

Health & Physical Education

Standard

IX

Activity Book



Government of Kerala
Department of General Education



Prepared by
State Council of Educational Research and Training (SCERT)
2024

THE NATIONAL ANTHEM

Jana-gana-mana adhinayaka, jaya he
Bharatha-bhagya-vidhata
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchala-Jaladhi-taranga
Tava subha name jage,
Tava subha asisa mage,
Gahe tava jaya gatha
Jana-gana-mangala-dayaka jaya he
Bharatha-bhagya-vidhata
Jaya he, jaya he, jaya he,
Jaya jaya jaya, jaya he.

PLEDGE

India is my country. All Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give my parents, teachers and all elders, respect and treat everyone with courtesy.

To my country and my people, I pledge my devotion. In their well-being and prosperity alone, lies my happiness.

Health & Physical Education



Prepared by

State Council of Educational Research and Training (SCERT)

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Dear friends,

The main objective of education is to bring up children with absolute mental, physical and social health. The Kerala Curriculum Framework 2023 (KCF 2023) envisions the moulding of such a future generation. Based on a comprehensive perspective of the curriculum, we need to design and develop creative learning processes for the awareness on health and physical education.

This Activity Book for class IX is meant to ensure quality education in Health and Physical education, which is a compulsory subject for class IX. There are many slots in the textbook that provide opportunities to create awareness on health, calorie-based diet, entertainment exercises, physical fitness, safety measures, sports culture and to know the environment through games.

There is also opportunity to develop a sports culture that helps one to diligently participate in activities for the good of the society. The elements of physical fitness like power, speed, reaction time and various yoga postures are presented in the book. Disabilities pertaining to body equilibrium, such as text neck and Kyphosis are dealt with in detail. There is ample scope in this book to gain more clarity on different physical activities, the quantity of food intake, energy balancing and entertaining aerobics.

The basic information that helps an individual to follow a lifestyle suitable to lead an excellent life with self-confidence is also provided in the book. Steps have to be initiated to ensure the overall development of the children by providing support for assessing them in connection with health and physical education. It is a fact that the values and attitudes that are developed through sports and games will guide us further. This book is presented to make the process of learning more enjoyable and mould a healthy society.

Love and regards,

Dr Jayaprakash R.K.

Director
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CONTENTS

1. FOOD-HEALTH-HAPPINESS	07
2. ACHIEVE FITNESS, PRESERVE POSTURE	24
3. THE SAFETY RING OF CARE	40
4. ACTIVE SOCIETY	48
5. KNOWING NATURE THROUGH GAMES	57
6. ANNEXURE	67

EXPLANATION OF SYMBOLS

Extended reading



Activity



Rules and Regulations



Assessment



THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

-
1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
 2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

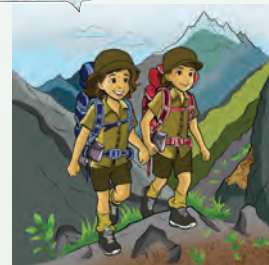


Steps towards Wellness

- What do you see in the picture?
- Who among you go hiking?
- Can you share your experiences?

A Story of Hiking

On the occasion of World Environment Day, the teachers and students of a school went hiking under the leadership of their sports club. They chose an adventurous route for hiking. Sreejesh, Zahir, Mridula and Anamika had an easy hike and reached the destination without fear and fatigue. The other hikers experienced fear and fatigue and they even required the teacher's help at some point. After the successful hike, they gathered to share and discuss their experiences.



Hiking

Hiking is a long, vigorous walk during the day or night in a natural environment.



Assessment

- In the story, why were some students able to hike with ease?
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- Why were they not affected by fear while hiking?
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.....
.....
- Some experienced difficulty while hiking. What could be the reasons?
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.....
.....
- We have seen how physical and emotional abilities helped in hiking. These are the important components for a long and healthy life. Let's know more about these qualities.



Health

Health is a state of complete physical, mental, emotional, social and spiritual well-being.



Physical health

It is the ability of the body to do various physical activities and the ability of the internal organs to perform their functions optimally.

Emotional health

It is the emotional ability of a person to overcome life's crises with equanimity.



Special Info

Both physical and emotional health is required to attain good health.



Let's get to know two sports stars who have made memorable contributions to Indian sports. Their physical and emotional abilities have contributed to their achievements.

"Mithoy Leyma" - An extraordinary woman

Name	: Mangte Chungneijang Mary Kom
Date of Birth	: 24 November 1982, Manipur
Member of Rajya Sabha	: 25 April 2016 - 24 April 2022
Awards	: Padma Vibushan (2020) Padma Bhushan (2013) Khel Ratna (2009) Padma Shri (2006) Arjuna Award (2003)
Achievement in sports	: Bronze medal in Olympics (2012)
World Championship	: Gold - 6, Silver - 1, Bronze - 1
Asian Games	: Gold - 1, Bronze - 1
Commonwealth Games	: Gold - 1
Asian Championship	: Gold - 5, Silver - 2



It was while Mary Kom was participating in the 2011 Asia Cup Women's Boxing Tournament held in Haikou, China that her three and a half year old son underwent a heart surgery. This put her in an emotional crisis. But, she bravely overcame the situation and beat a formidable opponent and went on to win the gold medal for India. Her son's surgery was also successful.

Let's salute this brave woman who overcame both the challenging situations through a balanced approach.



Do you know?

World Health Organization recommends that children between the age group of 5 to 17 years must engage in moderate to intense physical activity for an hour everyday.

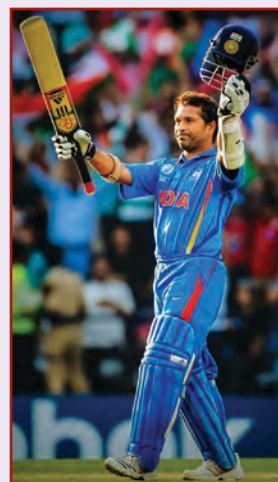


World Cricket Legend

Name : Sachin Ramesh Tendulkar
 Date of Birth : 24 April 1973, Maharashtra
 Member of Rajya Sabha: 27 April 2012 to 26 April 2018

Awards : Bharath Ratna (2014)
 Padma Vibhushan (2008)
 Padma Shri (1999)
 Khel Ratna (1997-98)
 Arjuna Award (1994)

Sports Achievement : Member of One Day World Cricket Championship winning team (2011)
 Member of One Day World Cricket Championship runner up team (2003)
 Member of Champions Trophy Cricket winning team (2002)
 Member of Champions Trophy Cricket runner up team (2000)
 Youngest player to debut for India and play an International game at the age of 16



Cricket legend Sachin Tendulkar is the sportsman who made India proud internationally. Many of you may be a fan of Sachin. Experienced in playing long innings, the opponents' efforts to distract him often fail. This is an example of his emotional well-being and his ability to play long innings is an example of enhanced physical fitness.

Prepare a note on your favourite player.

.....

Let's do some activities to understand more about physical and emotional health.



Activity 1

Pass and Play

Divide into two teams with an equal number of players. Take a look at the picture.





Rules and Regulations

- Five consecutive ball passes will earn you one point.
- The player with the ball can move from his position only after passing the ball to his teammate.
- Defenders should get the ball without touching the body of the opponents.
- After receiving a pass from a player, one should not give a back pass to the same player.
- All instructions from the teacher should be strictly adhered to.
- The team that gets more points in the stipulated time will win the game.



Assessment

1. Let's play 'Pass and Play'. How many played exceptionally well? How entertaining was the game? What measures can you adopt to improve the performance? What have you gained through the game? List it out.
 - Improved self-confidence.
 - Building up unity.
 -
 -
2. Album making – Collect pictures of your favourite sport stars. Prepare an album by collecting information on their achievements.





Special Info

Do you know?

As per WHO's 2021 statistics, 4.6% of adolescents in the age group of 15 to 19 years are found to have anxiety and 2.8% have depression.

Sports and games are helpful to overcome this dangerous situation.

- If the jubilation of some of the winning teams seemed excessive after the match, what could be the reason?

Cheering should never be to the point of upsetting others. Losers should be accepted. Losers should understand the cause of their failure and adopt ways to achieve success in future. Efforts should be directed to achieve better emotional well-being.

Let's experience various emotional states through a dance.

**Activity 2***Freeze Dance***Rules and Regulations**

Divide into three groups. Look at the pictures given.



- When the teacher plays music with a low beat, dance with appropriate facial expressions suitable to the music played. After a certain time, when the teacher stops the music, stand still.



- After a minute's break, the teacher plays another piece of music with medium tempo. Children must dance with appropriate facial expressions. Dance to the beat and continue for some time. Stand still when the music stops.



- Again after a minute's break, the teacher plays another piece of music with a faster tempo. Children must dance to the high tempo with appropriate facial expressions.
- Repeat this activity three to four times.



Did you enjoy 'Freeze Dance'? Write your experiences.

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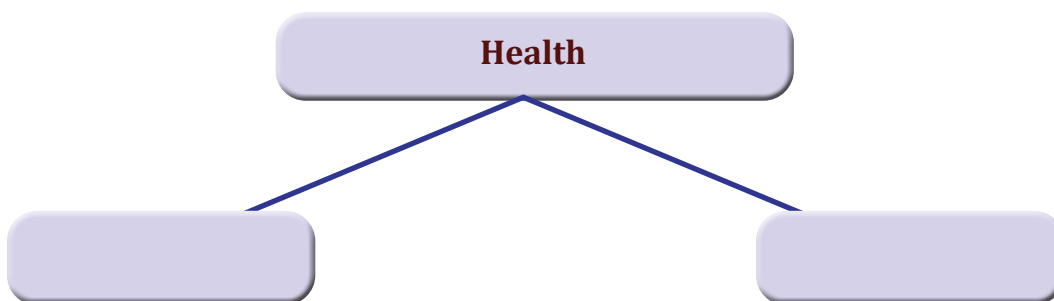
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Assessment

- List the benefits achieved through regular physical activities.
 -
 -
- Who among you performed well in the 'Freeze Dance?' What could be the reason for their better performance?

.....
- Complete the chart by writing the components related to an individual's health.



- Write a note on the topic 'How to achieve and maintain health?'

.....

.....

.....

The secret of our health



- Take part in aerobic activities and other physical activities regularly.
- Follow healthy dietary habits.
- Engaging in games helps to ease mental stress and achieve social awareness.



Calorie conscious adolescence

In class 8 you have learned about nutrition and related diseases.

What are the different nutrients?

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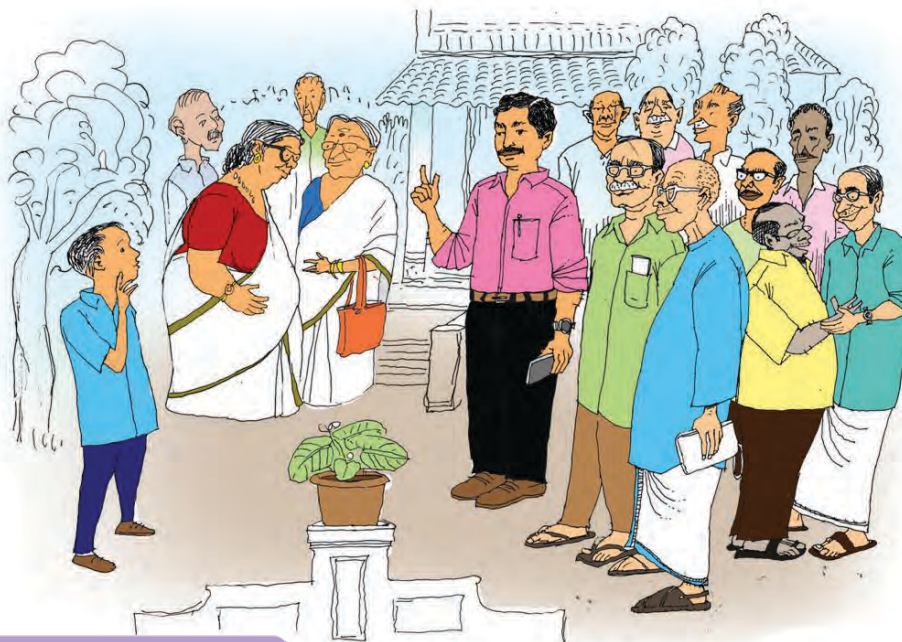
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Name a few diseases that you know caused due to nutritional deficiencies.

.....

.....

Let's understand more about energy balance.



Special
Info

Do you know?

Adolescents require an average of 2200 to 2800 calories per day from food. Michael Phelps, a famous swimmer, had an intake of 8000 to 10000 calories during his rigorous training and time of competition. However, after retiring from sports, he reduced calorie consumption significantly.

During a visit to a school on a holiday, as part of a sports training programme, an unusual gathering caught our attention. It was the reunion of an SSLC batch after 50 years. Many who had made it to the get together, had visible signs of ageing. But a man, who we found out to be the chief organizer, attracted everyone's attention.



A hale and hearty man, as he seemed, led all the activities cheerfully. He was a regular gold medallist in the State Masters Meet.

Discuss in class how he was able to be so energetic and cheerful even at this age.

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Special
Info

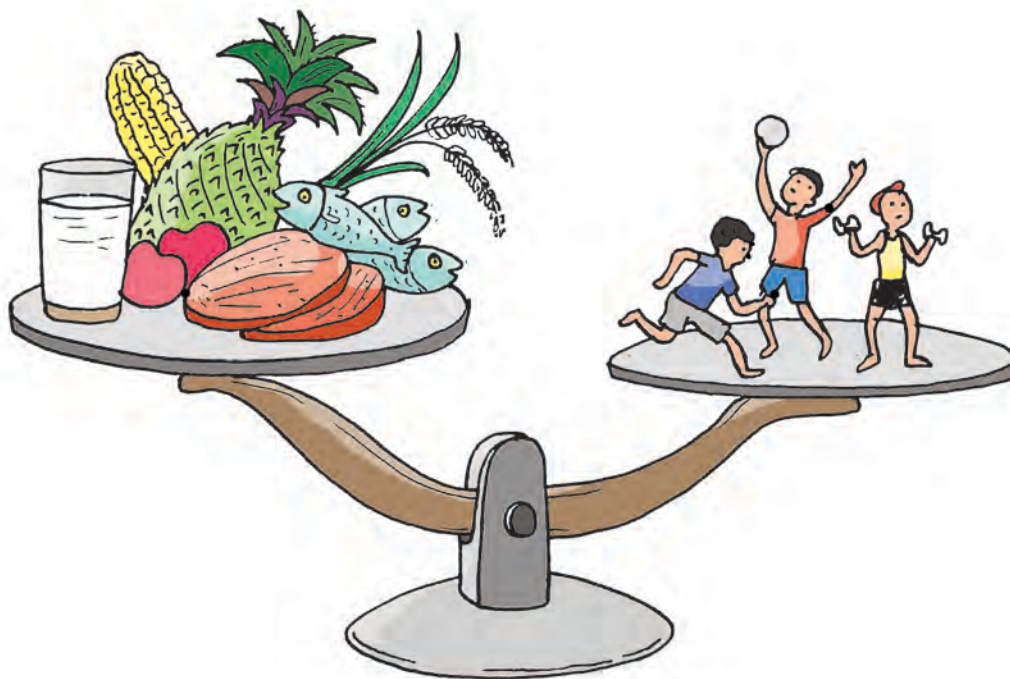
Do you know?

Energy is the ability to do work.

Calorie is a unit of energy.

It is the energy obtained from food that acts as the fuel for the functioning of various organs in the body and also for physical activities.

The teacher explained that regular physical training and healthy eating habits adhering to the energy balance principle had helped the man.



Energy Balance

Calorie content

What kind of food do you eat? Are you aware of the calorie value they contain? Take a look at Table 1 for the calorie content of the food we eat.





Table - 1: Food and its calorie value

Sl No	Food Items	Quantity	Kcal
1.	Boiled Rice	1 cup	170
2.	Upma	1 cup	270
3.	Idli	1	75
4.	Dosa	1	125
5.	Sambar	1 cup	110
6.	Chicken curry	$\frac{3}{4}$ cup	240
7.	Fried fish	1	95
8.	Tea with milk and sugar	1 cup	75
9.	Poori	1	80
10.	Boiled egg	1	90
11.	Bread	1	85



Special
Info

Energy Balance

The state in which the energy taken by the body and the energy spent by the body are equal is called energy balance.

1 cup = 200 ml

Source : Dietary Guidelines for Indians (National Institute of Nutrition), 2011.

Calories vary depending on the quantity of the food, the ingredients used, and the manner in which it is cooked.



If other food items are consumed in addition to those mentioned in the table above, their calorie value can be found with the help of the teacher and included in the list.

Do you know the calories expended for daily activities including physical activities?

For example, the calories spent while climbing the stairs for 5 minutes continuously can be understood by examining the table given below. Similarly, you can understand the energy spent for other physical activities too.

Table - 2: Activities and their calorie value

Activities	Kcal/Min
Sleep, rest	1
Sitting, reading, writing	1.5
Standing	2.3
Walking	2.8
Household chores	3.3
Recreational activities, climbing stairs	4.8
Light intensity work (lifting, lowering and carrying weight)	5.6
Swimming, cycling	6
High intensity physical activity/competitions/running	7.8

**Table - 3
Activities and calorie**

Activities	Kilo calorie/hour
Cleaning/Mopping	210
Gardening	300
Watching TV	86
Cycling (15 km/hr)	360
Running (12 km/hr)	750
(10 km/hr)	655
(8 km/hr)	522
(6 km/hr)	353
Walking (4 km/hr)	160

* The tables 2 & 3 show caloric value spent by a man weighing an average of 60 kg.

Source - Dietary Guidelines for Indians (National Institute of Nutrition), 2011.

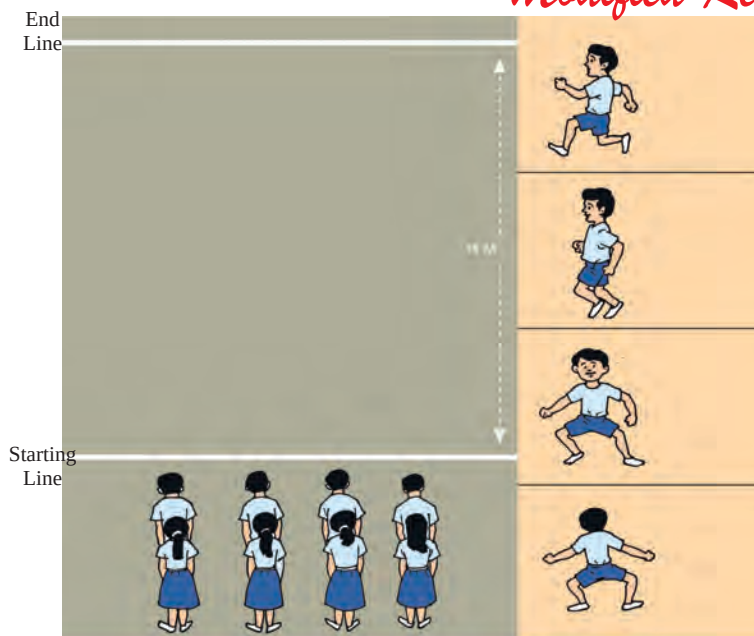
Caloric consumption increases with increase in the intensity of exercise. Therefore, those who engage in sports activities should consume food that contains more calorie value. If the body does not get enough calories, it will lose weight, and if the intake of food is more than what the body requires, it can lead to obesity. This increases the risk of lifestyle diseases. Following a lifestyle that ensures balancing of energy helps maintain better fitness and body composition.





Activity 3

Modified Relay



Do you know?

Even after a person stops doing exercise, metabolism and energy expenditure remain elevated for some more time in accordance with the intensity of the activity.



Rules and Regulations

- Divided into four groups with equal number of participants.
- An end line should be marked 15m parallel to the starting line.
- First, run 15 m forward and then backwards.
- Turn your body to the left side and run forward and then turn your body to the right at the end line and run backwards.
- A student runs 4 times in a row, continuously.
- The first team to complete the race in this manner will be the winner.

You can try and participate in a Modified Relay. You can also calculate the total calories expended by each student who participated in the game by using table 2 as reference.

- My calorie expenditure

Project

Calculate

- How about calculating daily calorie intake and output?
- Calculate the calorie input and output of every student in your class for 7 days.





Activity 4

Let's find the calorie

Form four groups. Record your 7 day calorie intake and consumption in table 3.

Discuss the findings each group in the class. Who is better at energy balance and who needs to be cautious?

Table - 3

Day	Breakfast in calories	Lunch in calories	Snacks in calories	Dinner in calories	Total Calories
Day 1					
Day 2					
Day 3					
Day 4					
Day 5					
Day 6					
Day 7					
Total calorie consumption for seven days:					
Average calorie consumption per day:					



Assessment

- Self-evaluation: Put a tick (✓) mark on the correct answer in the statements given below.
 - I am able to calculate the calorie content in my food. (Yes ☐ No ☐)
 - I am able to calculate the caloric value expended through my physical activities. (Yes ☐ No ☐)
 - I am able to maintain energy balance based on table 1 and table 2. (Yes ☐ No ☐)
- Were you able to effectively communicate the concept of energy balance to people at home and your friends? Explain.

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.....
- How many calories are expended by a person doing one hour of household chores daily?

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Achieve Health through a Discipline Lifestyle



Meet Jain, a 40-year-old lady employee whose sedentary lifestyle and poor eating habits has begun to affect her health. Jain became anxious about her health after the doctor said that she has various lifestyle diseases and advised her to do exercise and practise good eating habits. She shared her condition with her friend, a physical education teacher. The teacher advised her to modify her diet and walk for at least 30

minutes a day and also engage in strength building exercises. As per her advice, she incorporated various exercises in her daily routine and followed a healthy diet. Gradually, she gained health and was able to fight off various lifestyle diseases and was able to lead a healthy life.



Special Info

Do you know?

Examples of aerobic exercise include continuous walking, jogging, simple rhythmic exercises and cycling.



Special Info

Do you know?

Resistance exercises are exercises performed using one's own body weight (push up, pull up etc) or the weight of external objects (external weight training).

Do you know about lifestyle diseases and the physical problems caused by them?

Do you know people in your village, neighbourhood or any acquaintances who have overcome lifestyle diseases and improved their health? Record your experiences and discuss them in the class.

Lifestyle diseases

Lifestyle diseases are health problems caused by unhealthy lifestyles such as poor diet, lack of physical activity, smoking, alcoholism and mental stress. Obesity, type 2 diabetes, heart diseases, stroke and some types of cancer are a few examples. These diseases can be prevented by making positive lifestyle changes.

Causes of Lifestyle diseases

- Lack of exercise
- Faulty diet
- Mental stress



- Lack of sleep
- Use of drugs

Remedies

- Include physical activity in day to day life.
- Follow better food habits.
- Follow a better daily routine.

Let's introduce an exercise



Activity 5

Aerobic Exercise

As per the instruction of the teacher, aerobic exercises can be performed by doing a series of rhythmic exercises synchronised with music.

Describe the experience you had by participating in the activity.

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Similarly, riding a bicycle, swimming and walking long distances helps achieve cardio respiratory fitness. Doing exercises like lifting heavy objects, drawing water from the well, push ups and pull ups increase muscular strength.

It helps to overcome various lifestyle diseases that can happen in life.



Aerobic Exercise

Exercises done for a longer period of time require more oxygen. Such exercises are termed aerobic exercises.



Body Mass Index (BMI)

BMI or Body Mass Index is a numerical value determined by evaluating the weight of an individual on the basis of her height. It is a simple and commonly used method for determining whether a person is underweight, of normal weight, overweight or obese.

Formulae to calculate BMI.

$$\text{BMI} = \frac{\text{Weight (Kg)}}{(\text{Height})^2 \text{ (m)}}$$

BMI Chart

Age	Gender	Underweight	Normal	Overweight	Obese
5	Female	13.4	15.2	17	18.8
5	Male	13.8	15.4	17	18.4
6	Female	13.4	15.2	17	18.8
6	Male	13.8	15.4	17	18.4
7	Female	13.4	15.4	17.6	19.6
7	Male	13.8	15.4	17.4	19.2
8	Female	13.6	15.8	18.2	20.6
8	Male	13.8	15.8	18	20
9	Female	13.8	16.2	19	21.6
9	Male	14	16.2	18.6	21
10	Female	14	16.8	19.8	23
10	Male	14.2	16.6	19.4	22
11	Female	14.4	17.4	20.8	24
11	Male	14.6	17.2	20.2	23.2
12	Female	14.8	18	21.8	25
12	Male	15	17.8	21	24.2
13	Female	15.2	18.6	22.6	26.2
13	Male	15.4	18.4	21.8	25.2
14	Female	15.8	19.2	23.4	27.2
14	Male	16	19.2	22.6	26
15	Female	16.2	19.8	24	28
15	Male	16.6	19.8	23.4	26.8
16	Female	16.8	20.4	24.6	28.8
16	Male	17.2	20.6	24.2	27.6
17	Female	17.2	21	25.2	29.6
17	Male	17.8	21.2	25	28.2
18	Female	17.6	21.2	25.6	30.1
18	Male	18.4	21.8	25.6	29

Source - Fitness Protocols & Guidelines from age 5-18 Years (Fit India Movement)





Assessment

Project Activity

1. Measure the height and weight of all the learners in your class and evaluate them using BMI chart.

Number of underweight children :

Number of overweight children :

Number of children with an ideal weight :

Discuss the report in class. Based on the findings, create opportunities to bring essential changes in lifestyle.

2. Create an opportunity to engage all learners of the class in a seven minute aerobic exercise. Write your experience.

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3. Ask the teacher about the changes in the pulse rate during aerobics practice. Prepare a note.

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4. Write down your daily routine and based on your experience, evaluate if it needs a change.

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Chapter

2



Achieve Fitness, Preserve Posture



Sports and sportspersons always inspire us. Their body posture is generally attractive.

Don't we feel like imitating them? After watching a football match, don't we feel like playing? However, to play like them, we require certain basic fitness components. An ideal posture helps in such performance. It is also essential to coordinate our body and mind. Let's delve deep into the performance mastery of these sports persons.

Football Legend - Pele

Name	: Edson Arantes do Nascimento
Date of Birth	: 23 October, 1940, Brazil
Date of Death	: 29 December 2022 (82 years)
Playing Position	: Forward, attacking midfielder
Awards/Honours	: Brazil declared him as 'National Treasure' in 1961. Received International Peace Award in 1978 World ambassador of football
Achievement in sports	: Number of international goals - 77 Brazil won the World Cup in 1958, 1962 and 1970 under his leadership. Played first international match at the age of 16.



The given picture shows the world's greatest football legend Pele. He played for Brazil from 1957 to 1970 and electrified the football fields with his overwhelming performances. He had the special ability to outrun his opponents and jump high and head the ball. Therefore, he was recognised as one of the finest football players in the history of the world. He has the honour of being the youngest football team member ever to win a football world cup. Pele had all the essential qualities required of a football player.

Let's play a different football game.



Activity 1

Circle Football



Rules and regulations

- Both teams should stand inside the bigger circle as shown in the picture.
- Players should not enter the smaller circle. If they do, the ball should be given to the opposite team.
- The team that wins the toss gets the ball. The ball is passed from outside the big circle to the team members (by kicking).
- Teams can shoot goals into the goal post kept in the inner circle.
- The opposing teams can tackle the ball while passing.
- If they get the ball after tackling, they should move out of the bigger circle and start the game again.
- Before taking the goal shot the ball should be passed at least once.
- The team which scores the maximum goals will be declared the winners.





Special
Info

Performance-related fitness

It comprises of the fitness components required to perform well in different sports.

Play 'Circle Football' and write your experiences.

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Performance-Related Fitness for Excellence in Sports

To excel in sports performance, one needs to develop performance-related fitness. Let's examine different performance-related fitness components.



• Agility

It is the ability to move in different directions quickly. You can understand agility by observing your favourite football player moving with the ball dodging his opponents.



• Balance

Balance is the ability to control different parts of the body while moving or in a static position by overcoming the pull of gravity. A gymnast walking easily on a balancing beam is an example of balance.



• Co-ordination

Co-ordination is the ability to use different parts of the body together in a mutually complementary manner and with ease.

Catching a cricket ball by coordinating hand and leg movements is an example of coordination.



- **Power**

It is the ability to overcome resistance in the least possible time. A child performing a high jump demonstrates the power of his legs.



- **Speed**

It is the ability to perform motor ability in the least possible time. Usain Bolt finishing 100 mts, demonstrates speed.



- **Reaction Time**

It is the ability of the body to react quickly, to a situation.

In sprint events, the ability to start from the starting block (once the signal is received) quickly shows the reaction time of athletes.

We can develop this performance-related fitness through regular and scientific training.

To know the influence of performance-related fitness on our performance, let's play a game called 'Three Face Game'.



Activity 2

Three Phase Game

Divide the class into two or three teams of equal members.

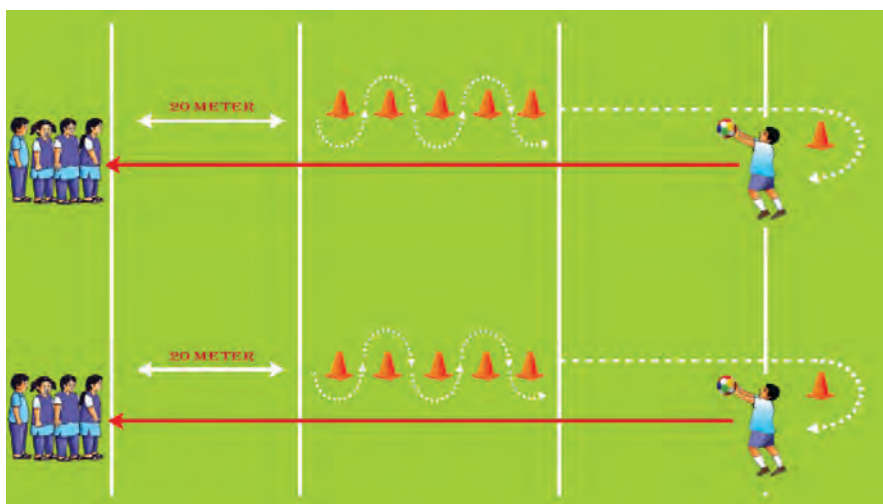
Team members should stand behind the starting line in a file formation. Take a look at the picture.



Rules and regulations

- Give the ball to the player standing at the front.
- As soon as the teacher gives the signal, the player standing at the front should sprint the first 20 metres.





- The next 10 metres should be covered by running in a zig zag pattern.
- Then, the last 5 metres should be completed by hopping.
- After running around the cone placed near the finishing line, throw the ball to the second player of your team.
- All team members should complete this activity.
- The team which completes the activity in the shortest time is declared the winner.

Did you like the 'Three phase game'? Which are the performance related fitness components that could be improved by playing this game?

-
-
-



Activity 3

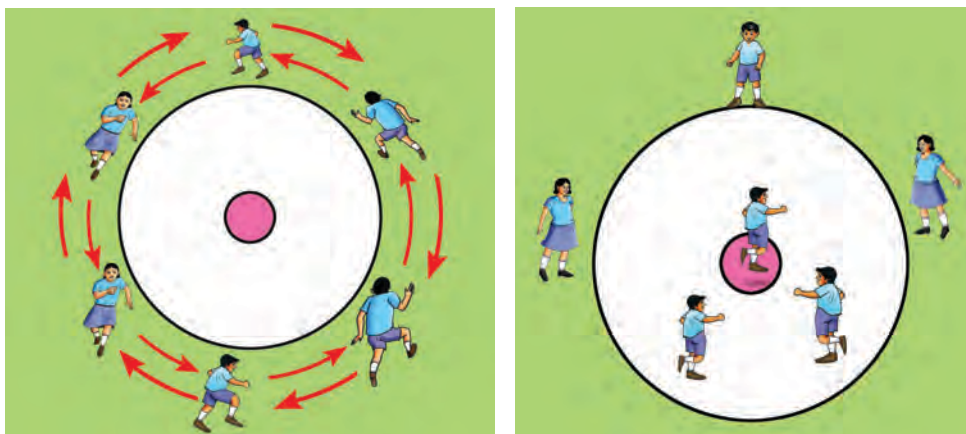
Move Master Game



Rules and regulations

- Form different teams of equal members.
- Draw lots to get the names of exercises as given in the chart.
- Stand outside the big circle.
- When the teacher says 'clockwise', players should run clockwise around the circle and run vice versa when the teacher instructs.





- When the teacher calls out the name of an exercise, a player, who picked the lot from each team, should come to the inner circle performing that exercise.
- The player who reaches the inner circle first, earns a point for his team. The team which scores more points wins the game.

Play 'Move Master Game'. Did you like the game? Which performance-related fitness components could be improved through this game?

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Assessment

1. What are the ways to improve performance-related fitness?

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2. Which performance-related fitness components are required to excel in the games you are interested in (e.g. Cricket, Hockey, Football etc)? Explain.

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3. Engage yourself in Circle Football/Three Phase Game/Move Master Game. Who performed well? Evaluate your performance. What aspects need to be checked by those who could not perform well?

.....

Chart

- One leg hop
- Two leg hop
- Backward hop
- Sprint
- Frog jump
- Crawling



Special Info

Find the meritorious sports person

Divide the class into different teams and provide opportunity to all to play Circle Football, Three Phase Game and Move Master Game. Find the players who performed the best.





Special
Info

Do you know?

From 2015 onwards,
21 June is observed as
International Day of Yoga.
It is also the longest
day in the Northern
Hemisphere.

Wellness through Yoga

Adolescence is a period of various physical changes. Along with this, we are also mentally and emotionally more active. Many a time, it leads to mental disturbances. We can reduce this through yoga. You have learned a few asanas in classes 5 to 8. Do you practise them regularly? Can you name these yogasanas? What are their benefits?

Now, let's learn two more yogasanas. Padahastasana and Vakrasana. Prepare the body and mind to do these asanas after doing warm up. You can refer to 'Warming up' given in the appendix at the end of this book.



Activity 4

Padahastasana



Step 1

Step 2

Step 3

Step 4

Step 5



This is an easy asana which can be performed in the standing posture. It helps stretch your back muscles and strengthen abdominal muscles.

Steps of Padahastasana (Look at the picture.)

- Step 1. Stand upright on the yoga mat.
- Step 2. Inhale and raise your arms by keeping the arms and legs straight and fingers together.
- Step 3. Exhale and bend forward slowly. Try to keep the legs straight and place your hands flat on the mat/feet.
- Step 4. While bending forward, pull your abdominal muscles inside and try to make your forehead touch your legs. This is the final pose of Padahastasana. Breathe normally in the final pose of Padahastasana. Continue in that pose as long as you can.
- Step 5. Slowly raise your body and come back to the standing posture.

Relax in Shavasana for double the time as you could hold in the final pose of Padahastasana.

Benefits of doing Padahastasana

1. Vertebral column and connected muscles become flexible and strong.
2. Flexibility of hip joint increases.
3. Calf and hamstring muscles get a good stretch.
4. Improves digestion
5. Internal organs get nourished by the increased flow of blood in the upper extremities.
6. This asana improves metabolism.

Do Padahasthasana... Experience the benefits



Assessment

1. Towards which direction does the vertebral column bend in Padahastasana?
 - a. Forward ☐
 - b. Backward ☐



Do you know?



Shavasana leads body to rest.



c. Sideward ☐

2. What are the benefits of doing Padahasthasana?

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3. Write your experience of doing Padahasthasana.

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4. Did you do Padahasthasana perfectly? Evaluate one another. Write a few suggestions for further improvement.

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Activity 5

Vakrasana

Vakrasana is a twisting asana which can be done in the sitting posture.



Step 1



Step 2



Step 3



Step 4



Step 5



Steps of Vakrasana. (Look at the picture.)

- Step 1 Sit in a long sitting position with both legs stretched out and kept together without bending the knees.
- Step 2 Bend your left leg and keep the left foot in line with your right knee.
- Step 3 Exhale and turn to the left. Simultaneously, cross the left knee over with the right arm and place the right hand by the side of the left foot.
- Step 4 Keep the left hand firmly at the back and straighten your spinal column. Turn your chest and head to the left. Breathe normally and stay in this position as long as you can.
- Step 5 Come back to the starting posture.

Now repeat the same on the right side.

Benefits of doing Vakrasana

1. Spinal column becomes flexible and strong.
2. Back muscles get a good stretch.
3. Improves digestion.
4. Muscles of the neck get good exercise.
5. This asana is good for diabetic patients.



Assessment

1. Do Vakrasana for a stipulated time. Prepare a note on your experience of doing it. Who all did Vakrasana perfectly? Write suggestions for further improvement.
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.....
2. Extend support to your family and friends to practise Padahastasana and Vakrasana. Were you successful in attracting your family and friends to yoga? Write your opinion.
.....
.....
3. Preparation of an album. Take photos of your poses in Padahastasana and



On June 21st, International Day of Yoga, organize a yoga demonstration in your school and attract others to Yoga.



Adolescence without Postural Deformities



Children's Pyramid

Observe the picture.

This is a pyramid model made by children. How were they able to stand like this?

All the members standing still, carefully and in a disciplined way helped in the formation of a "Children's Pyramid". If anyone in the group falls or moves, this model pyramid would collapse.

Our body posture too works in the same way. The body attains an ideal posture when every body part is aligned in a proper way. The body parts also need strength and flexibility for the same. When a body part deviates from the alignment, we develop postural deformities. Some postural deformities are by birth, but there are postural deformities caused by wrong habits and an improper life style. Let's understand these through some activities.





Activity 6

Bean Bag

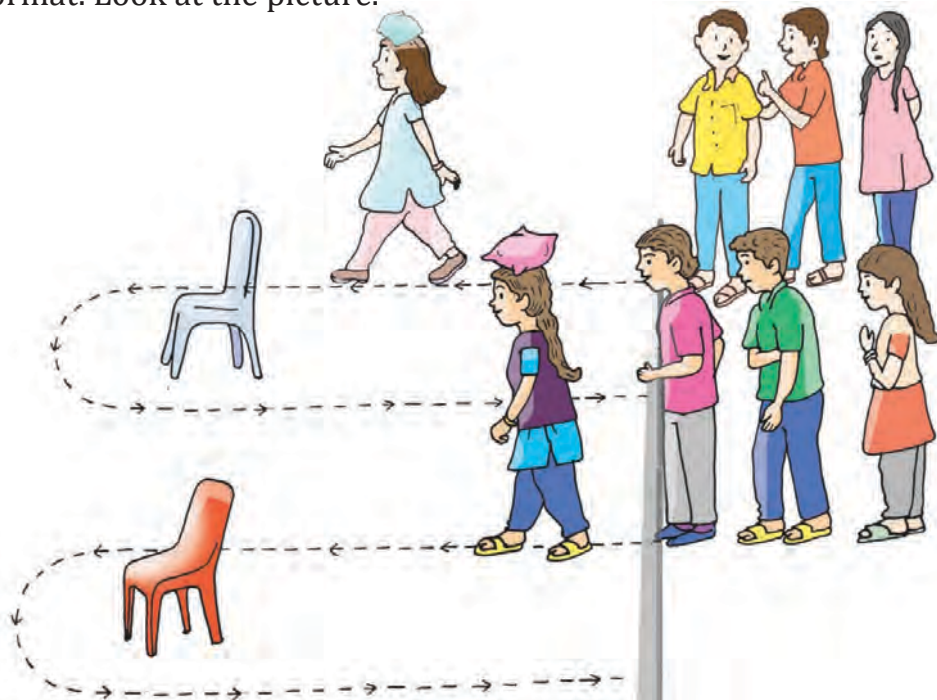
Class may be divided into teams of equal members. Each team should stand behind the starting line in a file format. Look at the picture.



Special
Info

Body Posture

Body posture is the upkeep of the correct alignment of body parts.



Rules and regulations

- The first child from every team should keep the bean bag (similar objects) on the head without supporting it with the hands and walk towards the chair kept 15 meters away from the starting line. The child should sit on the chair and then return to the starting line without letting the bean bag fall off his head. Then, the child should pass the bean bag to the next one.
- All members of the team should complete this activity.
- The challenge is to complete the activity at the earliest.

Some children's bean bags might have fallen off during this game. It is because as they couldn't keep the correct posture.

Play the bean bag game and improve your body posture.

When we keep the right body posture, our joints, ligaments, and muscles experience less strain and thus help in maintaining good health.



Let's get to know some postural deformities

1. Text Neck



It is a postural deformity caused by excess strain around the neck (Cervicle region).

Using the mobile phone for a long time with one's neck bent forward, causes text neck.

Symptoms

- Neck pain, stiffness in the neck muscles
- Back pain
- Pain or stiffness in the shoulders
- Pain, especially at the base of the skull
- Difficulty to move the neck freely
- Numbness in the hands or fingers

Causes



- Wrong body posture - looking at a device for a long time with your head bent down causes excess pressure on the muscles of the neck and spinal column.
- Muscle stiffness - holding the head in an unnatural position for a long time puts a lot of strain on the muscles and joints of the neck.
- Overuse of electronic devices/long-using devices for texting, browsing and spending time on the social media leads to poor posture and text neck.

Remedies

- Retain the right posture.
- Take frequent breaks while using devices.
- Make stretching exercises a habit to reduce stiffness of muscles and to increase flexibility.



- d. Do exercises to increase the strength of muscles.
- e. Keep the screen of devices like mobile phone at the eye level.
- f. Do yogasanas like Bhujangasana and Vakrasana.



Assessment

1. How does the continuous use of electronic devices affect your posture?
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2. What are the reasons for a posture defect like 'Text Neck'? Write the corrective measures to be taken to avoid this.
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2. Kyphosis

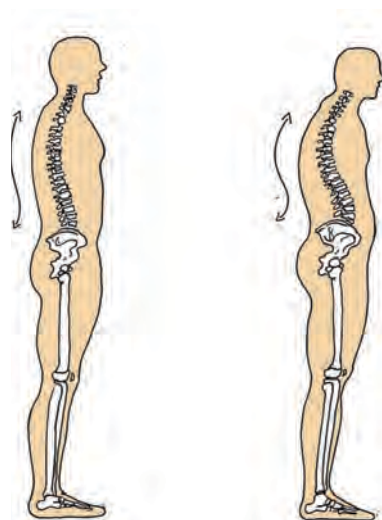
It is an exaggeration of the natural thoracic curve.

Symptoms

- Exaggerated forward rounding of the back.
- Stiffness and pain in the upper back.
- Weakness of muscles in the upper back.
- Respiratory congestion in extreme types of Kyphosis.

Causes

- By birth
- Bad posture
- Injury to spinal column
- Following poor body postures (while sitting, using computer chair, driving vehicles etc.)



Remedies

- Follow the right body posture while sitting, standing and walking.
- Do exercises to increase the flexibility of chest muscles.
- Do exercises to increase the strength of upper back muscles.
- Do yogasanas like Bhujangasna, Dhanurasana and Chakrasana.



Assessment

- Explain the exercises to strengthen the back muscles.

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- Explain the asanas which can prevent Kyphosis.

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Activity 7

Plank Star

This is an exercise to improve your body posture. (Look at the picture.)



Rules and regulations

- Divide the whole class into teams of 5 members each.
- Understand the method of doing plank.
- After forming teams, every student must take the plank position according to the teacher's instruction.



- Follow the teacher's instructions and keep the stop watch on simultaneously.
- Note down the time taken by all the five members of the team to remain in plank position.
- Find the team score totalling the individual score of 5 members.
- The team with the highest score is declared the winner.

Follow this and practise plank at home.



Assessment

- Did all of you get a chance to practise plank for a fixed duration? How did plank help you improve your body posture? Prepare a note.

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- Were you able to do plank for a longer time? Describe your experiences.

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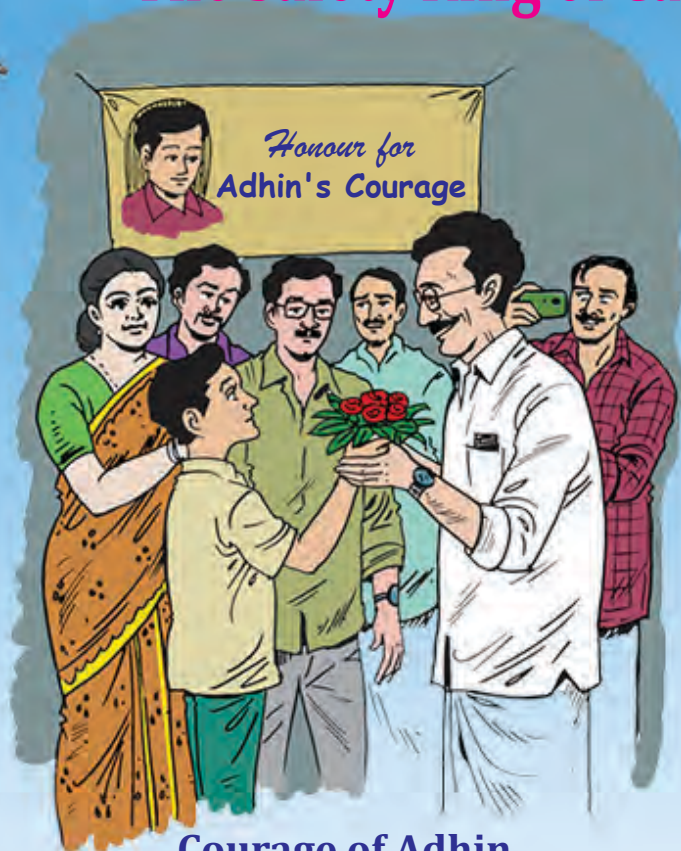
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The Safety Ring of Care



Courage of Adhin

It was a lush green village with a river following through it. It was the rainy season and the river was in full flow. Rahul, who was residing on the banks of the river, had gone for a bath. He got trapped in the strong current and started drowning. Adhin, a tenth standard boy, saw Rahul drowning. Being an experienced swimmer, he dived into the river and saved Rahul. Adhin's bravery was appreciated by everyone in the village. The villagers conducted a meeting and honoured Adhin for his bravery.

You also might have had similar experiences. Share it with your friends.

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Accidents in waterbodies occur frequently. It is necessary to know precautionary measures to avoid accidents in waterbodies. Knowledge of safety measures and first aid would be an added advantage. Let's get familiarised with them.

Drowning

Drowning is a type of suffocation induced by the submersion of the mouth and nose in water or any other similar liquid.



Emergency Number 112

112 is a Pan Indian emergency number. It can be utilized to get the emergency services of fire force, police and ambulances.

Circumstances of drowning

- Entering waterbodies without knowing how to swim.
- Entering unknown waterbodies without following safety warnings.
- Entering large waterbodies without wearing safety equipment
- People with epilepsy or similar conditions entering waterbodies without proper supervision.

How to rescue a person who drowns

In case of an accident, seek the help of people nearby. Also, contact the emergency number (112) for help.



Ensure your own safety before trying to rescue a person who drowns.



Try to rescue a drowning person by throwing light weight equipment or by holding out a long rope or a pole to him.



First Aid for Drowning



- Make the victim lie on a plane surface.
- Observe the victim's general condition.
- If the victim is conscious, make him/her lie on his/her left side.
- Look for any foreign body in the nose or mouth that is obstructing the breath. If found, try to remove it.
- Check if the victim is breathing by observing the movements of the chest or belly.
- If there is no pulse and breathing consider the victim to be unconscious. Start Cardiopulmonary Resuscitation (CPR) immediately. Continue CPR until the person becomes conscious or medical help arrives.
- Use heavy clothes or bedsheets to provide warmth to the victim's body.
- Take the victim to the hospital as early as possible.



Do you know?

If the brain is deprived of oxygen for five or more minutes, a person goes into coma, seizure or brain death





Activity 1

112 Help the Drowning Game

This game involves all the students of the class.



Rules and Regulations

- Choose one player as the catcher.
- The catcher has to chase and touch other players.
- Players who have been touched by the catcher should stand still. The catcher should try to make all the players stand still by touching them.
- The players standing still can be touched by other active members. In such situations, they can resume play the game.
- If the catcher is exhausted and incapable of touching more students, she should move to one side of the ground and scream "Drowning".
- At this time, every player should say "Help 112" and then run towards the catcher to touch her head.
- Those players who do not say "Help 112" should go back to a previously drawn line. Then they should run back yelling "Help 112" to touch the catcher on her head.
- The last player to touch the catcher becomes the new catcher.
- The number of players a catcher makes 'still' in the stipulated time is counted as her personal score.



Special Info

Do you know?

As the number of accidents in water bodies is increasing, it is essential to learn swimming. Swimming is an activity in which anyone can engage, regardless of age.



Special Info

Do you know?

Give an opportunity to every student for doing a demo of first aid.

Play this game involving all the students of the class. How did you feel about this game? Write your experiences here.

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Swimming

The best way to prevent drowning is to learn swimming with the help of elders. Waterbodies in villages can be used for this purpose.

Benefits of swimming

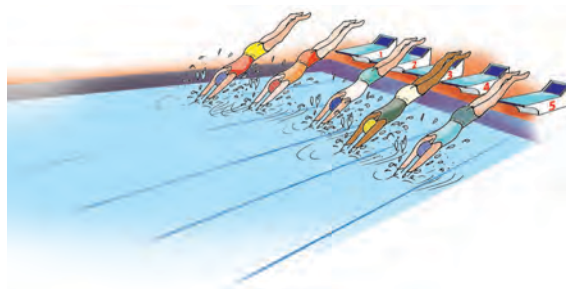
Exercise/Recreational aspects

1. It improves cardio-respiratory fitness.
2. Improves and retains muscular strength and muscular endurance.
3. It reduces mental stress.
4. It reduces fat in the body and tones muscles.



Competition/Career and Therapeutical aspects

1. Swimming as a sport gives opportunities to take part in competitions.
2. Learning swimming skills helps one get various career opportunities.
3. Swimming is considered for therapeutical purposes. e.g. Hydrotherapy.



Life saving aspect

1. Knowing how to swim enables us to save ourselves and others from drowning.
2. You can work as a lifeguard to protect others.



Choking

Choking is the blockage of the upper airway with food or other objects, which blocks the air flow and prevents a person from breathing effectively.

Symptoms of choking

- Inability to breathe
- Coughing/gagging
- Eyes protrude due to lack of breath
- Skin, lips and nails, turn blue
- Inability to talk
- Clutching the throat
- Losing consciousness on rare occasions



First aid measures for choking

- Instruct the victim to cough forcefully. Check whether the foreign object stuck in the throat can be removed thus.
- Stand behind the affected person and give 5 forceful thrusts upward at the center of the upper back.
- Hold the affected person from behind by putting your arms around his/her abdomen.
- Place your fist just below the sternum firmly and above the abdomen.
- Place the other hand above the fist. Apply pressure upwards and inwards forcefully five times.
- If the person falls unconscious, make the person lie in supine position. Call someone for help. Immediately start CPR. Continue CPR until medical support arrives.





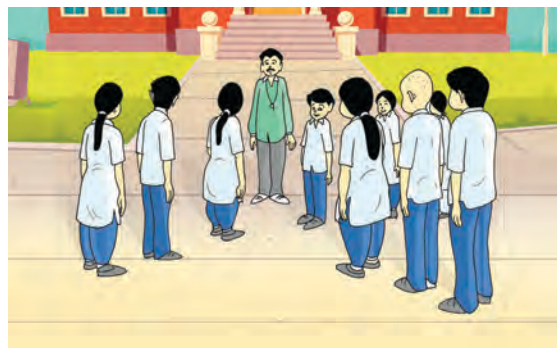
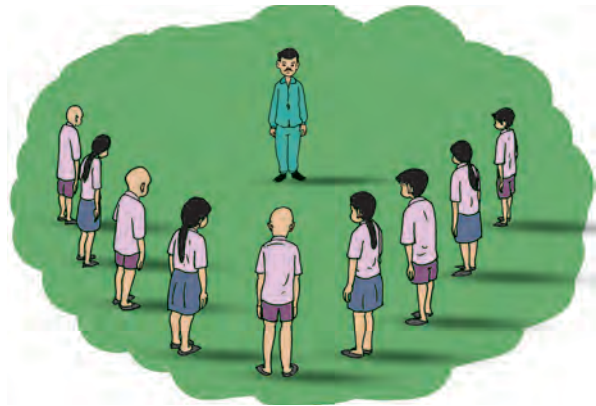
Activity 2

Act and Team up



Rules and regulations

- Players should pick a lot from the teacher. As per the teacher's instructions, move to different places on the ground.
- In order to form groups, every player should imitate the first aid measure mentioned in the lot. (Look at the picture.) Then the players who perform the same first aid measure will form a group in a designated place on the ground.
- Form groups using gestures. Avoid talking with each other.
- The group that completes the task in minimum time wins.



Did you like 'Act and Team Up'? Write your experience.

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Assessment

1. Write a note on drowning, choking and similar accidents that have happened near your locality.

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2. In case of an accident or emergency, which emergency number will you call?

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3. Describe the benefits of swimming.

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4. List out the benefits of playing '112 Help the Drowning.'

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5. How many friends in your class know swimming? Gather information about it and prepare a list.

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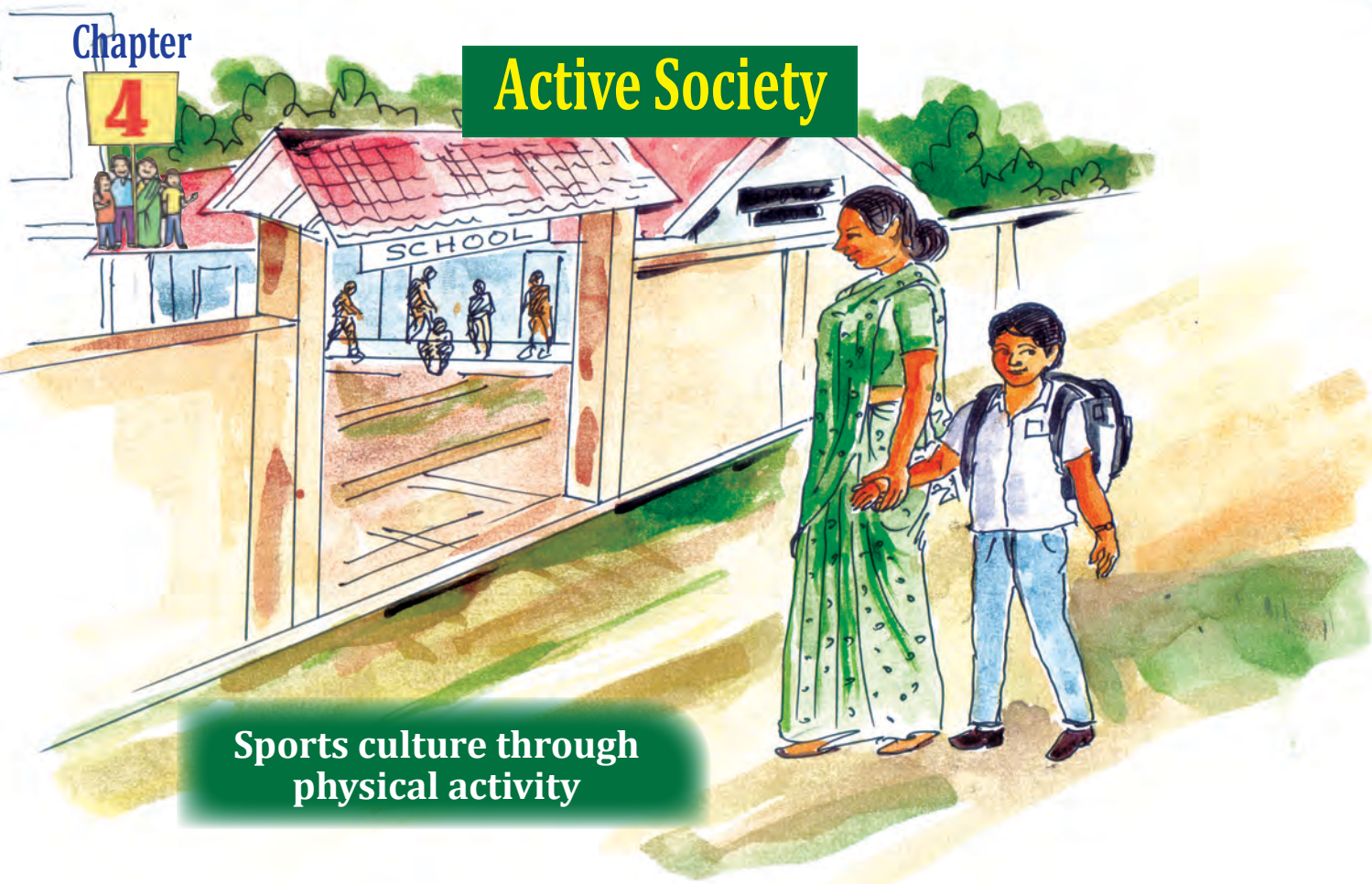
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Chapter

4

Active Society



Sports culture through physical activity

Let's get to know Freddie. Freddie had come to school holding his mother's hand to take admission in the VIIIth Standard. Being an introvert, he had very few friends. During the Physical Education period when all other students engaged themselves in various games, Freddie would be alone. His teacher noticed this and talked to him. The teacher understood that it was his unnecessary inferiority complex that was disturbing him. Teacher motivated him to take part in sports. In the following days, the teacher took the initiative to make him participate in games. He had good physical fitness and this helped him to become a part of the school football team. Freddie was able to continue a disciplined sports training and also establish a good interpersonal relationship with his team-mates. Within a year, he became a very good football player with a big circle of friends.



By the time he was in the Xth standard, he was made the captain of the school football team. He turned out to be an efficient captain who could build team spirit and cooperation.

- What have you learned from the story of Freddie?

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- Find and collect information on famous players who have grown up, facing similar situations.

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Benefits of participating in various sports activities in the school.

- Physical development
- Cognitive development
- Acquire social skills to co-operate with each other and work together.
- Develops a cooperative attitude.
- Acquires leadership skills.
- Learns to accept and respect each other.
- Learns to embrace success and failure with equanimity.

The life skills learned through sports will help us overcome many challenges, which may emerge in later life. When the society as a whole engages in physical and sports activities, sports culture evolves. In this way, we can create an active society.

Sports Culture

Sports culture refers to the values, customs, and practices associated with physical activity and sports. It involves everything from playing, watching, organising, and governing sports. It also involves the way sports and physical activities are presented through media.

Sports culture refers to behaving in accordance with social values such as behaving ethically and respecting the culture of other teams and players.



Sports Culture

Sports culture influences the progress of a society deeply.



Let's play a game.



Activity 1

Find the Leader



Rules and regulations

- Make all students except one stand in a circle.
- That student is asked to face another direction. From among the students standing as a circle, make one student a leader.
- Movements of the leader have to be imitated by other students. The leader must do exercise as seen in the six pictures.
- The student who is staying apart can be brought back and instructed to find out the leader.



- The leader has to start different exercise movements very carefully so that he is not caught by the student assigned to do so.
- If the student finds the leader, then he will become part of the group.
- Now, the previous leader has to take the responsibility to find the next leader. In this way, the game continues.

Play this game and tell us how you liked it. Write your experience.

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Benefits of Socialisation

- Better mental health through a healthy inter-personal relationship.
- Increased safety and belongingness.
- Increased mutual trust.
- Increased quality of life



Assessment

1. What is the scope of sports culture in the game 'Find the Leader?'

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2. Did you get the opportunity to exhibit leadership skills in the game? Explain.

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3. Prepare a chart on the benefits of taking part in sports training.



Inclusive Sports - A helping hand with special consideration

Inclusive sports is about ensuring equal participation among people with and without disabilities under the same rules in sports. It is essential to form a sustainable society with equality.





Activity 2

Circle of Friends



Rules and regulations

- One of you should be the catcher.
- The catcher has to chase and touch other children.
- When the catcher touches a student, they both hold hands and then try to touch others.
- This process continues and when all the students become a part of the chain, the game ends.
- Another student can then be selected as the chaser and the game continues.

Design a game

Divide the class into three groups. Let each group design a game with opportunities to gain leadership and socialisation skills. Fix the rules and regulations of the game and make the other two groups play the game in the school.





Assessment

1. What factors help us enjoy and have fun playing 'Circle of Friends'? Write a note.

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2. Identify a game similar to this and formulate its rules and regulations.

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3. What is the scope for learning leadership and socialisation skills in the game 'Circle of Friends'?

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Activity 3

Captain Ball

Divide the class into two teams as A and B.





Rules and regulations

- The captains of both the teams should stand inside the circles drawn at the end lines of the opposite team. See the picture.
- The team winning the toss can start the game by passing the ball from the end line of their court.
- The teams have to pass the ball and make it reach their captains. When the captain gets the ball, the team gets a point.
- A player cannot keep the ball for more than 5 seconds.
- A player with the ball should not move more than two steps with the ball to any direction.
- Captains should not move out of the circle.
- Other players are not allowed to enter the captain's circle.
- If the ball goes out of bounds, the opposite team can start the game.

Play this game and explain its merits.

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Social Welfare Activities

- We should always be ready to undertake collective actions for the good of the society. Some of the activities are:
- Cleaning the playground
- Designing new playgrounds

Find out similar activities and describe them.

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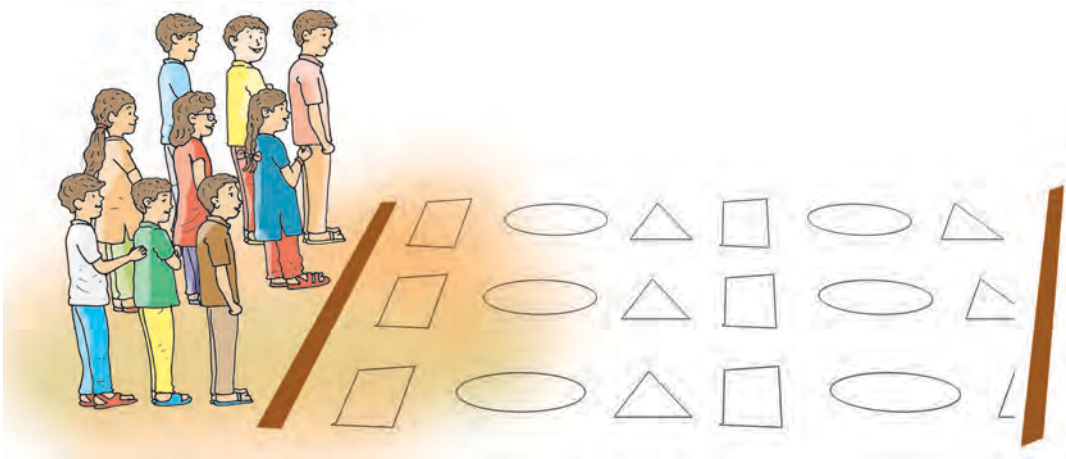
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Activity 4

Move as One



Rules and regulations

- Draw shapes between the starting line and the end line as shown in the picture.
- As the teacher whistles, the student standing in the first position, places one of his feet in the shape in front of him.
- When he places his other foot in the same field, he holds the hand of the second student standing in his line. (Look at the picture.)
- The first team to reach the end line holding hands while moving, wins.



- Restart the game, if you fall or step out of the field while playing.
- Only two feet are allowed at a time, in one field. (Look at the picture.)

When you played 'Move as One', could you develop unity among yourselves?
Share your experience.

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Assessment

1. Write a note on the topic 'Socialisation through Sports'.

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2. Design a programme to improve the socialisation process of your class. Execute this programme and write the benefits of socialisation gained through this programme.

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Chapter

Knowing Nature through Games

*Kalenjin*

Have you heard about the tribe 'Kalenjin'? Most of the long-distance runners of the world belong to the Kalenjin tribe of Kenya. What could be the reason?

This place is 7000 feet above sea level and has lower oxygen levels. This condition increases the aerobic capacity of the natives there. Their food habits and activities such as hill climbing have contributed to their excellence in long distance running. Nature often shapes athletes.

Do you know any exceptionally talented sports person from Kerala and how environmental and geographical features of the regions might have been favourable in honing their skills?

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Hope you have understood that nature designs our body. Similarly, nature provides a setting for various sports and games. Therefore, there is a strong bond between us and our natural environment. Sports events are held in water, on land and air. Let's know about sports events held on different surfaces.

Water Sports

Swimming

You have read about swimming in chapter 3. It is for recreation, fitness, competition and also for survival.

- What percentage of students in your class know swimming? Find out and write about it.

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- Write the differences between swimming pools and other waterbodies near you.

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- How does swimming cater to survival needs?

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Boat Race

Boat race is celebrated as an aquatic event in Kerala where waterbodies are in plenty.

- Name the major boat races conducted in Kerala.

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- What are the different aspects that make a boat race attractive?

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- What type of boats are used in boat races?

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Kayaking is an Olympic event that is similar to boat racing. As a competition event, kayaking has a lot of opportunities in Kerala. Many waterbodies here are favourable for Kayaking.

Kayaking

It is the racing competition using small boats known as 'kayaks'. These kayaks are covered at the front, back, sides and the top. The oar used to propel the boat has blades on both the sides. The riders also use safety equipment like helmets, jackets and glasses. This sports event is popular in many parts of Kerala which is rich in waterbodies.



Which places in Kerala have facilities for kayaking? Find out and write with the help of your teacher.

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Write the names of kayaking athletes from Kerala who have excelled in this sport.

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Sky and Mountain Sports

Hang Gliding



Special
Info

Do you know?

The recreational sports of hang gliding begins by jumping over high hills.

It is a competitive event in which gliders are flown without the help of machines.

- Do you know places in Kerala where hang gliding is conducted? Write with the help of your teacher.

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- What are the safety equipment used for hang gliding?

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This sport was developed in Germany in 1891. The glider is made of strong aluminium sheets covered by sail cloths that are used in sailboats. The glider glides by following all the safety measures.

Paragliding



Paragliding is a recreational and competitive adventure sport of flying paragliders. A paraglider is a light, free-flying, foot-launched glider aircraft with no rigid primary structure.

- Have you ever watched or participated in a paragliding event? If yes, what equipment is used for paragliding?

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Mountaineering

Mountaineering is an adventure sport of climbing high mountains with or without special equipment. This adventure sport helps to establish an intense connection with nature.

- What are the precautions to be undertaken before going mountaineering?

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Special Info

Do you know?

A High Court judge of England Sir Alfred Wills has conquered 'Vetter Hon' a mountain in Switzerland in 1865. This is believed to be the beginning of mountaineering.

Mountain Biking/ Cycling

Riding specially designed bicycles on mountains is called mountain biking. These cycles are designed to increase performance and last long on rough terrains.

- Have you taken part in, or watched mountain biking? Write your experience.

.....

.....

.....

- What is the difference between a normal bicycle and a mountain cycle?

.....

.....

.....



Sports conducted on Ice

Ice Skating

Ice skating is self-movement and gliding on a surface made of ice, using metal-bladed ice skates. It is both a recreational as well as a competitive sport.



Special
Info**Do you know?**

Ice skating originated in Netherlands. Competitors wear tight costumes to overcome air resistance.

Special
Info**Do you know?**

Ice hockey is considered as the fastest team game in the world.

- What are the special features of ice skating? Find and write.

.....

.....

- Name the countries where ice skating is popular. Find out with the teacher's help.

.....

.....

Ice Hockey

This is a competitive sport played on ice by making certain changes in field hockey.

What is special about ice hockey? Find out and write.

.....

.....

Beach Sports

The sand on the beach is used for resistance training in different sport events. Beach sports are more safe and entertaining, as one can jump and dive without the fear of injury.

Take a look at the pictures given below. Write the name of the respective sports event under each picture.



.....



.....



.....



Many sports competitions like Cricket, Football, Volleyball, Basketball, Athletics, etc. are held on plains.

We get different experiences while playing a variety of sports and games on different surfaces. We can thus experience and enjoy playing on various surfaces. We must try to improve our physical, mental, emotional and social abilities by participating in games and sports popular in our locality.

Let's enjoy nature and play 'Tree Touch Game', a game which is seldom played now.



Activity 1

Tree Touch Game



Rules and regulations

- Select one or more chasers.
- All other students must stand, touching a tree. (if there are no trees, you can place cones or draw circles).
- When the whistle goes, students touching the trees need to run and touch another tree.
- Everybody must change the trees they are touching. The chaser has to run and touch any tree that is left unclaimed. The chaser must start the game from the spot decided by the teacher.
- If the chaser manages to touch a tree, the student who is near that tree will become the new chaser.
- If all the students are able to change trees successfully, then the game can be continued with the same chaser.





Assessment

- The 'Tree Touch Game' must have given you an opportunity to experience a connection between you and the environment. Write about it.

.....

.....

- Design a new game involving trees. Write its rules and regulations.

.....

.....



Activity 2

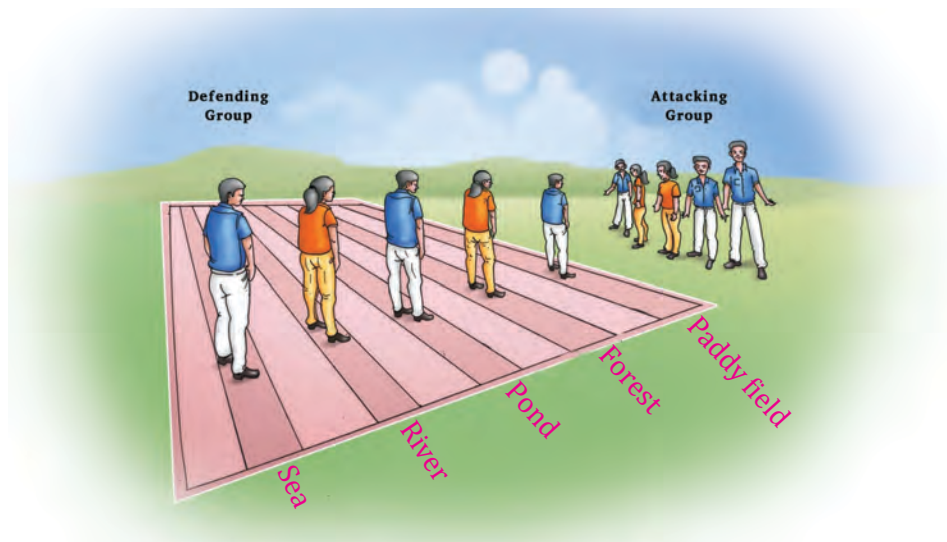
Let's understand different terrains through a game.

Thattu Kali



Rules and regulations

- Let's divide into two teams with equal members.



- One team should stand as defenders in various rows as shown in the picture. Each row represents different terrains.
- The other team will stand behind the starting line as attackers.
- The game begins when the last defender claps.



- Attackers have to aim to cross the last zone by crossing every other zone.
- Defenders on the zones have to be dodged to cross a zone. If the defenders touch an attacker, he will be out.
- If an attacker crosses the last zone by defeating all defenders, the attacker's team gets a point.
- After a fixed time, defenders will become attackers and the game can be continued.
- When both teams get the chance to play as attackers, it will be called one innings.
- Based on the available time, one can play one or two innings. The team which gets the highest score is declared the winner.



Assessment

1. Play 'Thattu Kali' on a different, natural surface available in your locality. Write your experience after playing.
.....
.....
2. Write a note on your experience of playing nature-friendly games.
.....
.....
3. Which aspects of nature could you observe after engaging in nature-friendly games?
.....
.....
4. What safety measures were followed while engaging in nature-friendly games?
.....
.....
5. Project: Prepare a project on the popular games in your locality. It can be done as a group activity with groups of students from the same locality. Include various aspects like origin, history, present status and socialisation in the games chosen and try it out in the next classes with the help of the teacher.



[illegible]

Annexure

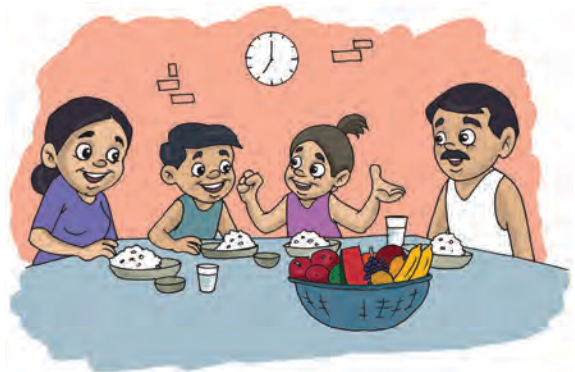
- ☐ Lifestyle Formation
- ☐ A Regular Day
- ☐ Warming up
- ☐ Cooling down



Lifestyle Formation

Food habits

- Dine with your family.
- Avoid using digital devices during dining.
- It is better to take food one hour after and 2 to 3 hours before exercise.
- Never skip breakfast. Chew food properly and eat slowly.
- Drink two to three litres of water that is boiled and cooled.
- Ensure rainbow diet (fruits and vegetables of different colours).
- Avoid adulterated fast food, carbonated drinks and junk food as far as possible.
- Have dinner at least 2 to 3 hours before bed time.



Regular Exercise



- Enjoy doing exercise with family members. Give preference to aerobic exercises like walking, jogging, cycling, swimming etc.
- Students of the age group 5 to 7 must do moderate to high intensity physical activities for atleast one hour daily. They should attempt strength training for 3 days a week (Source - WHO).



A Regular Day

- Engage in short duration physical activities before going to school. Help your parents with domestic chores.
- Walking or cycling is a better option to go to school. If you travel by vehicle, find enough time to walk with your friends.



During class time



- Practise stretching your body in between the classes.
- Walk as much as possible while at school. Visit the school library and lab everyday, so as to develop a habit of being physically active.

During interval

- Use the opportunity to walk and engage in leisure time physical activities.
- Participate in curricular and creative activities as far as possible.



After reaching home



- Engage in recreational sports activities with family members and friends. You can also take your pet out for a walk, if you have one.
- Reduce screen time used for recreational purpose as far as possible.



Study time

- Short exercises and listening to music during short breaks in studies help you to remain active.
- Pressing the stress ball/squeeze ball during study hours reduces stress.
- Schedule your study time.



Sleep



- Make sleeping and rising early a habit.
- World Health Organization (WHO) recommends 9 to 12 hours of sleep for children of 6 to 12 years of age and 8 to 10 hours of sleep for those of 13 to 18 years.
- One can sleep in supine or sideways position so as to maintain the natural curves of the back.
- Stop using electronic devices half an hour before bedtime. Keep such devices at least 1 metre away from your body.

There might be certain changes in your routine during holidays. However, ensure that you exercise, eat, study, have fun and sleep on time even during holidays.



Warming Up

- Warming up refers to the preparatory phase prior to a physical activity or sports event. It will help to enhance the performance and reduce chances of injury.
- Hold all stretching exercises for a stipulated time and repeat on the reverse side also.
- All other exercises may be practised for around 10 times and repeated on the other side of the body.

1. NECK STRETCH



2. OVERHEAD SHOULDER STRETCH



3. WRIST EXTENSION - 1



4. WRIST EXTENSION - 2



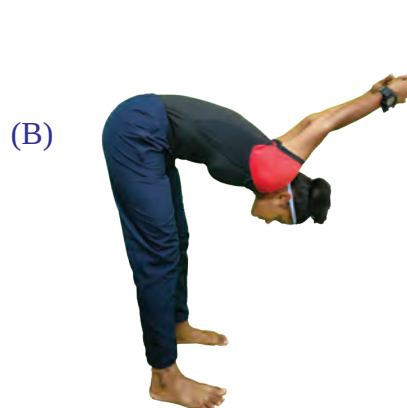
5. SHOULDER STRETCH



6. CROSS ARM SHOULDER STRETCH



7. REVERSE SHOULDER STRETCH



8. ARCH BACK AND STRETCH



9. SIDE BENDING STRETCH



10. HAMSTRING AND CALF STRETCH



11. QUADRICEPS STRETCH



12. CALF STRETCH



13. KNEELING HIP FLEXOR

(A)



(B)

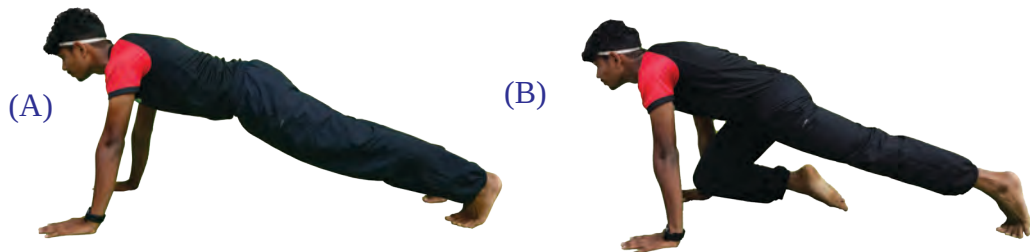


14. ALTERNATE TOE TOUCH



15. MOUNTAIN CLIMBERS

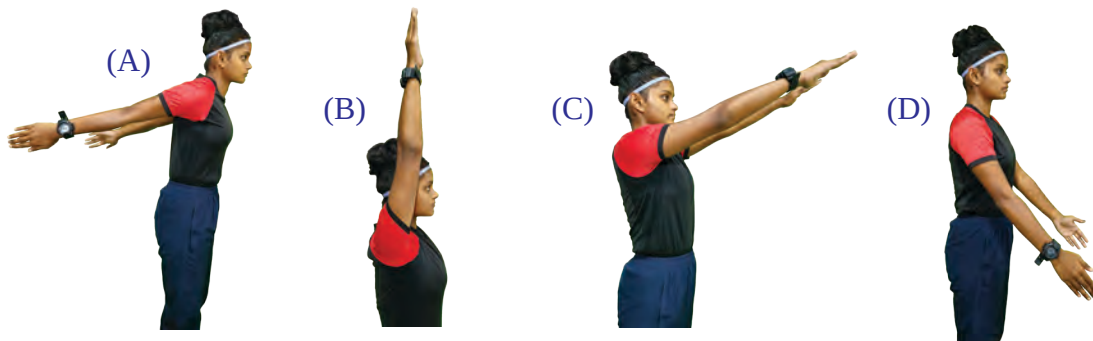
Keeping the arms stretched, (plank position) move both legs alternatively as if climbing a mountain.



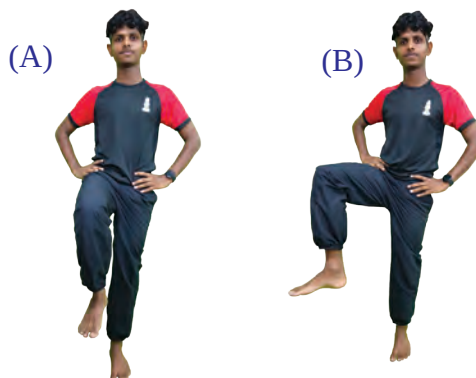
16. ARM SWINGS



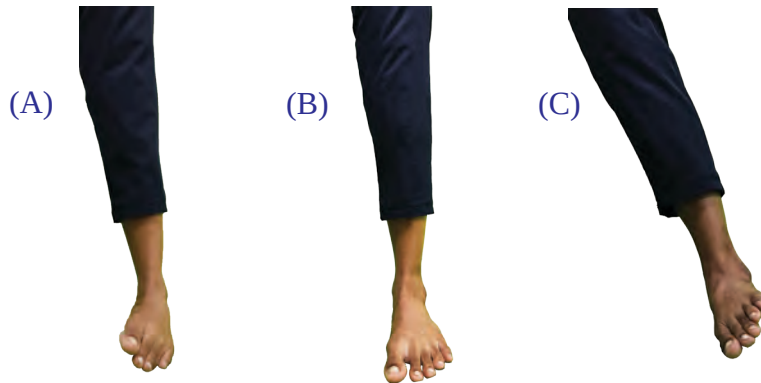
17. ARM ROTATION



18. HIP CIRCLE



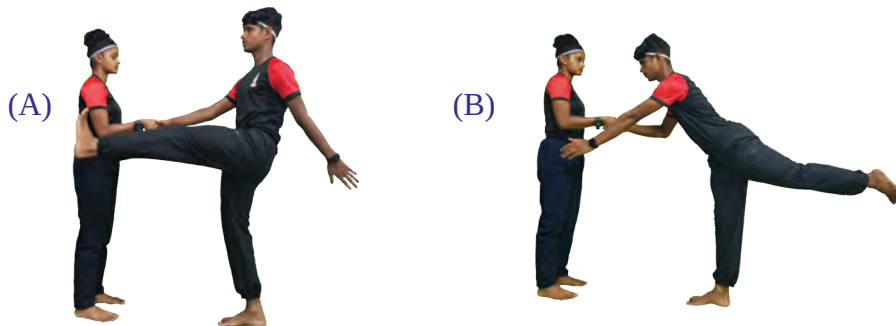
19. ANKLE INVERSION AND EVERSION



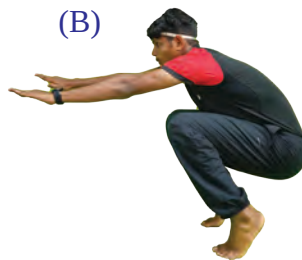
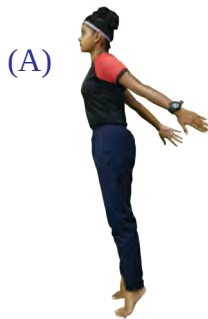
20. JUMPING JACKS



21. LEG SWINGS: FORWARD AND BACKWARD WITH SUPPORT



22. TUCK JUMPS



23. LATERAL STEP PULL

Stage 1 : Place the left leg and both arms backwards.

Stage 2 : Do jumping jacks.

Stage 3 : Place the right leg and both arms backwards.



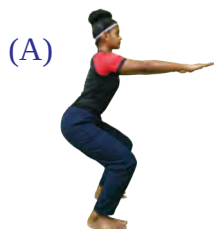
24. ALTERNATE ANKLE TAP WITH SQUATS

Stage 1 : Do squats.

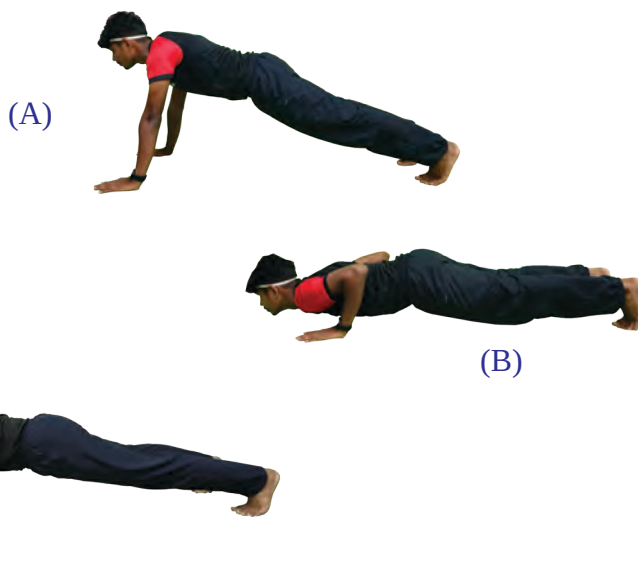
Stage 2 : Touch the sole of the left foot with the right hand fingers.

Stage 3 : Do squats.

Stage 4 : Touch the sole of the right foot with the left hand fingers.



25. FOREARM PLANK EXERCISE



26. Major activities (Select any activity mentioned below and perform for 10 minutes.)

- Cycling, swimming, etc.
- Going up and down the stairs
- Jogging (begin slowly and increase the speed gradually)
- Various types of exercises using skipping rope.
- Play any recreational game that you learned in the class.



Cooling down

- This activity is done after a competition or physical activity to bring the body back to its original state. It helps in faster recovery, prevents injury and improves performance.
- Hold all stretching exercises for around 10 to 12 seconds and performed on the other side of the body.

1. SLOW WALKING



2. SLOW JOGGING



3. ARMS ABDUCTED (WITH A RELAXED WRIST) AND SLOW JOGGING.



4. BEND FORWARD (Hang the arms in a relaxed manner and walk and jog slowly.)



5. NECK STRETCH

(A)



(B)



(C)



(D)



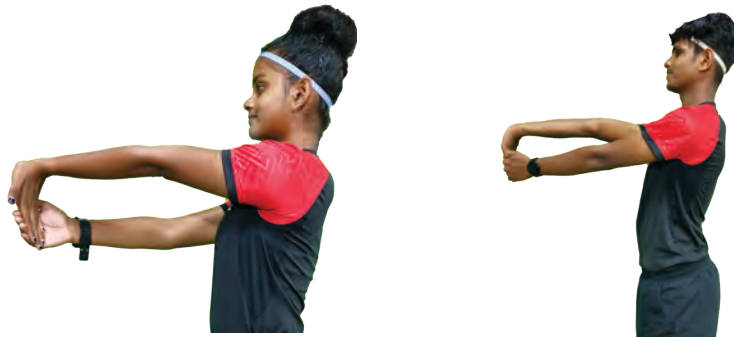
6. OVERHEAD SHOULDER STRETCH



7. WRIST EXTENSION STRETCH - 1



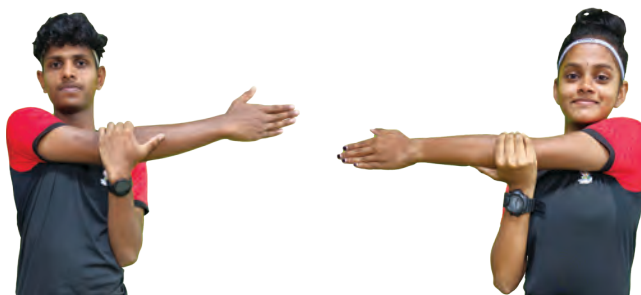
8. WRIST EXTENSION STRETCH - 2



9. SHOULDER STRETCH



10. CROSS ARM SHOULDER STRETCH



11. ARCH BACK AND STRETCH



12. SIDE BEND STRETCH



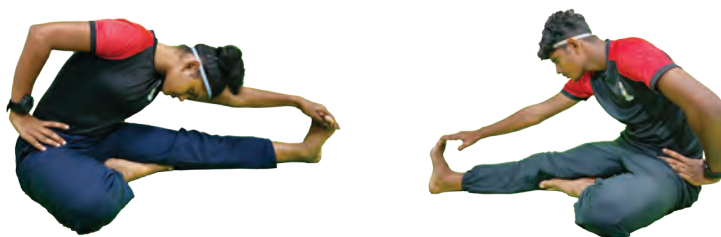
13. HAMSTRING STRETCH



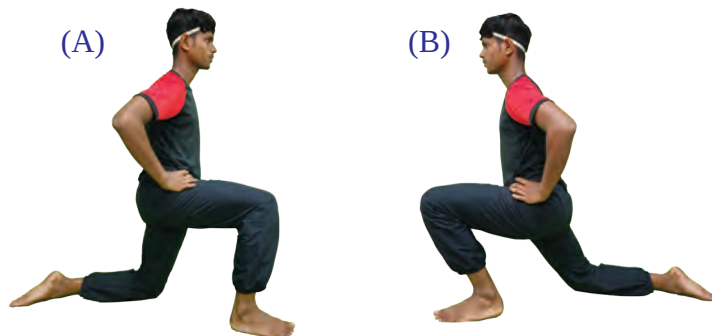
14. QUADRICEPS STRETCH



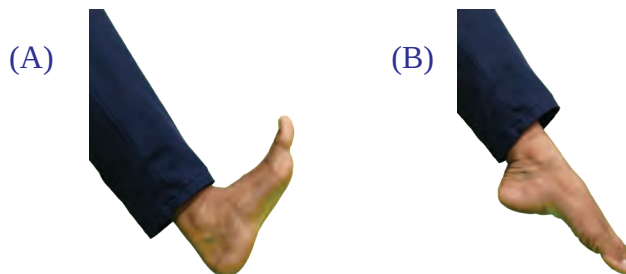
15. CALF STRETCH



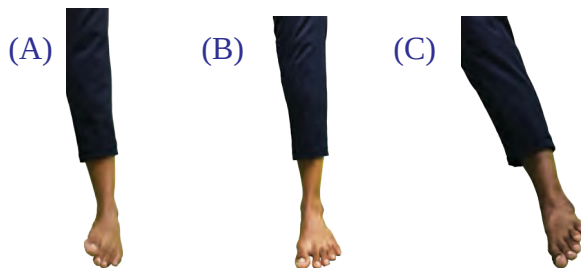
16. KNEELING HIP FLEXOR



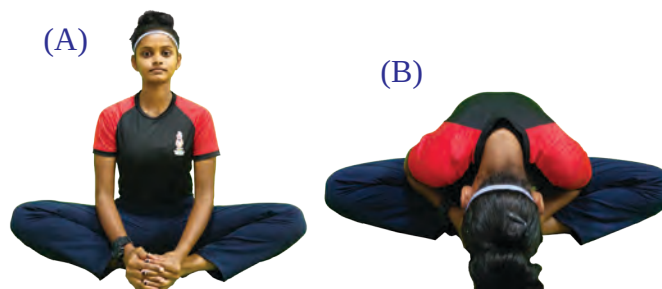
17. DORSI FLEXION AND PLANTAR FLEXION



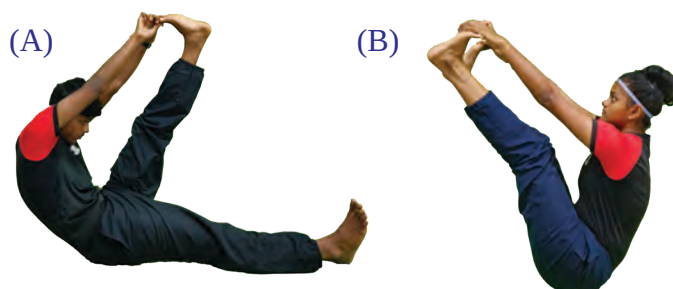
18. ANKLE INVERSION AND EVERSION



19. BUTTERFLY STRETCH



20. LYING HAMSTRING STRETCH



21. LIE DOWN AND RELAX



Notes

A series of 25 horizontal dotted lines for writing notes.



This image shows a full page of white paper with horizontal blue dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.



CONSTITUTION OF INDIA

Part IV A

FUNDAMENTAL DUTIES OF CITIZENS

ARTICLE 51 A

Fundamental Duties- It shall be the duty of every citizen of India:

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievements;
- (k) who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between age of six and fourteen years.

CHILDREN'S RIGHTS

Dear Children,

*Wouldn't you like to know about your rights? Awareness about your rights will inspire and motivate you to ensure your protection and participation, thereby making social justice a reality. You may know that a commission for child rights is functioning in our state called the **Kerala State Commission for Protection of Child Rights**.*

Let's see what your rights are:

- Right to freedom of speech and expression.
- Right to life and liberty.
- Right to maximum survival and development.
- Right to be respected and accepted regardless of caste, creed and colour.
- Right to protection and care against physical, mental and sexual abuse.
- Right to participation.
- Protection from child labour and hazardous work.
- Protection against child marriage.
- Right to know one's culture and live accordingly.
- Protection against neglect.
- Right to free and compulsory education.
- Right to learn, rest and leisure.
- Right to parental and societal care, and protection.

Major Responsibilities

- Protect school and public facilities.
- Observe punctuality in learning and activities of the school.
- Accept and respect school authorities, teachers, parents and fellow students.
- Readiness to accept and respect others regardless of caste, creed or colour.

Contact Address:



Kerala State Commission for Protection of Child Rights

'Sree Ganesh', T. C. 14/2036, Vanross Junction

Kerala University P. O., Thiruvananthapuram - 34, Phone : 0471 - 2326603

Email: childrights.cpcr@kerala.gov.in, rte.cpcr@kerala.gov.in

Website : www.kescpcr.kerala.gov.in

Child Helpline - 1098, Crime Stopper - 1090, Nirbhaya - 1800 425 1400

Kerala Police Helpline - 0471 - 3243000/44000/45000

Online R. T. E Monitoring : www.nireekshana.org.in