## Let us learn about sports and outdoor activities

Engaging in sports and outdoor activities create the opportunity for us to spend our leisure time effectively. Sports contribute towards reducing stress, gaining pleasure and developing personal values. Sports also help us develop the ability to obey rules and regulations and the spirit of working as a team.

In previous grades you have gained knowledge about minor games, leadup games, folk games and organized sporting events.

In this chapter you will gain knowledge about the skills of spiking and blocking in volleyball; attacking, defending and shooting in netball and kicking, stopping and heading the ball in football. You will also learn exercises that are useful in developing these skills and rules and regulations related to these games while gaining some knowledge about the judging criteria as well. In addition, you will also learn about outdoor activities like hiking and expeditions to forests which are related to outdoor education.

### 4.1 Volleyball

Volleyball is a team event played between two teams of six players. In volleyball each team has to pass the ball over the net by hitting the ball using any part of the body and ground it in the opposite court. After the player on the right hand side of the back row of a team has served the ball to the opposite side, the ball is played until it goes out of court or until a team fails to return the ball properly to the opposite side.

Volleyball is very important for us because it is the national game of our country.
Volleyball has become popular because of following reasons:

1. Does not incur a high cost
2. Minimum equipment is required
3. Limited space is required
4. Does not take much time to complete a game
5. Rules are simple and clear
6. Easy to follow and a rich source of entertainment

## Activity

Prepare an article for a wall newspaper on the history of volleyball.

## Skills related to volleyball



Serving
Receiving
Setting
Spiking
Blocking
Court defending
Out of these skills you will learn spiking and blocking in this chapter.

## Spiking



Figure 4.1 - spiking
In volleyball, slamming the ball that is over the net into the opposing team's court is called spiking.
$\rightarrow$ Except for serving and blocking, all the other acts of passing the ball into the opposing team's court can be considered as spiking.
$\rightarrow$ When executing a spike, releasing the ball clearly off the five fingers is accepted mostly while touching and throwing the ball are not allowed.
$\rightarrow$ Spiking is considered to be complete when the ball has completely passed the vertical plane of the net or when the ball makes contact with a defender of the opposing team.

Spiking is very important in ensuring the victory of a team and maintaining the spirit of the game. Therefore it is vital that the correct technique of executing a spike is learnt. For easy understanding, let us study this under four stages.

1. Hitting approach
2. Take-off
3. Hit the ball
4. Landing

## 1. Hitting approach

Steps a player takes from the moment he starts getting ready for the spike until the take off is called the hitting approach. This is determined on the requirement of the individual player who executes the spike. The hitting approach could occur in two, three or four steps.

The following figure shows the three-step hitting approach for a right handed spiker.


Figure 4. 2 - Hitting approach
To have a better understanding of this, study figure 4.2 b and observe carefully the movement of the hands, legs and the body.

- The way arms are swung is very important in the hitting approach; the two arms which are swung forward with the first step should be swung backwards with the second step. The second step should be longer than the first. The last step, i.e., the left foot, should be placed a little ahead of the right foot. A right-hander should take steps beginning with the left foot, then the right and the left again.
- A very good take-off can be made by generating more speed during the approach.


## 2. Take-off

- A good take-off is essential for a successful hit. In a good take-off greater part of the attacker's body is raised above the net. Therefore the intended hit can be made very successfully.
- During take-off, the player has to bend the knees and straighten them like a spring.
- When in the air, the body of the spiker should be bent backwards like a bow.
- When spiking, the palm of the hitting hand should be raised to a position that is above and behind the head so that the elbow moves slightly behind the shoulder.
- The free arm should lie upright before the body and be aligned with the position of the head and the eyes should be focused on the ball.


Figure 4. 3 - Take-off

## 3. Hit the ball

- When hitting the ball the fingers should be brought together, curved and made rigid.
- When hitting the ball, the shoulder that moved backwards should move forward very fast with stretching of the hitting arm as far as possible and hitting the ball at the maximum height.
- The balance of the body should be maintained and the free arm should move downwards at the time of hitting the ball.



## 4. Landing

Figure 4. 4 - Hit the ball

Landing means returning to the ground by lowering the body by way of bending the knees and controlling the body weight.


Figure 4.5 - Landing

## Skills related to spiking can be developed through the following activities

1. Hold the ball with one hand, raise it above the shoulder and fling it onto the ground with great force.


Figure 4.6
2. Hold the ball with both hands and fling the ball on to the ground with great force dashing forwards with the body bent backwards like a bow.


Figure 4.7
3. Drop the ball that is held in the non dominant hand and hit it with the dominant hand.


Figure 4.8
4. Throw the ball upwards with both hands and hit it standing in the same spot.


Figure 4.9
5. Keep the ball hanging above the head and hit it hard taking off with the correct spiking approach.


Figure 4.10

## Spiking according to the rules-things to be borne in mind

## Spiking

« The front-row players can hit the ball that is at any height within their own court.

* The back-row players can hit the ball that is at any height taking off from the back court only. It is illegal to touch the spiking line with feet when taking off to hit or hit the ball keeping the feet in front of the spiking line. It is not illegal to land on the front half of the court after hitting the ball having taken off from the rear half of the court.
$\star$ A back-row player can hit the ball while in the front part of the court, but at least a part of the ball should be below the top level of the net at the point of hitting.
* A team cannot complete a spike when the service ball, which is coming to the court is completely above the top level of the net.


## Some fouls committed during spiking

1. Hitting the opposing team's ball.
2. Hitting the ball so that it goes off the court.
3. A back-court player coming to the front court and hitting the ball that is completely above the net.
4. Spiking and sending the ball to the opponents court, which was lifted by the libero player with finger tips in the front part of the court while it is completely above the level of the net.

## 5

Develop activities that can be used to develop skills related to spiking.

## Blocking

Blocking is obstructing the ball, above the level of the net by front row players, which was hit by the opposing team and has cleared the net.
$\rightarrow$ This can be called a defensive as well as an attacking strategy.

The blocking technique can be studied under four stages.

1. Ready Position
2. Appoaching the ball
3. Take-off and touching the ball
4. Landing

## 1. Ready Position

- At the ready position, the player has to position himself facing the net about 50 cm behind the net and should keep the body balanced (See the figure 4.11).


Figure 4.11 - Ready position

## 2. Approaching the ball

- When the setter sets the ball to some place the blocker has to move to that place. There are three ways of approaching the ball. They are side steps, cross steps and the dash.


Figure 4.12

## 3. Take-off and touching the ball

- As the knees are bent and the body is lowered, spring up and bring the feet together stretching the arms upwards.
- Stretch the fingers and slightly curve and stiffen the palm of the hands and pass the ball over the net to the opposing team using the fingers. When doing this the arms should be positioned beside the ears in front.
- Bend the body forward and as the ball comes into contact with the hands, move the hands downwards by bending the wrists.


Figure 4.13 - Taking off

## 4. Landing

- Plan your landing by landing on the balls of your feet with your knees and ankles bent.
- Arms are swung downwards as landing takes place.
- The weight of the body should be balanced by bending the knees and the player should get ready for the next move.


## The following activities can be done to practise blocking

1. Take-off properly at the net that has been tied at a lower level to suit the height of the players and practise blocking without using the ball.


Figure 4.14
2. Two players take off from opposite sides of the net and touch each other's hands pretending to block the ball.


Figure 4.15
3. Stand at the net and move sideways performing the action of blocking.


Figure 4.16
4. Two players stand on opposite sides of the net, leap up and pass the ball over the net to each other.


Figure 4.17
5. The ball is held above and close to the net and the players practise blocking by touching the ball.


Figure 4.18
6. Block the ball that is being hit close to the net.


Figure 4.19
Blocking can be classified according to the number of players involved in the blocking. It can be named as single, double or triple blocking.

## Blocking according to the rules-thing to be borne in mind

$\star$ Only the front-court players can complete the coverage. At the time a blocking takes place, some part of the player's body should lie above the top level of the net. The blocking action without touching the ball is called an 'attempt to block'. A blocking becomes complete only after the blocker has touched the ball.

## * Joint block

When two or three players join together and perform blocking, it is called a joint block. The blocking becomes complete when any one of them touches the ball.

* Repeated touch of the ball by one or more of the blockers is considered a single touch that happens during the same posture. Touching the ball while blocking is not considered a hit and therefore a team gets three hits when they receive the ball to their court after blocking.
« After blocking any player of the team can make the first hit. Even the player who did the blocking can make the first hit.
^ While blocking, a player may attempt to block by extending the hands and arms over the net to the opponents' court so that it does not obstruct the opponents.

However, blocking can be done only after an opponent has hit the ball.

## Officiating Volleyball Games

The following officials are required to officiate a volleyball match:

- First referee
- Second referee
- Scorer
- Assistant scorer
- Two or four line judges


## The first referee

The first referee should carry out his/her duties seated or standing on the referee's stand located at one end of the net. His/her view should be approximately 50 cm above the upper level of the net.

## The second referee

The second referee should stand on the ground outside the court close to the pole on the opposite side of the first referee.

## The scorer/ Assistant Scorer

The scorer should sit facing the first referee at the scorer's table that is placed on the side opposite of the first referee's position.

## Official hand signals of the referees

When judging a volleyball game official hand signals are very important. Starting


| Authorisation to <br> serve <br> Move the hand to <br> indicate the direc- <br> tion of service. | Team to serve <br> Extend the arm to <br> the side of the team <br> that will serve |
| :--- | :--- | :--- |

Change of courts
Raise the forearms
front and back and
twist them around
the body.
Ball 'in"
Pointing the
arms and fingers
towards the floor.

| Catch |
| :--- |
| Slowly lifting the |
| forearm with palm |
| of the hand facing |
| upwards. |


| Four hits |
| :--- |
| Raise four fingers |
| spread open. |


| Reaching beyond |
| :--- |
| the net |
| Place a hand |
| above the net with |
| the palm facing |
| downwards. |


| The server has |
| :--- |
| trampled the line |
| or stepped into |
| the court or a |
| player is out of |
| court |
| Pointing to the |
| center line or |
| relevant line. |

Showing the
back of the palms
bending elbow
perpendicularly

| Ball touched <br> Brushing with the <br> palms of one hand <br> the fingers of the <br> other that are held <br> vertically. | Warning / delay <br> penalty <br> lovering the wrist <br> with a yellow card <br> (warning) with a <br> red card (penalty). |
| :--- | :--- |

## Line Judges' Official Flag Signals

Table 4.2

| Ball "in" <br> Point down with <br> flag. | Ball "out" <br> Raise flag <br> vertically. |  |
| :--- | :--- | :--- |
| Ball touched <br> Raise flag and <br> touch the top with <br> the palm of the <br> free hand. | Crossing space <br> faults, ball <br> touched an <br> outside object or <br> foot fault by any <br> player during <br> service <br> Waving flag <br> over the head <br> and pointing to <br> the antenna or <br> respective line. |  |
| Judgement <br> impossible <br> Raise and cross <br> both arms and <br> hands in front of <br> the chest. |  |  |

### 4.2 Netball

Netball is a sport that is very popular among females. Twelve players can be registered for a game of netball. A netball team should consist of seven players to play the game but a game of netball can also be played with five players.

Figure 4.20 below shows how players should be placed in the court at the start of a game. The symbols (letters) relevant to each player of one team is shown in the boxes. According to the rules that are applied at the start of the game, all the players, except for the centre player (C), should be within their goal areas. They can come to the centre area of the court when the referee has blown the whistle. The centre player (C) of the team which gained the centre pass after the referee has blown the whistle passes the ball from the centre circle following the rule related to footwork to another player of the own team within three seconds so that the ball can be caught by that player from within the centre area. After winning a point by shooting the ball, the two teams take alternate turns of centre pass.


Figure 4.20 - Position of playes

| Goal Third | Center Third | Goal Third |
| :--- | :--- | :--- |
| 1 | 2 | 3 |

Figure 4.21 - Play area

Player Areas allowed to play in

- GS - Goal Shooter - 1,2
- GA - Goal Attack - 1,2,3
- WA - Wing Attack - 2,3
- C - Centre - 2,3,4
- WD - Wing Defence - 3,4
- GD - Goal Defence - 3,4,5
- GK - Goal Keeper - 4,5


## The basic skills (techniques) of netball



Ball controlling
Foot work
Attacking
Defending
Shooting

## Attacking

In netball when a team has received the ball, taking it to their shooting post by way of passing it among the members of the own team while avoiding the opposing players is called attacking. During attack, the players of the opposing team may obstruct in the following ways:

- prevent a player from catching the ball thrown to her by her team mate.
- prevent a player from moving to a vacant place in order to get the ball.
- prevent a player from passing the ball to her team mate.

Therefore, it is the tactical skill of the attacking player to catch the ball and pass it to a team member, avoiding the obstructing player cdefender. Given below are a few of the activities that are useful in developing this skill:


Figure $4 .{ }^{-} 22$
Running around obstacles in a zigzag


Figure 4.23 Running side ways.


Figure 4.24
Running backwards and forwards


Figure 4.26
Running while abruptly changing direction


Figure 4.25
Running changing the pace


Figure 4.27
Running changing both pace and direction

## 犑 Activity

Design activities in which some of the members of your group act as defenders and the others as attackers who try to pass the ball avoiding the defenders.

## Defending

The aim of the defender is to limit the number of goals the opponents would score or to delay them from scoring goals. The skill of the defender is to prevent the opponents passing the ball among one another and to get possession of the ball to their team. In order to continue doing so, the defender should do the following:

- Defend the opponent very efficiently.
- Obstruct the opponent from throwing or shooting the ball that she has caught.
- Start defending the opponent soon after passing the ball.
- Quickly understand the tactics and the playing style of the opposing team.


## Shooting

Putting the ball through the ring on the goal post from within the goal circle is called shooting. Shooting can be done with a single hand or with both hands. When shooting the ball, it is important to control the arms and legs correctly.

- Keep the body erect, raise the dominant hand and hold the ball with the fingers. The ball should be above the head and in front of the forehead. The free hand is kept on the ball as a support.


Figure 4.28

- Start shooting by bending the knees slightly


Figure 4.29

- Stretch the arms as the body straightens from the knees. Then release the ball from the hand so that the ball is pushed upwards with the wrist whilst aiming at the ring on the goalpost.


Figure 4.30
The following activities can be performed in order to make shooting successful

1. Practise shooting at different places within the goal circle.
2. Practise shooting while being obstructed by a defender.
3. Catch the ball sent by another player to the goal circle from different places and shoot.

## Rules and regulations

Netball rules and regulations are introduced by the International Federation of Netball Associations (IFNA). Netball games are governed by 21 key rules. You gained knowledge about some of those rules in the previous grades and this year, you will learn some rules related to attacking, defending and shooting.
^ While defending or attacking, a player should neither knock against, push, strike the opponent nor grab the ball from the opponent.
$\star$ Players cannot stretch their hands sideways and defend.

* A player possessing the ball should not be obstructed within a distance of less than $0.9 \mathrm{~m}(3 \mathrm{ft}$.).
* When shooting, the shooter should not be obstructed by the opponent stretching the arms, standing within a distance of less than 0.9 m ( 3 ft .).

When above rules are violated, a penalty pass or a chance to shoot a goal is given on the spot. The player who committed the offence should stand by the side of the player who did not commit the offence so that she does not get obstructed. The player who committed the offence cannot join the play until the ball is released from the hands of the player who did not commit the offence.

On occasions where an attacker and a defender of the opposing teams;

1. get hold of the ball at the same time
2. commit an offence at the same time so that play is obstructed
3. move to an offside area at the same time and either one or both of them get hold of the ball,
the ball is tossed up between the two within the play area and the game is restarted.

### 4.1 Activity

Engage in a game of netball applying the attacking, defending and shooting skills you learnt while adhering to the rules and regulations.

## Duration of the game

At national or international level, a game consists of four 15-minute quarters.

1. Quarter 1-15 minutes - break 3 minutes
2. Quarter 2-15 minutes - break 5 minutes
3. Quarter 3-15 minutes - break 3 minutes
4. Quarter $4-15$ minutes

The two teams should change sides after each quarter.

## $\square$ For extra knowledge

At school level, a game consists of two quarters according to the requirement of the organizers.

The duration of a game at school level is as follows:
Table 4.3

| Age | First half | Break | Second half |
| :--- | :--- | :--- | :--- |
| Under 15 | 10 minutes | 3 minutes | 10 minutes |
| Under 17 | 15 minutes | 3 minutes | 15 minutes |
| Under 19 | 20 minutes | 3 minutes | 20 minutes |

## Judging netball games

The panel of judges at a netball game consists of the following officials:

- Two umpires to control the game and to make decisions
- Two timekeepers
- Two scorekeepers

The two umpires should select their sides by tossing a coin. When the umpires stand facing the court, they judge the half of the court that lies on their right. Figure 4.31 given below shows the areas and the boundary lines which the umpires A and B judge.


Figure 4.31
Official hand signals used by a netball umpire are given in the next page.

Table 4.4 - Hand signals used by a netball umpire
Held ball

### 4.3 Football

Football is a game played between two teams with eleven players each. Each team tries to score goals by kicking the ball into the opposing team's goal. It has won recognition as the most popular sport in the world as it has become the game that is watched by the most number of people. In football, the players, except for the goal keeper, cannot touch the ball with their hands during play. Hence they engage in play employing a variety of skills.

## Skills (techniques) of football



The techniques we will be learning in this section are kicking, stopping and heading the ball.

## Kicking the ball

The ball can be kicked using different parts of the foot. Let us study the following types of kicks:

1. Kicking with the toe
2. Kicking with the inside of the foot
3. Kicking with the outside of the instep
4. Kicking with the heel

## 1. Kicking with the toe

Toe kick is used to make the ball move fast along a straight path. In toe kick, the ball is kicked with the tips of the toes.


Figure 4.32 - Kicking with the toe
2. Kicking using the inside of the foot

The inside of the foot kick is used for long-distance passes and short-distance passes. In this kick, the curved inner part of the foot is used to kick the ball.


Figure 4.33 - Kicking with the inside of the foot
3. Kicking with the outside of the instep

The outside of the instep kick is used to make the ball move along a curved path. The outside of the instep is used for this kick.


Figure 4.34 - Kicking with the out side of the instep
4. Kicking with the heel

The back heel kick is used to flick the ball backwards deceiving the opponent. The heel is used for this kick.


Figure 4.35 - Kicking with the heel

## Stopping the ball

The ball coming towards a player can be stopped using different parts of his body. In this lesson let us study the ways of stopping the ball:

1. By keeping the foot on the ball
2. Using the innerside of the foot
3. Using the chest
4. Using the abdomen

## 1. Stopping the ball by keeping the foot on the ball

The ball is stopped by keeping the sole of the foot on the ball as it comes rolling along the ground or, if the ball is moving through the air, just as it touches the ground.


Figure 4.36 - Stopping the ball by keeping the foot on the ball

## 2. Stopping the ball using the inner side of the foot

A slow moving ball or a fast moving ball is stopped using the innerside of the foot. When stopping the ball in this manner, the foot is drawn a bit backwards just as the ball touches the foot.


Figure 4.37 - Stopping the ball using the inner side of the foot

## 3. Stopping the ball using the chest

A ball that is moving in the air can be stopped using the chest. When stopping the ball using the chest, the chest should be drawn a little backwards just as the ball hits the chest.


Figure 4.38 - Stopping the ball using the chest

## 4. Stopping the ball using the abdomen

A ball that bounces on the ground can be stopped using the abdomen. When stopping the ball using the abdomen, the abdomen is drawn a little backwards just as the ball hits the abdomen.


Figure 4.39 - Stopping the ball using the abdomen

## Heading the ball

Heading the ball can be done adopting various body postures. In this lesson, let us study the following methods of heading the ball.

1. Heading the ball without a jump
2. Heading the ball with a jump
3. Heading the ball, that is coming from a side with a jump

## 1. Heading the ball without a jump

As the ball is moving in the air, heading is done using the forehead while keeping an eye on the ball. When the ball is headed in this manner, the feet are in contact with the ground and the ball moves forward.


Figure 4.40 - Heading the ball without a jump

## 2. Heading the ball with a jump

The eye is kept on the ball that is moving in the air and heading is done with a jump using the forehead. When heading is done in this manner, the feet lie above the ground and the ball moves forward.


Figure 4.41 - Heading the ball with a jump

## 3. Heading the ball, that is coming from a side with a jump

In this method, the ball that is moving in the air is headed using the sides of the head in order to send the ball in different directions. Most often, the ball is headed with a jump in this method.


Figure 4.42 - Heading the ball, that is coming from a side with a jump.
It is now clear to you that hitting and stopping the ball can be done using different parts of the body.

## Following activities will help you to develop these skills

1. Two pupils stand apart and practise passing and stopping the ball kicked by each other alternatively.


Figure 4.43
2. The ball is passed in different ways to stop using different methods (using the inner-side of the foot, instep of the foot, abdomen).


Figure 4.44
3. When the ball is passed by one student, another heads the ball with or without a jump.


Figure 4.45
4. Three students stand apart and head the ball.



Figure 4.46



## Activity

Design a set of exercises that would help to develop the skills in football that you have studied.

## Rules and regulations in football

When you learn about the game of football, it is important that you gain a clear understanding of the rules and regulations of the game. We will next learn about the rules and regulations applied and signals used by referees in international football games.
$\star$ Number of players
A football team consists of a maximum of eleven players one of whom should be the goal keeper. The minimum number of players that a team consists of is seven. There can be three to seven reserve players.

## $\star$ Duration

The duration of a game of football consists of two 45 minute halves and maximum of 15 minutes break in between. (According to the game it can be reduced to 40 minutes)

## * Major offences committed in football:

- Kicking or attempting to kick an opponent
- Tripping or attempting to trip an opponent
- Jumping at an opponent
- Charging at an opponent
- Strikes or attempts to strike an opponent
- Pushing an opponent
- Holding an opponent
- Spitting at an opponent
- Deliberate handling, hitting or carrying the ball with the hand.


## Judging football games

Officials who judge a football match are;

- referee
- two, side referees


## Responsibilities of the referee

- Checking the legality of the football ground and the football
- Enforcing rules throughout the game
- Keeping records of the game
- Imposing penalties on players who violate rules
- Pausing the game after an accident and restarting
- Preventing outsiders entering the ground except for players and umpires


## Responsibilities of the side referee

- Assisting the referee
- Giving signals when the ball moves out of the ground
- Showing the team that possesses the corner kick, goal kick and the throw-in
- Showing players who are in offside positions
- Informing substitution of players
- Informing the time limit of the game


## 31 Activity

Divide into groups and engage in playing a game of football adhering to rules and regulations.

## Referee's signals

Direct free kick
Advantage
Indirect free kick



Throw-in for attacker


Corner Kick


## 红 Activity

Shown above are some of the signals used by the referees in football. Divide yourselves into two teams, appoint umpires and engage in a game of football. Ask the umpires whom you have appointed to use the signals when judging.

### 4.4 Outdoor educational activities

Engaging in outdoor educational activities provide an important opportunity for us to communicate with the natural environment, foster love for plants and trees, enjoy the pleasures it offers and cultivate attitudes towards protecting the environment. We have seen many outdoor educational activities carried out at school in order to create opportunities for us to commune with nature. We engage in such activities mostly to relieve our monotony and to get pleasure and enjoyment. These activities are very effective means of spending leisure, promoting collective action and developing personality.


| Camping |
| :--- |
| Campfire games |
| Cooking out door |
| Jungle craft |
| Hiking |
| Jungle exploration |
| Rowing |
| Climbing mountains |

Cycling tours

## Benefits we gain from outdoor educational activities

1. An opportunity to gain pleasure
2. An opportunity to identify the environment
3. An opportunity to understand the environment
4. An opportunity to understand the challenges nature offers
5. Develop exploration skills
6. Develop self-confidence
7. Develop leadership skills
8. Develop collective understanding
9. Develop the skill of decision making
10. Getting used to substitutes
11. Develop problem solving skills

In this chapter we will learn about hiking and jungle exploration.

## Hiking

You may have seen that many kinds of hiking are organized in order to achieve various objectives. Some of them include:

1. Hikes to raise awareness of an issue among the public
2. Hikes to raise funds
3. Hikes for pleasure
4. Hikes to explore the forest
5. Hikes for political purposes
6. As a mark of protest
7. As a means of demonstration

## Activity

Provide examples for the different kinds of hikes mentioned above

## Jungle exploration

This is how a group of Grade 10 pupils organized a jungle exploration together with their physical education teacher.

## 1. Preparing plans for the jungle exploration

During planning stages, they focused on the following:

- Expected date of the hike
- The route they were going to take
- Equipment they need to carry
- Finances required for expenditure
- Persons from whom they have to get permission
- Institutes from which they have to get permission
- Places which require permission to visit
- Persons who should be informed
- Action that has to be taken in an emergency
- Preparing for possible accidents.

2. The pupils were educated on the use of the compass and to do compass readings

- The compass is a piece of equipment that is used to find the direction.
- The pointer of the compass always indicates the North when placed on a flat surface.
- The route map is marked accordingly.
- Compass can be used to find the direction to reach the destination.


Figure 4.47
3. The pupils were made aware of standard symbols used in maps and educated on how to prepare the map of their journey

## Standard Symbols used in maps

|  | Main road (A Grade) |
| :---: | :---: |
|  | Main road (B Grade) |
|  | Main road under construction |
|  | Minor roads |
|  | Foot path |
| $\Rightarrow== \pm$ | Tunnel |
| $[3, \text { 在 }$ | Scrub / forest |
|  | Passenger ferry |
| - | Causeway |
| $\frac{110}{\text { an }}$ | Bridge / culvert |
| $--\not-4--$ | Footbridge |
|  | Marshy land / mangroves |
| $00$ | Tank / abandoned tank |
|  | Irrigational canal |
| $0=$ | Catch pit / dam |

## Activity

Prepare the road map from your home to school. (Study the road signs and standard symbols and use the ones you need in your map as required and include information of the persons or places that should be informed in an emergency.)
4. The physical education teacher explained the importance of using the position of constellations in travel for the knowledge of the pupils; using illustration.


## Activity

Form a group and prepare a plan to climb a mountain as an outdoor activity and make necessary arrangements to engage in this activity.

## Summary

Volleyball is the national game of Sri Lanka. It is a popular game because of its distinctive features. Players can engage in different activities to develop spiking and blocking skills in volleyball. Each of these two skills can be studied under four stages. There are rules and regulations related to spiking and blocking. The official hand signals used by referees are important in communicating their judgements.

There are six basic skills in netball. Of these skills, attacking, defending and shooting were discussed in this chapter. Attacking is passing the ball among team members while avoiding the opponents and taking it to the relevant post. The aim of defending is to limit the number of goals the opponents would score or to delay them from scoring goals. Putting the ball through the ring of the goal post is called shooting. Netball is governed by 21 key rules.

Football is a game preferred by most countries in the world. It has become so popular due to its highly competitive and exciting nature. Players adopt various skills by kicking, stopping and heading the ball. Number of rules are applied and the decisions are conveyed using a number of different signals.

We enjoy engaging in outdoor activities. Gaining new experiences, new knowledge, personality development, development of organizing skills and gaining knowledge on the use of equipment are some of the benefits that we gain by engaging in outdoor activities which are in turn important life skills. Outdoor activities include hikes which are organized for various purposes. It is important to have a basic knowledge about preparing plans for jungel exploration and gaining skills in using a compass, preparing and reading maps and using the position of constellations to find the directions.

## (1)

1. Write three special features of volleyball which have made it popular.
2. Write the four main stages of spiking in volleyball.
3. Write the four main stages of the technique of blocking in volleyball.
4. Write four offences that could be committed by players in a game of volleyball.
5. Name the officials who are involved in judging a volleyball game.
(2)
6. Describe the occasions where a team is obstructed by the opposing team when attacking in netball.
7. Describe three activities that can be done in order to practice shooting in netball.
8. Name the occasions where a penalty pass or shoot is given in netball and describe how it is taken.
9. Name the positions of each of the members of a netball team in a court.
10. Write the occasions where the ball is tossed between two players in netball.
11. Name the officials that make a panel of judges in a netball game.

## (3)

1. Name four types of kicks used in football.
2. Write four methods of stopping the ball in football.
3. Write the three methods of heading the ball in football.
4. Write five duties of the head umpire of a football match.
5. Write six major fouls that could be committed during a game of football.

## 4

1. Write six advantages we gain by engaging in outdoor educational activities.
2. Name six outdoor educational activities.
3. Write five facts that attention should be paid to when preparing a plan for a jungle exploration.
