Sukhman. Another man who was also watching flowers recited a poem on flowers to Sukhman.

Colourful flowers, tiny leaflets in sight.

They are blue, yellow and some are white.

Pluck them and they wither quickly.
But if not, they shine forever brightly.
Some in the sun and some at night.
Some blossom during their season and some forever bright.
They giggle in joy and their aroma is free.
Always remain happy, whatever it may be.

After listening to the poem, we happily returned home. While passing by 'Sri Dukh Nivaran Gurudwara Sahib' Sukhman asked to stop.

Nana ji – What is the matter ?

Sukhman – Look at that shop. There are so many flowers. Why the shopkeeper has plucked so many flowers ? It is very bad.

Nana ji – My son, flowers are also grown for selling. Some people trade in flowers.

Sukhman – What do the people do with these flowers after buying it ?

Nana ji – For performing prayer, decoration, making garlands, to put them in hair, for making baskets, etc. Now no more questions. I think that is enough. Laughing and enjoying they reached back home.



Things to remember

- Broccoli and Cauliflower are flowers.
- Scent, perfumed oil, paint, etc., are prepared from flowers.
- Flowers bloom according to season.
- Some flowers blossom on plants, some on trees and some on climbers.