

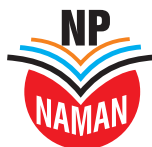


# Living with Nature

A Book of Environmental Studies

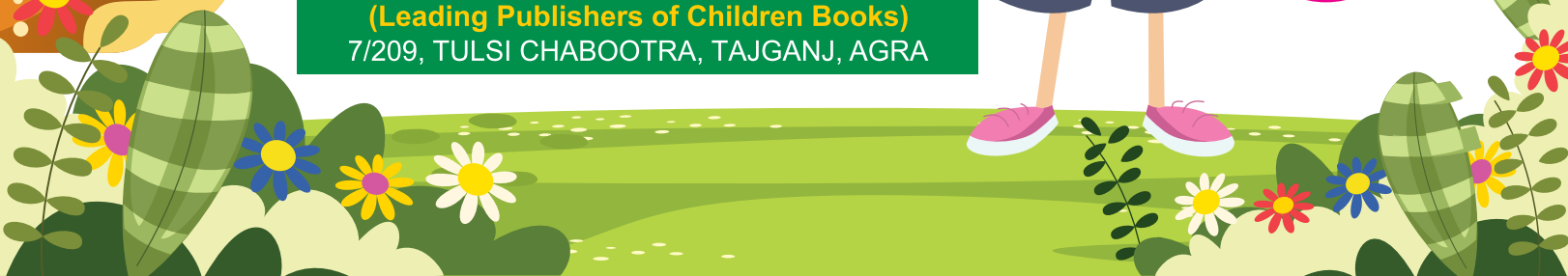


S. Kumar  
Prachi Bindal





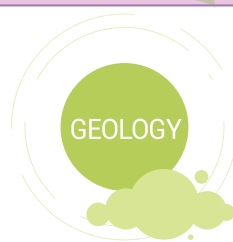
**Naman Publishing (India) Pvt. Ltd.**  
(Leading Publishers of Children Books)  
7/209, TULSI CHABOOTRA, TAJGANJ, AGRA

5



# Contents

1. Shifting Home and Relationships	...05
2. Types of Work	...09
3. Games : We Play	...14
4. Growing Crops	...20
5. Food and Digestion	...26
6. Preservation of Food	...31
7. Respiration	...36
8. Our Likes and Dislikes	...40
9. Food for Plants and Animals	...44
10. Senses of Animals	...52
 <b>Model Test Paper-I</b>	...59
11. Forests : Our Wealth	...60
12. Human Shelters	...67
13. Disaster Management	...73
14. Utility of Water	...82
15. Aquatic Life	...89
16. Fuel and Travel	...94
17. India's Heritage	...101
18. Health and Diseases	...108
19. Mosquito Bite	...116
 <b>Model Test Paper-II</b>	...120





# Shifting Home and Relationships



## Get Set!



Does any of your family members live other city or country. Write his name and reason of migration :



- |                          |            |            |
|--------------------------|------------|------------|
| 1. Within the country :  | Name _____ | City _____ |
| 2. In foreign country :  | Name _____ | City _____ |
| 3. Reason of migration : | Name _____ | City _____ |



**M**embers of a family may choose to live together in their ancestral house in which many generations have lived before them. Sometimes, people also divide a large ancestral house and decide to live as nuclear families in different portions of the house. Structure of a family also changes because of the impact of socio-economic forces such as shifting of families from one place to another, which is called **migration**, and natural calamities such as droughts and floods. All these things affect their quality of life, roles, relationships, value systems and aspirations.

**If you belong to such a family, how will you address these relatives ?**

1. uncle who lives in America \_\_\_\_\_
2. grandfather in Bihar \_\_\_\_\_
3. aunt in the army \_\_\_\_\_
4. uncle who shifted from Tamil Nadu \_\_\_\_\_

Here are some causes of change in family structures :

## **MIGRATION**

When people shift their residence within or outside the country, we say that they have migrated. Migration is a common occurrence. People migrate from villages to cities in search of job. Urban youth migrate to developed countries for better career prospects. Armed personnel and other persons in government jobs have to shift on their transfer to other places. Jobs that require frequent shifting are called transferable jobs. You have to leave behind your friends and familiar surroundings. Wars, terrorism, anti-social activities and family-feuds are some other reasons for shifting a house.

## DEMOLITION

Demolition means the action of pulling or knocking down a building or structure. Slum dwellers are the biggest victims of demolition. The government destroys their illegal dwellings. So, they have to shift their temporary houses at other places. They are mostly poor people and villagers who have migrated from villages to cities. They get work involving manual labour in the city and live in their temporary houses at slums.

## DISPLACEMENT

Demolition of kutcha and pucca houses by natural calamities leads to shifting of house. People who are displaced and do not have another house, are provided support by the government in refugee camps.



demolition



construction of a dam

Displacement may also be man-made. Many families are displaced when their houses and lands are taken away by the government to create free space for metro-rail track or road construction. Dam construction also causes people to move to other areas as their houses and land are submerged in the water.

## BOND OF BELONGINGNESS

We love our family members. We learn a lot from them. We tend to remain connected to them. We interact with them everyday. But if some of them live away from our home, we meet them only on special occasions or we communicate with them through telephone or letters.

We exchange **greeting cards** on special occasions, such as Diwali, Holi and New Year. We often speak on the **telephone** or communicate through **e-mail**.

We must try our best to strengthen the bond of love with our family members, no matter where they live.

Above all, we must never hurt the feelings of our family members.



## Practice Period

### A. Tick (✓) the correct answer :

- Shifting of families from one place to another is called :  
 (a) migration  (b) demolition  (c) displacement
- We learn a lot from our :  
 (a) school  (b) playground  (c) family members
- We communicate with our relatives through :  
 (a) computer  (b) radio  (c) telephone

### B. Fill in the blanks :

jobs, migration, destroys, feelings

- \_\_\_\_\_ is a common occurrence.
- People migrate from villages to cities in search of \_\_\_\_\_ to earn money.
- The government \_\_\_\_\_ the illegal dwellings.
- We must never hurt the \_\_\_\_\_ of our family members.

### C. Tick (✓) the correct and cross (X) the incorrect statement :

- Jobs that require frequent shifting are called transferable jobs.
- Slum dwellers are the biggest victims of demolition.
- Some people migrate in search of a better job.
- Displacement is always man-made.

### D. Give a one-word answer :

- Shifting home \_\_\_\_\_
- Natural calamity resulting in shifting \_\_\_\_\_
- The biggest victims of demolition \_\_\_\_\_
- Shelter provided to displaced persons \_\_\_\_\_

### E. Answer the following questions :

- What are our duties towards our family?
- What are the different causes of migration?
- What are the man-made causes of displacement?
- Why do we tend to remain connected our family members?



## Innovative Assessment

- ◆ The following are some famous Indian personalities who have migrated to other countries. Find out the reasons for their migration :



Lakshmi Mittal  
Steel magnate



Indra Nooyi  
CEO, Pepsico



Anita Desai  
Novelist



Swaraj Paul  
Business magnate



Vikram Seth  
Novelist



Tiger Ali Singh  
Wrestler

## Fun with Activity

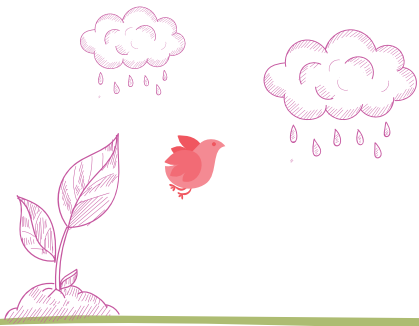
- ◆ Make a family album. Collect photographs of all members of your extended family and paste them in your scrapbook. Below each photograph write their names, telephone number, birthday and how they are related to you. Bring the scrapbook to the class and show it to your classmates.

## Project

Suppose one of your classmates has recently shifted to your city. Ask her/him the following questions :

1. Where did she/he live before?
2. In which school did she/he study?
3. Why did her/his family shift?
4. What difficulties did she/he face while shifting?

On the basis of her/his answer, make a project report on the difficulties which are faced during migration.



# Types of Work

## Get Set!



How do you address these people? Write down in your own words :

- |                       |       |                          |       |
|-----------------------|-------|--------------------------|-------|
| 1. sweeper            | _____ | 2. your milkman          | _____ |
| 3. your domestic help | _____ | 4. your newspaper vendor | _____ |
| 5. a cobbler          | _____ | 6. your doctor           | _____ |



We all work to earn money and to contribute to the society. The people around us do different types of work. Some of these workers provide us essential services. They sweep our roads as sweepers. They clean our dirty utensils and mop the floor as domestic servants. They deliver newspapers as hawkers. They walk around the streets and pick up waste as rag pickers. They open blocked drains and collect garbage as sanitary workers. We often consider these jobs low. We call these jobs 'unclean'.



domestic help



sanitary worker



sweeper



rag picker

## MANUAL WORK

Manual work is that work which require physical labour and which we do with our own hands.

Jobs like those of waiter, vendor, mechanic, plumber, milkman, washerman, gardener and mason are low paid. They do not require extraordinary skills or high qualifications, hence, we underpay these workers.

Can you imagine what will happen if these people refuse to do their work? The smooth running of the social life would be hindered.



### Fact Flash

In countries like the USA and the UK, all occupations are given equal honour and respect.

## INTELLECTUAL WORK

There are many works that people perform while sitting in their offices. Their services are also essential for us. Doctors treat and operate the sick and injured people. They are assisted by nurses and wardboys. Teachers teach students in schools and colleges. Engineers design buildings, dams and flyovers. They have not to sweat or work hard physically. Their jobs are intellectual. These jobs are regarded as 'White Collar Jobs'.



## RESPECT FOR ALL JOBS

In India, before independence, low-caste people were made to do menial jobs like sweeping and cleaning the toilets. High-caste people ill-treated them. Low-caste people were considered as untouchables. So, they were forced to live outside the village. They were also not allowed to use the wells that were used by high-caste people. They were not allowed even to pray in temples meant for high-caste people.

**Mahatma Gandhi**, the father of the nation, fought against untouchability. He named untouchables as 'Harijans'. Harijan means 'People of God'. Gandhiji also worked for the upliftment of Harijans. To help them develop self-respect and self-confidence, he often visited their colonies and spent a lot of his time with them. Gandhiji wanted us to honour and respect all occupations.



## DIGNITY OF LABOUR

Today, India is changing. People have realised that manual labour is as dignified as intellectual labour. Dignity of labour means the respectability towards the work we do with our hands. Every work deserves honour.



Look at the pictures given below :



farmer

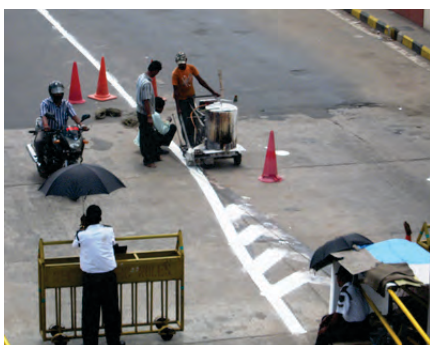


labourer



mason

What do you think about these labours? How will you get food if the farmer does not work in the fields? Where will you live, if the labourers and masons do not build houses? How will you travel if the construction workers do not make roads and bridges? Imagine how you would feel if there is no barber to cut your hair or a washerman to wash your clothes?



Dignity of labour is the respect we give to all types of jobs. It is a feeling within us that we don't consider one job as lesser or greater than another. It is one of the most essential qualities that we should develop within ourselves.

Many skilled and educated people do not apply for certain jobs as they find them below their dignity. By doing this they waste their time, talent and education waiting for the right opportunity and choice of job.

Today this is changing. Like other developed countries, the youth of India feels encouraged to do their small jobs themselves. They take up part-time jobs as salespersons, waiters, delivery boys, attendants, etc.

Each job, whether big or small, contributes to the society. All types of work are dignified and respectful. Labour also gives us self-help lessons. It helps us to keep fit and makes us aware of our needs and the requirements of the people around us.



## Practice Period

### A. Tick (✓) the correct answer :

- In the past, the \_\_\_\_\_ were made to live outside villages.  
(a) rich  (b) poor  (c) low-caste people
- A person who looks after a garden is called:  
(a) florist  (b) gardener  (c) sweeper
- The name 'Harijan' was given to the untouchables by :  
(a) Indira Gandhi  (b) Jawaharlal Nehru  (c) Mahatma Gandhi
- Dignity of labour is to give respect to all kinds of :  
(a) charity  (b) help  (c) labour
- Many people do not apply for certain jobs as they feel them :  
(a) above their dignity  (b) below their dignity  (c) above qualification

### B. Fill in the blanks :

high, sweepers, dignified, hands, self-help, respectful

- \_\_\_\_\_ sweep our roads and streets.
- We should not treat any job as \_\_\_\_\_ or low.
- Dignity of labour means the respectability towards to the work we do with our \_\_\_\_\_ .
- All types of work are \_\_\_\_\_ and \_\_\_\_\_ .
- Labour also gives us \_\_\_\_\_ lessons.

### C. Tick (✓) the correct and cross (X) the incorrect statement :

- Some of the workers provides us essential services.
- All people do the same kind of work.
- Mahatma Gandhi stressed on the dignity of labour.
- Mahatma Gandhi called the untouchables 'Harijans'.

### D. Answer the following questions :

- Name some low-paid jobs in India.
- We depend on others for essential services. Explain.
- Who gave the name 'Harijan'? What does it mean?
- How were "untouchables" treated in the past?
- What efforts did Mahatma Gandhi make to remove untouchability?
- What do you mean by dignity of labour?



## Innovative Assessment

- A.** Blue-Collar jobs are those jobs that involve manual efforts. For example, construction worker, mechanic, material fabrication, machine shop, etc.



- B.** White-Collar jobs are those jobs that generally do not involve manual labour. For example, managerial, clerical, sales, teaching etc.



Write any four jobs in which people in your neighbourhood are involved in each category.



## Fun with Activity

- ◆ **By what name do you call these people in your language?**

- |             |       |                      |       |
|-------------|-------|----------------------|-------|
| 1. Milkman  | _____ | 2. Vegetables seller | _____ |
| 3. Grocer   | _____ | 4. Domestic help     | _____ |
| 5. Gardener | _____ | 6. Security guard    | _____ |
| 7. Sweeper  | _____ | 8. Cobbler           | _____ |
| 9. Mechanic | _____ | 10. Plumber          | _____ |

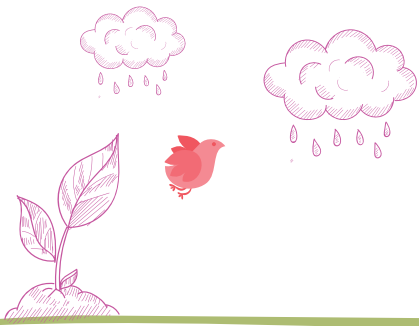


## Project

Always speak politely to people who provide you essential services. Never forget that you are the one who need their services. When your work is done, respect the person and his work by saying, 'Thank you'.

Write a project report on the job of a cobbler. Include these points :

1. His name and family background.
2. His clothes he usually wears.
3. Where he works-a shop or road side.
4. Time he normally devotes repairing shoes.
5. How do people around call or address him.
6. How did you treat him when you had a chance to meet him.



# Games : We Play



## Get Set!



Where do you see the following? Write 'S' for Sky or 'L' for Land :



1. chess

2. carrom

3. ludo

4. cricket

5. hockey

6. football

7. dancing

8. music

9. cycling



Any playing activity which we undertake for enjoyment is called a game.

When we work all the time and have no time to relax, our mind becomes dull. We need to relax and have a free time. This free time is called **leisure**. We enjoy our leisure by doing the things we like most. We watch television, play games, read books, newspapers or listen to music. We play games for many other reasons as well :

1. Playing games is a **good exercise**. It keeps our bones and muscles strong. It keeps our body in excellent shape.
2. When we play a good game, we develop our **confidence**.
3. When we follow the rules and regulations of the game, we become more **disciplined** in life.
4. We channelise our **mental** and **physical energy** in a more positive manner.
5. We become **fresh** and **active**. We are able to do **more work**.

## CHANGING NATURE OF LEISURE

In the past, when there was no television, children used to play outdoors. Elders used to go for long walks, listen to the radio or read books.

Nowadays, watching television is a popular pastime. Elders and children watch television together. In this way, a family spends time together. The numerous channels show interesting and educational programmes on nature and science. We get to know about the latest happenings in our country and around the world by watching the news channels. Also, there are some entertainment-based programmes like cartoons, sports and musical shows. Parents and elders usually guide their children about which programmes to watch.

## INDIVIDUAL GAMES

Many games are played all by oneself. They are known as **individual games** or **single-player games**.

Swimming, gymnastics, athletics, skating, cycling and golf are some individual games we play.



swimming



cycling

## TEAM GAMES

Many games are played in groups. Such games are played between two teams. The number of players in each team varies from game to game. Such games are called **team games**. Cricket, hockey, basketball, volleyball and football are team games.



cricket



hockey



football

## OUTDOOR GAMES

We play games such as cricket, hockey, tennis and basketball outside our homes. These games are played in open grounds, courts and stadiums. They are called **outdoor games**.

## INDOOR GAMES

Games played at home are called **indoor games**. A few examples of indoor games are chess, snakes and ladders, carrom and ludo.

## TEAM SPIRIT

In sports, **team spirit** is understood as the spirit that makes the players want their team to succeed. Players cooperate and coordinate while playing as a team. They are not interested in showing their individual performances and talent. Team is the only thing that matters.

## CAPTAIN OF THE TEAM

Aryan is the captain of the cricket team of our class. He is a good captain. He



### Fact Flash

Chess is an indoor game that needs no physical power rather it requires mental skilfulness.

always gives us **responsibilities** and **clear directions**. He is fair, focused and encouraging. Under his **leadership**, our cricket team has shown true **team spirit**. Ragini is the captain of the football team of our class. She always **encourages** her teammates to **develop** and **improve** their skill in playing. The captain is the **leader** of his/ her team. Success in a game depends a lot on the role the captain plays in the game.

### **NATIONAL TEAM**

A child who excels in a game at the school level, when provided proper training, essential support and encouragement by the teacher, reaches the desired level, he/she represents the country.

He/she becomes a **national player** and plays for the **national team**.



A national team consists of players from different parts of the country. They play as a team. When our national team wins a tournament, the whole country celebrates its victory. The team effort is appreciated and the players are honoured.

### **NATIONAL SPORT**

The most popular sport of a country is called its **national sport**. The national sport of some countries are hockey (India and Pakistan), baseball (USA), sumo wrestling (Japan), buzkashi (Afghanistan), volleyball (SriLanka), kabaddi (Bangladesh), archery (Bhutan) and skiing (Andorra).

### **PLAYING TOGETHER**

In school and neighbourhoods, girls and boys play together. There are separate teams for women and men for all sports played at the national and international level. However, in certain sports like tennis and badminton, both women and men may jointly play as a team. They play under a category called **mixed doubles**.

### **LOCAL GAMES**

Games which are played only in certain areas are the **local games** of that place. They reflect the tradition and culture of that particular area. Usually, teachers called '*gurus*' train the players.

Some local games played in different parts of India are as follows :

1. **Vallamkali** is the popular boat race of Kerala. It is held every year during Onam. More than a hundred oarsmen row each boat.
2. **Mallakhamb** is a traditional form of gymnastics. In this game, a gymnast usually hangs from a pole and performs exercises.



vallamkali



mallakhamb



kabaddi

3. **Kabaddi** is a team game. It is known by different names in different parts of India. It is called *chedu gudu* in Tamil Nadu, *hu-tu-tu* in Maharashtra, *hu-du-du* in West Bengal and *jabarjang* in Punjab. Now, kabaddi is a part of national games.
4. **Tirandazi** (archery), **patang bazi** (kite flying), **camel and bullock races** and **cock, pigeon, bull and ram fights** are some other popular local games.

## MARTIAL ARTS

The art of self-defence, which is usually practised as a sport, is called **martial arts**. The term is derived from Latin. Martial arts means the 'Arts of Mars', the Roman god of war. Martial arts can also be linked with religion and spirituality.

Some popular martial arts of India are :



*Kalaripayattu*  
Martial art of Kerala



*Silambam*  
Martial art of Tamil Nadu



*Cheibi gad-ga*  
Martial art of Manipur



*Gatka*  
Martial art of Punjab



*Vermakalai*  
Martial art of Tamil Nadu



*Kick-fighting*  
Martial art of Nagaland

## Karate

It is related to judo but stresses on techniques for striking with strong kicks and punches accompanied by shouts. The three elements of **speed**, **strength** and **technique** are important for learning and practising **karate**. An expert karate master breaks bricks with a chop of his/her hand. **Black belt** signifies the highest proficiency in karate.

## Taekwondo

It combines techniques for combat, self-defence (with a purpose never to attack first), exercise, sport, philosophy and meditation.

Taekwondo training generally includes an effective system of block, flying kicks, punches and open-handed strikes.

True sportspersons have a reputation for fair play and good sportsmanship. They have personal qualities such as patience, honesty, tolerance, generosity, politeness and friendliness. They also have a positive attitude towards sports and life. We should also develop these qualities and become true sportspersons.



### Fact Flash

Sumo wrestling is one of the oldest Japanese martial arts. The most notable feature of the Sumo wrestlers is their weight (more than 200kg).



## Practice Period

### A. Tick (✓) the correct answer :

- Chess is an \_\_\_\_\_ game.  
(a) outdoor  (b) indoor  (c) individual
- A national player plays for the \_\_\_\_\_ team.  
(a) school  (b) state  (c) national
- The captain is the \_\_\_\_\_ of his/her team.  
(a) leader  (b) peon  (c) owner
- The national game of India is :  
(a) cricket  (b) football  (c) hockey

### B. Fill in the blanks :

captain, strong, hu-tu-tu, television

- Games keep our bones and muscles \_\_\_\_\_ .
- Watching \_\_\_\_\_ is a popular pastime.
- The \_\_\_\_\_ of the team gives directions to team members.
- Kabaddi is called \_\_\_\_\_ in Maharashtra.



**C. Tick (✓) the correct and cross (X) the incorrect statement :**

1. We enjoy our leisure by doing the things we like most.
2. Games keep our bones and muscles weak.
3. Many games are played all by oneself.
4. A national team consists of players from one part of the country.
5. Games which are played only in certain area are the local games of that place.

**D. Answer the following questions :**

1. Why do we play games?
2. What is the difference between individual and team games?
3. What is team spirit? Why is it important?
4. What is a national team?
5. Name any two martial art forms of India.



**Innovative Assessment**

◆ **Identify my name :**

1. I am the national sport of Bangladesh. \_\_\_\_\_
2. I am a boat race held during Onam. \_\_\_\_\_
3. I am a martial art popular in Kerala. \_\_\_\_\_
4. I am a local martial art and have evolved into modern wrestling. \_\_\_\_\_



**Fun with Activity**

◆ **Write about your favourite television programmes :**

	PROGRAMME	CHANNEL	DAY	TIME
1.				
2.				
3.				



**Project**

Collect photographs of sportspersons and paste them in your scrapbook. Write the name of the sportsperson, the sport she/he plays and the country she/he plays for. Also giving details (i) why they have become popular? (ii) What are the achievements of these sportsperson? Collect pictures of some of the martial art forms of India. Write a project report on them.