

Mainstreaming Health and Physical Education



Central Board of Secondary Education

Preet Vihar, Delhi - 110092

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CHAPTER 1: INTRODUCTION / PREAMBLE

Curriculum reform is a global issue and drives education policy directives around the world. The broad framework is usually provided by a national apex body, the narrower focus is around the syllabi based on the disciplines and the learning outcomes expected at age appropriate levels.

1.1 RATIONALE

- 1.1.1 Health and Physical Education is concerned with total health of the learner and the community. Besides physical health, it includes mental and emotional health of the learners. Health is often a state of physical, mental, emotional, social and spiritual well-being and not merely the absence of disease or infirmity.
- 1.1.2 The aim of Mainstreaming Health and Physical Education is to enable the student to attain an optimum state of health, by incorporating each of the aforementioned aspects.
- 1.1.3 In this respect, it is a truism to say that the practice of healthy living will serve as the foundation for Physical Education. It is envisaged that any effort to promote aesthetic values at the school level will include a natural esteem for physical well-being. The mastery of the body, its powers and qualities, requires knowledge, methodical training and exercise. The skills and capacities need to be developed, the muscles and nerves trained, the senses cultivated and hygienic and proper dietary habits inculcated for this purpose.
- 1.1.4 Therefore, provision has to be made much more systematically than before, in the school curriculum for Health and Physical Education imbued with Life Skills
- 1.1.5 Research has demonstrated that there is a positive correlation between brain development and exercise which also has an impact on cognitive development thus helping to improve academic grades.
- 1.1.6 A comprehensive view of Health and Physical Education includes and encompasses the three areas of Health Education, Physical Education and Yoga as integral to achieving holistic health (physical, mental, intellectual, emotional, social and spiritual). Given the interdisciplinary nature of this subject, it needs to be transacted in innovative ways across the curriculum.
- 1.1.7 The ubiquitous digital presence can be an added resource for the student, teacher educator and the teacher. It provides endless possibilities of resorting to online resources to add value to PE.
- 1.1.8 At the Secondary level acquisition of the habits of healthy living and participation in games and sports and athletics for neuromuscular coordination and physical fitness are the aims which should be taken care of while developing any syllabus of Health and Physical Education.
- 1.1.9 While at the Senior Secondary level, through the integrated PE approach, students will acquire the knowledge, skills, right attitudes and values towards the pursuit of a lifelong physically active and healthy lifestyle.

With these aims in mind, the overall and specific objectives for a HPE curriculum are outlined below:

1.2 Overall Objectives of Health and Physical Education:

- 1.2.1 To develop awareness regarding the importance of physical fitness in individual and social life including Life Skills.
- 1.2.2 To bring the overall awareness of values with regard to personal health and fitness, and to inculcate among students the desired habits and attitudes towards health to raise their health status.*
- 1.2.3 To make the pupils physically, mentally and emotionally fit and to develop such personal and social qualities that will help them to be good human beings.*
- 1.2.4 To take action individually and collectively to protect and promote (i) own health (ii) health of family members: and (iii) health of the surrounding community and seeking help when required from available community resources.*
- 1.2.5 To develop interest in exercise, sports and games for self-satisfaction and make it a part of life;
- 1.2.6 To enable an individual to enhance inner qualities - self-mastery, discipline, courage, confidence and efficiency.*
- 1.2.7 To enable an individual to display a sense of responsibility, patriotism, self-sacrifice and service to the community *
- 1.2.8 To develop awareness of the importance of self-defence.*
- 1.2.9 To create awareness among children about rules of safety in appropriate hazardous situations to avoid accidents and injuries. To acquaint them with first-aid measures about common sickness and injuries. *
- 1.2.10 To help children learn correct postural habits in standing, walking, running, sitting and other basic movements so as to avoid postural defects and physical deformities. *
- 1.2.11 To help children grow as responsible citizens by inculcating in them certain social and moral values through games, sports, Red Cross, Scouts and Guides etc. *
- 1.2.12 To inculcate values and skills in children in order to promote self-control, concentration, peace and relaxation to avoid the ill effects of stress, strain and fatigue of routine everyday life. *
- 1.2.13 To address the physical, psycho-social needs of CWSN (Children with Special Needs) in an integrated fashion. *
- 1.2.14 To seek in instilling self-worth thus helping students to become confident, assertive, emotionally stable, independent and self-controlled. *
- 1.2.15 To help release of emotional stress, anxiety and tension, leading to a reduced risk of depression. *
- 1.2.16 To help strengthen peer relationships, social bonding, buddy mentorship and team camaraderie.
- 1.2.17 To develop more positive attitude towards challenges, winning and losing, thus preparing students for life and for the workplace.*

*** Values Integrated across HPE**

1.3 Mainstreaming HPE

- 1.3.1 With the above objectives in mind, the CBSE in consultation with MHRD and Ministry of Sports, Govt. of India has attempted to integrate and mainstream Health and Physical Education across the secondary and senior secondary levels. This is to ensure that the Physical Education component which will continue to be assessed internally, is taken up as a cross-curricular, interdisciplinary discipline across the four strands.
- 1.3.2 Mainstreaming would require the coming together of the Class Teacher, PE teacher and teachers of other disciplines.
- 1.3.3 The mandatory nature of this discipline needs all students to participate in an innovative way through the strands detailed hereafter.
- 1.3.4 It will be mandatory for the **school to upload a report of work accomplished across the strands of grade X and XII in the prescribed manner, for enabling students to sit for the Board exam.**
- 1.3.5 The stipulation is to ensure all schools take this aspect seriously so as to ensure lasting and lifelong benefits for their students.
- 1.3.6 **The following subjects of internal assessment are being subsumed in Health and Physical Education from session 2018-19 onwards:**

Class IX-X

- i. Work Education (500)
- ii. Health and Physical Education (506)

Class XI-XII

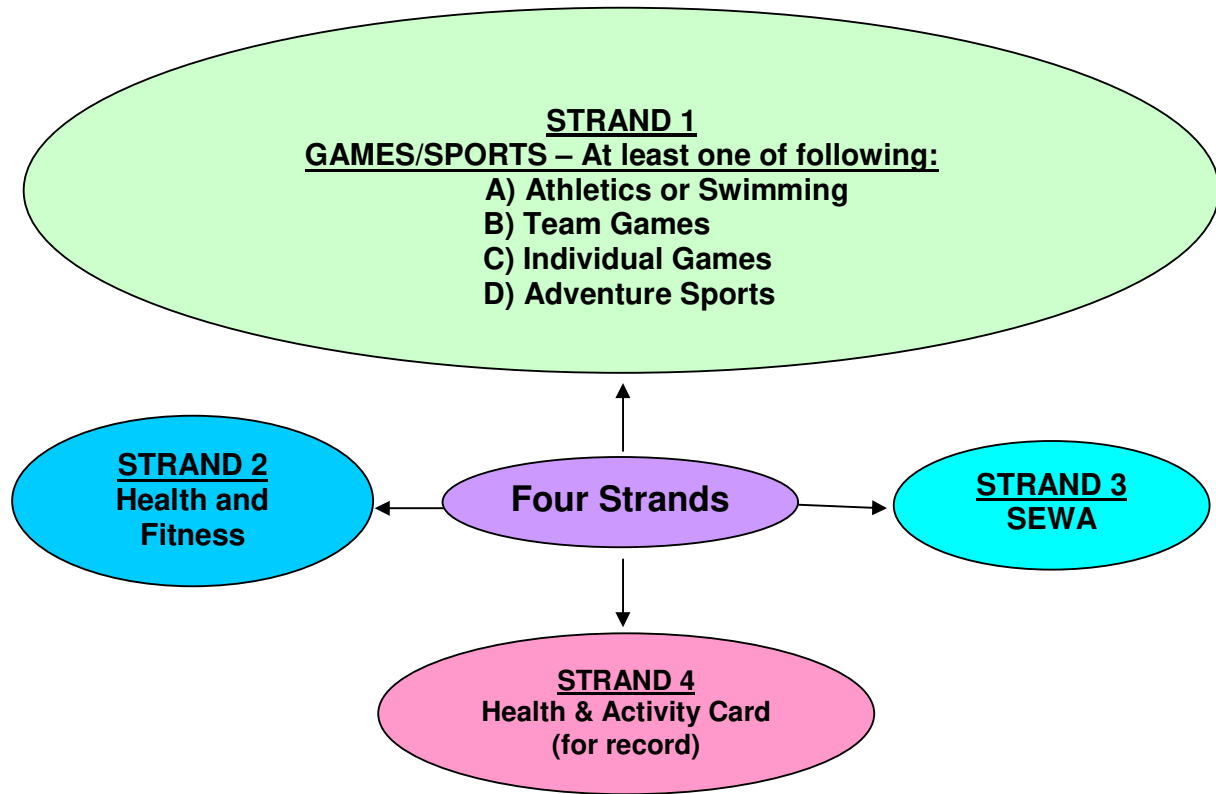
- i. Work Experience (500)
- ii. Physical and Health Education (502)

As the above subjects of internal assessment are being subsumed in Health and Physical Education, so the schools should not allocate any period to these above-mentioned subjects from session 2018-19 onwards. The same periods should be allocated to Health and Physical Education.

CHAPTER 2: FOUR STRANDS

2.1 Introduction

- 2.1.1 The new format of HPE envisions that each student will undertake activities categorized under four strands
- 2.1.2 The work education aspect of the syllabus is subsumed under this format, hence there will be no need to take it up as a separate subject
- 2.1.3 This format is to be compulsorily implemented for classes IX, X, XI and first half of the year for class XII
- 2.1.4 **This is an essential requirement for writing the Board examination.**
- 2.1.5 Unless schools undertake HPE seriously and are ready with records of all strands as well as Health and Activity Cards for all students, they will not be allowed to register their candidates for Board examinations
- 2.1.6 All schools need to fill in the HPE School Report for the ongoing session before registering their candidates in classes IX and XI. The report should reflect the activities undertaken under each strand separately for each class right from class IX to XII. The format of the HPE School Report is given in the Annexure
- 2.1.7 No theory classes will be taken as a part of this format
- 2.1.8 The class teacher shall be responsible for ensuring that each child participates in all strands
- 2.1.9 The class teacher shall also guide and facilitate strand 3 and strand 4
- 2.1.10 In the absence of a sports/games teacher, the class teacher may facilitate strand 1 and 2 also and ensure that all children participate in the games/sports of their choice.
- 2.1.11 Internal assessment is to be jointly done by the class teacher and the sports/games teacher
- 2.1.12 From Strand 1, at least one activity is to be taken up by each student as a class or as an individual. The choice will be left to the students and the class teacher will facilitate each child to decide, based upon the sports facilities available at the school. Schools are encouraged to provide more options by adding to the infrastructure each year
- 2.1.13 Children are free to choose more than one activity from strand 1, as long as the school sports infrastructure supports it.
- 2.1.14 Children are also free to change their choices during the course of a year
- 2.1.15 A class as a whole could be encouraged to take up any one team game and/or invasion game, by delineating the role of each student of the class. Roles should be decided by students among themselves. Roles could include player, captain, umpire, cheer leaders, commentators, event manager, coach, organizers, reporters for school magazines, etc.
- 2.1.16 The Board will be inspecting records for Strand 1 and 2 such as attendance and participation by all students. Evidences such as Portfolios, Journals, Essays, Video recordings etc. in case of SEWA may be kept ready for scrutiny by the CBSE at any time during the year.
- 2.1.17 Schools are encouraged to place the activities they undertake under various strands on their own website under the 'Sports Corner' which should be updated at regular intervals.



2.2 THE OBJECTIVES:

Regular, high quality PE programs should also provide all students with opportunities to develop:

- 2.2.1 An inclination towards, and strong motivation for lifelong maintenance of health and fitness *
- 2.2.2 Cardiovascular fitness, muscular endurance, muscular strength and flexibility to meet the demands of everyday life *
- 2.2.3 Agility, balance, coordination, reaction time, power and speed to be able to perform a wide range of daily tasks *
- 2.2.4 The techniques necessary to become a skillful performer and competitor in different sports and activities *
- 2.2.5 Such traits of character as self-mastery, discipline, courage, determination and confidence *
- 2.2.6 Good sportspersonship, fair play and ability to be an informed spectator *
- 2.2.7 An ability to perform in different activity – related roles such as attacker, defender, supporter, supported, referee, leader, captain *

* Values integrated across HPE

TABLE 1.1

DISTRIBUTION OF MARKS FOR INTERNAL ASSESSMENT

Strand	Marks	Periods (Approx)	Levels*
1. GAMES A) Athletics/ Swimming B) Team Games C) Individual Games/ Activity D) Adventure Sports	} 50 marks	90 periods	Upto 25 marks: Learning 26-40 marks: Proficiency 41-50 marks: Advanced
2. Health and Fitness	25 Marks	50 periods	Upto 12 marks: Learning 13-20 marks: Proficiency 21-25 marks: Advanced
3. SEWA	25 Marks	50 periods	Upto 12 marks: Learning 13-20 marks: Proficiency 21-25 marks: Advanced
4. Health and Activity Card	No Marks	10 periods	-
Total	100 Marks	200 Periods	-

*The grades/levels obtained under the first three Stands will be reflected in the report cards.

CHAPTER 3:

STRAND 1: GAMES / SPORTS

Any one or more games or activity out of Athletics/ Swimming, Team Games, Individual Games and Adventure Sports must be taken up by each student as an individual, or as a class team or as a school team.

3.1 Athletics / Swimming

3.1.1 Example Activities (illustrative only): Track and field events that require physical strength, speed/skill, such as, racing against own best timing and with others over different distances; relay races; marathons, cross country running, race walking, throwing for distance and aiming onto/at targets; jumping for height; jumping for distance; swimming against own best timing and with others, over different distances.

3.1.2 Inclusion: Allow students to use standing starts or rolling starts if using a wheelchair. Use visual signs to start race so that students with hearing impairments can be involved. The students must find unique and creative ways to include CWSN who are their classmates. Though few of the strategies for inclusion have been outlined for some games in boxes attached below, if movement is not possible at all, then aided umpiring or aided cheering should be considered for CWSN. If some learning is possible, let the CWSN learn about the intricacies of the game. If they are interested in art work or music, let them create their own version of the game in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers.

3.1.3 Life Skills Imbided/ Acquired:

- Learning the techniques
- Learning about sports/games through other formats such as fine arts

3.1.4 Outcomes/ Values imbided:

- Going further, higher, faster
- Being able to set and meet personal targets
- Being able to focus, concentrate and practice to improve
- A commitment to training and an ability to set and meet personal targets
- Learning as a team and from others

Category of Activity: Athletic Activities

Name of Activity: Long Jump

Long jump is an individual event included as a track and field event under the term 'Athletics'. It requires participants to combine speed and lift to produce forward flight and maximum lift through the air. It combines an approach run with a take-off followed by a period of flight through the air that concludes in a landing. The event requires technical efficiency in order to gain the maximum distance possible.

At competency level students should learn and practice the different components of the long jump from standing positions and short run ups. They will also need to learn and be able to perform the correct sequence of movements if they have to perform the long jump efficiently.

At proficiency level students should be able to long jump with a high level of skill, competing against themselves and others in competitions and events where the outcome is performing at one's maximum level.

Rules of Long Jump

- Take off must be behind a line.
- The distance of the jump is measured from the jump line to the nearest break in the sand.
- The tape is placed at zero on the jump line.
- Performers take a number of jumps, of which the best is used for determining event winners and positions.
- A tie is settled by taking the second best attempt.
- A 'fault jump' is recorded when a performer places his/her foot beyond the jump line when approaching the take off board.

History of Long Jump

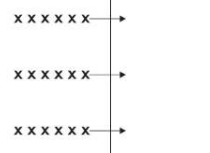
The Long Jump event can be traced back to the ancient Greek Olympic Games. At this time it was part of an event called the 'Pentathlon' which included 5 different events that one competitor undertook. It was the only jumping event that was included in the original Greek Olympic Games and as such it is one of the oldest and most important of the track and field events. To perform the long jump athletes had to run a short distance with a weight in each hand called 'halteres'. As they prepared to jump, they swung the weights forwards and pulled back in order to gain momentum and height.

Facts about Long Jump

- The current world record for men is 8.95 metres and for woman 7.52 metres. How far can you jump?
- The most popular style of jump uses the 'hitch kick' in which jumpers appear to walk in the air.
- Anju Bobby George became the first ever Indian to win a World Championship medal. In 2005 she was ranked 5th in the world for long jump.
- Amritpal Singh holds the Indian men's national record in the long jump with a leap of 8.08 meters done at the Federation Cup Athletics Championship in Delhi in March, 2004.

Basic Requirements/ Equipment

- A playing area that has a safe surface for running and jumping.
- A long jump pit that is well dug and free of objects.
- Low barriers for jumping over.
- A line or board to show the take off position.
- Boxes or benches from which students can jump.
- Students should be suitably dressed to undertake the activity safely.
- Lime Powder, Measuring tape.
- When working with large numbers of students use the landing pit lengthwise:



Including all Students

Space • Task • Equipment • People

Use STEP to modify long jump activities so that all students are included. Try these modifications or devise your own.

Space

- Increase or decrease the run up.
- Give students time to assess and determine the length of run up needed for them to reach the take off point consistently.

Task

- Establish balance and weight transference skills before introducing jumping
- Some students will be successful at long jump if they are able to perform jumps from standing positions.
- In the initial stages allow students to swing their arms and take off from two feet and land on two feet (standing broad jumps).
- Wheelchair users can take one push of their wheelchair and record the distance travelled.
- Substitute jumping upwards by placing targets at distances to increase the length of time in the air.

Equipment

- Use mats instead of a pit, crash mats for landing.
- Allow students to use support to help them achieve a jumping action. For example help them to push down on a chair to jump upwards.
- Jump over small plastic hurdles with one leg.
- Tie elastic ropes and jumps.
- Used sport step ladder for different jump drills.



People

- Find a way to ensure that all students play an active role in the jumping activity. All students can improve their own ability to perform at their maximum level through jumping activities regardless of the distances or ways in which they might jump.

Physical & Health Education /Games

Links to assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of athletic activities.
- An involvement in sports/physical education programmes.
- Team work.
- A knowledge of different athletic events and their rules.
- Skills of agility, balance and coordination.
- Motivation and commitment to take part in athletics.
- Ability to lead others as a team captain, coach, timekeeper or judge.
- An awareness of rules of safety.
- An evidence of being self disciplined.

Life Skills

- Listen actively.
- Takes criticism positively.
- Communicate using appropriate words, intonation and body language.
- Identifies one's own strengths and weaknesses.



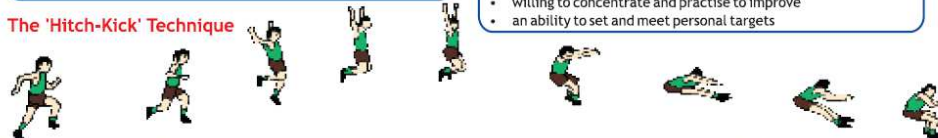
**Purpose of the activity**

To participate in events that require students to go further, higher and faster.

Outcome of the activities

The outcomes of participating in these activities will be

- a commitment to training
- willing to concentrate and practise to improve
- an ability to set and meet personal targets

The 'Hitch-Kick' Technique**The Approach**

- Approach the board at full speed after taking a usual number of steps so that the strong foot falls on the take off board.

**Take off**

- Attack the board and slap foot on it propelling the body upwards and outwards. The free knee and the arm above planted leg should be thrust forward.

**Flight**

- Extend bent knee and pull it backward. At the same time pull the opposite arm backward. 'Cycle in the air'.
- Circle the other arm behind body and up over head. Kick the planted leg forward so it points straight ahead.
- Bring the trailing leg forward and extend it so both legs point forward in a piked position. Swing both arms forward and down so they move past legs and behind body.

**Landing**

- On landing lean forwards in the sand. Avoid falling backwards. This loses distance.

**Here are some practices****Approach run**

- Run and jump from different starting points over 10-20m attempting to strike the same take off point.
- Place a marker to show the starting points.
- Develop an accurate run up, arriving at the take off point at maximum speed.

**Jumping and bounding activities**

Practise sequences of jumps using 'same', 'same', 'same' (hopping), 'other', 'other', 'other' (leaping) and other combinations. Call out different sequences that students perform:

Same, same, other; other, other, both; same, same, other, both, etc.

Set up plyometric circuits using jumping, hopping and bounding drills:

- Astride jumps onto and off a bench.
- Squat jumps: ½ squat, jump up into a tuck position, land and repeat.
- Double footed bounds: ½ squat, swing arms forward and up as jump forward. Land on two feet and repeat.
- Alternate foot bounds: repeated leaps forward from one foot to the other.

Flight

Begin with left foot forward, heel on the ground, toes raised and weight on the right foot. Take off from the left foot, hold the position and land in the same split leg position.

Take off on left leg and land on the opposite leg, upper body straight.

With an approach of 5-7 strides take off with a good drive and knee lift and then change the position of the legs before bringing them together to land.

Jump off raised surfaces to help improve flight techniques

Try these challenges

Compete in different jumping competitions. For example

- A 3-jump aggregate competition.
- A competition against yourself. How much have you improved? How can you improve further?
- An aggregate of a jump from right foot and left foot competition.
- A team competition by adding all team members jump distances together.

Now make up your own games and have some fun

- Compete against yourself combining the total distance of a 'hang' jump with a 'hitch' kick jump.
- Compete against others in athletic competitions organised by students. Can you act as 'take off' officials, 'pit' officials and recorders?
- Can you create a new jumping competition? What other ways might you combine and approach with a take off, flight and a landing?

Assessment

Knowledge (4)	• History of the activity • Facts	• Rules of long jump
Skills (6)	• The approach • Flight	• Take off • Landing
Application of skills (10)	• Effective approach run • 'Hitch kick' technique • Distance of the jump	• Lift at take off • Controlled landing

Links to NCERT syllabus

Theme: Orientation to physical education and sports education: sports and games

Links to other subjects

Maths : Volumes, using the dimensions of a rectangular pit and the level of sand in the pit (weight) the volume of the cuboidal pit and surface area can be calculated.

Language: Use of conditionals, students are asked to examine their performance and comment using conditionals. For example, 'unless I have stamina.....'.

Category of Activity: Athletic Activities

Name of Activity: Running

Races over short distances are called sprints. They are among the oldest running competitions in the world. Sprinting requires athletes to begin from a stationary position and reach and sustain their quickest possible running speed. Sprint races take place over distances of 100, 200 and 400 metres. Indoor sprints take place over 60 metres. The man and woman who run the fastest time over 100m is often named 'the fastest man/woman in the world'.

At competency level students should learn and practice to improve their running technique so that they are able to run efficiently over short distances. They should be able to start a race correctly and be able to run at their maximum speed over short and longer distances.

At proficiency level students should be able to run over different distances with high levels of proficiency, be able to start races appropriately and take part in relay events. They should be committed to training and regular practice to help them increase cardio vascular efficiency, muscle strength and endurance.

Rules of Running

- Any runner found guilty of obstructing the path of another runner is disqualified.
- Sprinters are not permitted to run inside the inner curve of the track.
- Any sprinter with a false start even once is disqualified.
- Competitors are allowed to run with spiked shoes.
- No points are awarded if the sprinter fails to finish the race.
- The time is recorded to 1/100th of a second in photo finish.
- Time is recorded to 1/10th of a second . (Hand time watch)

History of Running

The original Ancient Olympic Games held in Olympia, Greece had just one event - the 'stadion' race. This was a simple race from one end of the stadium to the other. It was a race over a distance of about 200 meters. Sprint races have been included in all Olympic Games from 1896. Woman took part in sprinting events from 1928. Now sprinting events for men and woman include individual and relay events and sprints over hurdles.

Facts about Sprints

- It is only possible to maintain near maximum speed for not more than 30 seconds.
- The winner of a sprinting event is the athlete whose torso reaches the closest edge of the finish line first.
- Usain Bolt is currently the world's fastest man, setting a world record for the 100m of 9.58 seconds.
- Abdul Najeeb Qureshi, an Indian sprinter from Hyderabad, ran the 100m at the Commonwealth Games in 2010 in 10.30 seconds.

Basic Requirements/ Equipment

- An area that has a safe surface for running.
- Students should be appropriately dressed to participate safely in running events.
- A starting line and a finishing line.
- Cones or markers.
- Stop watches/measuring tapes.

Including all Students

Space · Task · Equipment · People

Use STEP to modify running activities so that all students are included. Try these modifications or devise your own.

Space

- Increase or decrease the distances over which students run. Keep the finishing line in the same position but change the position of the start.
- Visual impaired students can run with a sighted runner guiding them.

Task

- Students should explore different ways of moving. For example can they cover the distance by walking, pushing themselves, using sticks?
- Allow students to use standing starts, or 'rolling starts' if using a wheelchair.
- Use visual signals (e.g. a flag) to start races with students who have hearing impairments.



Relay races

- Use a touch changeover.
- Experiment with different ways of carrying the baton. Carry it in two hands or let wheelchair users carry it in their lap.
- Use adjacent lanes for takeovers.
- Use verbal guidance for outgoing runners.

Equipment

- Participating in running activities is easier if the surface is flat and even.
- Running on grass makes the activity more difficult, particularly for wheelchair users and those who use other mobility aids.

People

- Find a way of ensure that all students play an active role in the running activities. All students can improve their own ability to perform at their maximum level through moving in their own ways regardless of the distances or ways in which they might move.

Links to continuous and comprehensive assessment frame work for classes IX and X

Physical & Health Education /Games

- An appreciation and understanding of the physical fitness requirements of athletic activities
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different athletic events and their rules
- Skills of agility, balance and coordination
- Motivation and commitment to take part in athletics
- Ability to lead others as a team captain, coach, timekeeper or judge
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Raise questions, identify and analyse problems
- Get along well with others
- Communicate using appropriate words, intonation and body language
- Identifies one's own strengths and weaknesses



Athletic Activities Running

Class IX - X

PROFICIENCY LEVEL



Purpose of the activity

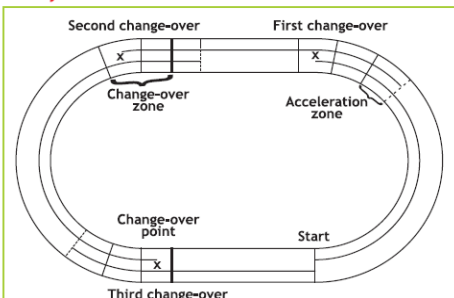
To participate in events that require students to go further, higher and faster.

Outcome of the activities

The outcomes of participating in these activities will be

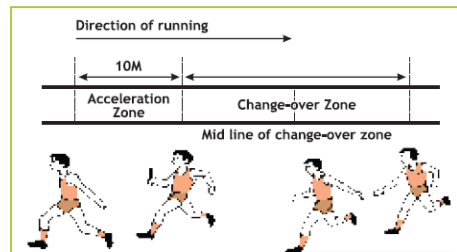
- a commitment to training
- willing to concentrate and practise to improve
- an ability to set and meet personal targets

Relay Races



Who will run when?

- The most popular strategy of running a relay race is to run in this order: the second best runner runs first; the fastest runner runs last; the slowest runner third and the other runner second. Is this best for your team?
- What other strategies might you use to win the race? What strategies work best for your team?



Baton Changeover

- Blind exchange technique to be practiced (4x100 mts.) an visual exchange (4x400 mts.) relay.
- The baton must be exchanged when both runners are running at maximum speed.
- Use the downsweep method of passing the baton, passing it from right hand to left hand.
- Outgoing runner holds the hand high and flat to receive the baton.
- Incoming runner uses a downward sweeping movement to place the baton firmly into the receiver's hand.

Here are some practices

Short relays

Try 4 x 25 metre and 4 x 50 metre relay races where changeovers are more important than running speed using straight tracks

Athletic Activities Running

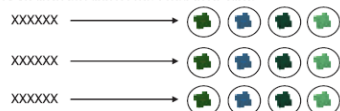
Class IX - X

PROFICIENCY LEVEL



Pick up Relay

Set objects like bean bags or cones, inside hoops or chalked circles, at regular intervals from the start line. Runner 1 collects each object, one at a time, returning them to the start line. The next runner takes one object at a time and sets them out again in their original position. Runner 3 collects them and so on until all runners have had their turn.



The Relay Race

Set up a running area with cones like this:



No. 1 starts at cone A; No. 2 starts at cone C. When No. 1 reaches cone B; No. 2 sprints off and attempts to reach cone D before being tagged by No. 1.

Increase distance between B and C so that both athletes reach D at the same time.

Try this challenge

- In teams of 10. Each athlete runs as far as they can in 10 seconds. Combine the 10 individual distances to produce a team score. Which team covered the furthest distance?

Make up your own challenges and have some fun

- Organise individual and relay races over different times and distance against classmates and other schools. Include fun events. For example include a dribbling race. Runners from one school or class dribble a ball as fast as they can over 50 metres. Runners from another school or class begin 3 seconds after the first runners and try to beat the front runner to the finish line.

Assessment

Knowledge (4)	- History of the activity - Rules of running - Facts
Skills (6)	- Acceleration at approach - Change over compete within zone - Position of hand of outgoing runner - Effective downsweep and passing of baton by incoming runner
Application of skills (10)	- Efficient running style - Efficient relay change over's - Running at near maximum speed 4 x 100m relay race times

Links to NCERT syllabus

Theme: Orientation to physical education and sports education: sports and games

Links to other subjects

Science: The topic of motion may taught, particularly the concepts of distance, displacement, speed and velocity. The time taken by each runner may be recorded and using the data students may calculate distance and displacement, and also speed and velocity.

Maths: By using the recorded time taken by each runner in covering 100m or 200m or 400m, students may be asked to represent these as frequency distribution table and bar graph.

Language: Students may be asked to write a brief biography of sprinters like P. T. Usha. They may also write a piece on rules of relay races.

Social Science: The planning and using strategy in a relay race may be used for explaining the role of a District Magistrate or Chief of Gram Panchayat, especially how to evolve a suitable strategy for successful implementation of policies and programmes.

Category of Activity: Athletic Activities

Name of Activity: Putting the Shot

Shot put is a track and field event, which involves putting (throwing in a pushing motion). A heavy metal spherical ball called 'Shot', as far as possible. The shot is generally made of solid iron or brass although any metal not softer than brass may be used. The shot is thrown from inside a circle which is 2.135 mts. (7 ft.) in diameter having a 10 cm high stop board in front of the circle. The distance is measured from inside of the circumference of the circle to the nearest mark made on the ground by the fall of the shot. Distance is rounded off to the nearest centimeter.

Rules of the Event

- Thrower must rest the shot close to the neck.
- Shot must be kept tight to the neck through out the motion.
- Shot must be released above the shoulder, while using only one hand.
- Thrower must not touch the top or outside ground of the circle or stop board. His limbs may however extend over the lines of the circle.
- Shot must land in the sector of the throwing area (34.92°).
- Thrower must exit from the back of the circle, after the shot has landed.
- Thrower must start his throwing motion within 60 seconds of calling his/her name.
- Usually three attempts will be given to all participants & best 8 will be given 3 more attempts. Best throw will be used for performance ranking.

History of the Event

Shotput originated from ancient Greece in 776 BCE. It is believed that the game originated from the Scottish stone throw to kill Romans. It is also believed that originally the event was done by using stone balls to the British Isles. In Scotland stone throwing events were organised in pre-Christian times, as a way of determining which Clieftain was most powerful and had most military might. This eventually became a part of actual Highland games programmes, organised every August in Scotland since 11th century.

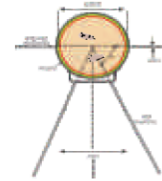
In the middle ages there is enough evidence to show that an event closely related to this sport existed, where participants hurled canon balls as a feat of strength. It seems the word 'Shot' came from the canon balls and 'Putt' must have come from the throwing style that was used. The sport remained popular among soldiers throughout 18th century there have been a few changes in the style of throwing in all these years. In the olden times the thrower used to stand on a wooden rectangle to throw, if he went out of it he fouled and his throw was discounted. At that time standing throw was only option until rectangle was replaced by a seven feet circle, the glide technique developed and then it was Randy Barnes one of the best shot putters who introduced rotational type of throw in 1976 at Montreal Olympics.

Facts about the Event

- Shotput competitions are being held in Olympic games for men since its inception in 1896.
- The event for women was added in 1948 Olympic program.
- Men's shot weighs about 7.260 kg. (16.01 lbs) and women's shot weighs about 4 kg. (8.8 lbs).
- Throwing a shot not only involves much technique and strength but also a few physics concepts.
- It needs good initial velocity and release of shot at 40° approx. to reach the farthest.

Basic Requirements/ Equipment

- A throwing area that has a safe surface for throwing.
- A shotput arena having a circle with an iron rim.
- High barriers for throwing over.
- A stop board.
- Boxes or benches on which students can sit.
- Students should be suitably dressed to undertake the activity safely.
- Lime Powder, Measuring tape.
- When working with large numbers of students use the landing area with great caution.



Including all Students

Space • Task • Equipment • People

Use STEP to modify Shotput activities so that all students are included. Try these modifications or devise your own.

Space

- Increase or decrease the diameter of the circle good throwers should use smaller circles and swift movement, lesser able students should use larger circles and gain momentum.
- Give students enough time to practice each type of throw, the momentum needed for them to push the shot with a greater effort.

Task

- Establish balance and weight transference skills before introducing throw.
- Some students will be successful at throws if they are able to perform throw from standing positions.
- In the initial stages allow students to push the shot standing position with facing the throwing arena.
- Wheelchair users can also take the throw while being stationary or by moving the chair within the scheduled arena.
- Substitute throwing upwards by placing barriers of different height to increase the parabolic angle of the shot in air.

Equipment

- Use objects of different shapes, sizes and weights.
- Use medicine balls.
- Allow students to support to help them in achieving throwing action.

People

- Find a way of ensure that all students play an active role in the throwing activity.
- All students can improve their own ability to perform at their maximum level through throwing activities regardless of the distances or ways in which they might throw.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of athletic activities.
- An involvement in sports/physical education programmes.
- Team work.
- A knowledge of different athletic events and their rules.
- Skills of agility, balance and coordination.
- Motivation and commitment to take part in athletics.
- Ability to lead others as a team captain, coach, timekeeper or judge.
- An awareness of rules of safety.
- An evidence of being self disciplined.

Life Skills

- Listen actively.
- Takes criticism positively.
- Communicate using appropriate words, intonation and body language.
- Identifies one's own strengths and weaknesses.



Athletic Activities Putting the Shot

Class IX - X

PROFICIENCY LEVEL



Purpose of the activity

To participate in events that require students to go further, higher and faster.

Outcome of the activities

The outcomes of participating in these activities will be

- a commitment to training
- willing to concentrate and practise to improve
- an ability to set and meet personal targets

Rotational Technique

Grip and Hold

- Grip the shot on the base of your fingers not on the palm. Spread your fingers slightly.
- Hold the shot closer to the ear.
- Thumb under the shot.
- Throwing elbow pointed outward away from your body.



Stance

- Stand at the back of the circle.
- Facing away from the target.
- Feet shoulder width apart body upright.
- Head up, extend your left arm.



Wind up

- Rotate your body about $\frac{1}{4}$ turned to the right.
- Your right elbow will point towards the target.
- Keep shoulder level as you rotate, pivot on your right foot. Keeping the left foot flat on the ground.
- Rotate the left leg so that your knee moves slightly towards right.
- Balance on the ball of your left foot.
- Move your left arm in sync with your left leg.



Entry phase I

- Shift your weight to your left as you pivot on, and turn your left foot.
- Bend your left knee slightly and flatten your left foot as you transfer the center of gravity to your left side.
- Begin push off with your right foot.
- So that you are on the ball of the foot.



Entry Phase II

- As your center of gravity shifts to your left side. Continue pushing with your right foot.
- Lift your left foot of the ground and begin sweeping it anti clockwise.
- Pivot and turn your left leg.
- Go back on the ball of your left foot as you pivot moving your upper and lower body together.
- Keep your left arm extended to counter balance the sweeping right leg. Which will extend past the right side of the circle.



Drive Phase I

- Continue sweeping your right leg around until it lands in the center of the circle towards the right foot.
- Your right elbow will be pointed towards the target and your right knee bent.
- Bend your left arm at the elbow. Bring your forearm closer to the body.
- Left your left leg and circle it towards the front of the ring. Do not slow down.



Athletic Activities Putting the Shot

Class IX - X

PROFICIENCY LEVEL



Drive Phase II

- Left leg lands in the center of the circle. Your foot should be flat & your leg firm with very little bend in the knees.
- Left arm extend towards target, then reaches up lifting your left shoulder.



Power Position

- Left arm should be pointed towards the target with your left leg straight and right knee bent.
- Right shoulder should be lower than the left, with your right forearm roughly parallel to the ground.
- Your weight should be over your right foot.
- Do not stop in this position.
- Continue rotating, because your rotation's momentum helps to power the shot.



Delivery

- As your left foot lands continue shifting your weight on the left foot.
- As you do so, punch your throwing arm up at approx. 45° angle, pushing off with your right leg as you release the shot forward.



Follow Through

- Good follow through is essential to maintain your momentum through out the delivery and keeping your balance afterwards.
- As you push off with your right foot, lift your left leg and pivot on your left foot.
- When your foot lands, hope on the foot and keep spinning.
- Keep your balance otherwise every thing you have done so far will be wasted if you fall out of the circle and foul.



Now make up your own games and have some fun

- Compete against yourself combining the total distance of glide and spin throw.
- Compete against others in athletic competitions organised by students. Can you act as judge, umpire, referee and recorders?
- Can you create a new throwing competition? What other ways might you combine and approach with the throw?

Assessment

Knowledge (4)

- History of the activity
- Rules of Shot putt
- Facts

Skills (6)

- Grip
- Style
- Stance
- Follow through

Application of skills (10)

- Effective approach
- Peri - O - Berian technique
- Pivot
- Controlled follow through
- Distance of the throw

Links to NCERT syllabus

Theme: Orientation to physical education and sports education: sports and games

Links to other subjects

Maths: Trigonometry can be applied to calculate horizontal distance, picture of release angles.

Science: Preliminary swings shows, how to break the inertia, circular movements generates centrifugal and centripetal forces, transformation of energy from body to the shot. Newton laws can be best understood by observing throws.

3.2 Team Games

3.2.1 Examples of team games (illustrative only):

- **Invasion Games:** Basketball, Hockey, Kabaddi, Netball, Gallery, Football, Water Polo, Judo, Karate/ Self Defence
- **Net Games:** Lawn Tennis, Table Tennis, Badminton, Squash Volleyball
- **Inning Games:** Cricket, Kho-Kho, Rounders, Softball, Stoolball
- **Target Games:** Archery, Boccia, Bowls, Golf

3.2.2 Inclusion: Use bright colours which will help the participation of students with vision impairment. The teacher has to modify each skill as per the percentage of impairment of the child. The students must find unique and creative ways to include CWSN who are their classmates. Though few of the strategies for inclusion have been outlined for some games in boxes attached below, if movement is not possible at all, then aided umpiring or aided cheering should be considered for CWSN. If some learning is possible, let the CWSN learn about the intricacies of the game. If they are interested in art work or music, let them create their own version of the game in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers.

3.2.3 Life Skills Imbided/ Acquired:

- Cooperating with others to use individual skills and team strategies to beat the opposition and win the game (Interpersonal and Intrapersonal Skills)
- Playing individually or with a partner and strategizing to beat the opponent and win the game (Critical Thinking, Decision Making)
- Using individual skills and team strategies to cooperate with others to score points and win the game (Creative and Critical Thinking)
- Competing individually or as a team to score the most points (as in archery) or the least number of points (as in golf) and win the game
- Understanding that including all is more important than winning (Intrapersonal Skills)
- Learning about sports/games through other formats such as fine arts (Creative Thinking)

3.2.4 Outcomes/ Values Imbided:

- Team spirit and loyalty
- Sportsmanship
- Communicating with others
- Competing and winning fairly
- Fraternity

Category of Activity: Invasion Games

Name of Activity: Basketball

Basketball is a fast, free-flowing, high-scoring invasion game. The rules allow all players to move freely around the court and occupy any position on the court. All players have an equal opportunity to score goals. The way in which the game is re-started after a point is scored or a rule infringement makes it a fast game with few breaks in play. Dribbling allows players the opportunity to create advantageous scoring opportunities.

At competency level students should learn and practice the basic skills of dribbling, sending, receiving and shooting. They should play simple games using one to one marking, learning how to keep possession by dribbling effectively and moving the ball accurately and speedily between players. As they progress skills should become more consistent and efficient and players should be introduced to set play situations and different strategies of play.

At proficiency level students should be able to attain high degree of proficiency at most individual skills and should understand the more complex strategies and systems of play demanded by the game such as zone marking, man to man or press defence.

Rules of the Game

Basketball is played by teams of 5 players. It usually has a high target, or basket, in which goals are scored.

- Semi body contact game.
- No running while holding the ball.
- A player may dribble the ball to move from one position to another but only one dribble (continuous actions) is allowed.
- Any player can get the ball if it is in play and all players can occupy any part of the playing area.
- Any player may shoot from any part of the court.

History of Basketball

Basketball was invented in December 1891 by Jaims Naismith at Springfield College in Springfield, Massachusetts people wanted a game that could be played indoors and in a relatively small space. While trying to make lessons more appealing one of the teaching staff introduced various recreational games that included Football, American Football and Lacrosse but each game was difficult to play in the small space of the gymnasium. So the staff members decided to take different aspects of each of the games and combine them to produce a new game. The main features of the original game were: It was played indoors, with a ball that was easy to handle and difficult to conceal, no tackling was allowed. Players were not permitted to run with the ball. The target was placed above head height to make shooting a skillful action. The ball may be thrown in any direction with one or both hands. The ball may be batted in any direction with one or both hands (never with the fist). The ball must be held in or between the hands; the arms or body must not be used for holding it. The time shall be two 15-minute halves, with five minutes' rest in between.

Facts about Basketball

- The first game of Basketball was played in December 1891.
- The Basketball Federation of India was formed in 1950. Its first World Championship was played in 1950.
- The Indian national basketball team is known as the Young Cagers.
- The first Indian National Championship for men was conducted in 1934 in New Delhi. The Basketball Federation of India (BFI), which controls the game in India was formed in 1950.

Basic Requirements/ Equipment

- Any suitable indoor or outdoor space that can accommodate the group.
- A range of different size balls that bounce.
- Target(s) for shooting at or into to score points. Wherever possible these targets should be elevated and above head height.
- Bands or bibs that can be worn by different teams.

Including all Students

Space • Task • Equipment • People

Use STEP to modify basketball activities so that all students are included. Try these modifications or devise your own.

Space

- Increase or decrease the space between the sender and the receiver; for example, if players are closer together it improves the accuracy of the pass; if they are farther apart, it provides more reaction time.
- Increase the playing space to encourage more movement; reduce the size of the space to encourage the development of passing skills.

Task

Passing & receiving

- Some young people find it easier to catch (receive) a larger ball, but throw (send) a smaller ball; therefore, in some cases, it may be necessary for these individuals to practice the skills of sending and receiving separately until their competency has improved (see also 'Equipment').

Dribbling

- Begin with static dribbling before introducing movement.
- Some students who have mobility or coordination impairments can move a short distance carrying the ball, bounce from a static position, and then continue moving.
- Wheelchair users can dribble according to wheelchair basketball rules; two pushes with the ball on the lap allowed then the player must bounce, pass or shoot the ball.

Scoring

- Use targets placed at different heights: chalked onto walls, basketball rings or use buckets or hoops. Increase the size of the target to make it easier. Increase the distance from a target to make it more difficult.

Equipment

- Provide students with a range of balls that bounce; players can initially practise with the size of ball they find they can control best.
- A brightly-coloured ball may help the participation of students who have vision impairment.

People

- Team numbers can be varied; for example, in order to balance a game, it may be best to play 4 v 2, where four players who are developing their skills play against two more competent players.
- Have one or more unmarked players per side who are always ready to receive a pass.
- Some players might act as 'link' players, carrying the ball between attacking and defensive zones.
- End Line / Ball game.
- Instead of targets, each team can have a Catcher; the team scores a point if they can successfully pass the ball to the catcher.

Physical & Health Education / Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of games playing
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different games and rules of the games
- Skills of agility, balance and coordination
- Motivation and commitment to take part in the game
- Ability to lead others as a team captain, coach or referee
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Listen actively
- Takes criticism positively
- Communicate using appropriate words, intonations and body language
- Identifies one's own strengths and weaknesses



Invasion Games Basketball

Class IX - X

PROFICIENCY LEVEL



Purpose of the activity

To cooperate with others to use individual and team skills and strategies to invade the space of the opposition to score points and win the game.

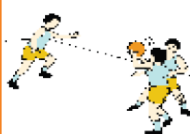
Outcome of the activities

The outcome of participating in these activities will be:
• team spirit • cooperation • communication • focus on winning

Skills

Passing the ball

- Check team mate is ready to receive
- Keep the ball under control and be ready to pass
- Look at receiver without making it obvious to the opposition
- Pass in front of the receiver and to the target made by the receiver
- Use short, quick passes (3.5 - 4 metres) as much as possible in a direct line between passer and receiver



Receiving the ball

- Move to receive the ball
- Signal readiness for the ball using a clear signal to the passer with one or both hands
- Prior to moving check team mate is ready to pass
- Get free by moving towards the ball, away from the ball and then going towards the ball (feinting)
- Keep possession while dodging an opponent protecting the ball by keeping body between the ball and opponent.



Dribbling

Passing a player

- Control the ball by spreading the fingers around it
- Keep the hand on top of the ball to ensure it rebounds accurately back to the hand
- The head should be up and the player should be aware of both opponents and team mates
- The player should protect the ball by keeping his/her body between ball and opponent



Scoring

Lay up shots

- Technique (for right handed shot)
 - At the end of the dribble, hold the ball with both hands
 - Look at the target
 - Ground the right foot and continue forward by stepping onto the left foot
 - Jump from the left foot upwards towards the basket
 - As the jump is made, take the ball up in front of the body and turn it so that the shooting hand is behind the ball
 - Release the ball with the shooting arm and hand at full stretch
 - Place the ball softly against the backboard so that it drops into the basket

Jump shots

- Ball position should be in front and above the head.
- Take a jump from both feet & try to stay in air.
- After reaching maximum height, throw the ball towards basket.

3

Invasion Games Basketball

Class IX - X

PROFICIENCY LEVEL



Here are some practices

Passing and Receiving

Ball in the Ring

Six or seven players stand in a circle with one/two defender in the middle of the circle. Players on the outside of the circle try to pass the ball across the circle so that the defender cannot intercept the pass. A player who makes a pass that is intercepted changes places with the defender in the middle of the circle. Condition the game so that players must pass using:

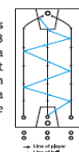
- chest pass, hook pass, one handed side pass etc.
- pass using a different pass to the one received

Passing and moving

Play in three's with one ball. Pass the ball from player 1, to 2, to 3 while travelling from one end of a playing area to another. Once at the far end one player dribbles in for a lay-up shot or attempt at a target. Change the position of the players each time.

Play using:

- different passes



- both hands to dribble
- Increase the difficulty of the game by adding defending players who try to intercept the ball as it is moved down the playing area.

Shooting

Practice lay up shooting from the left and right side of the basket

Shoot for goal

Play in teams of 10

Make a single file of players facing the basket. Give the ball to the player at the front of the line. Player shoots using a lay up shot, runs in for own rebound and passes out to the next player in the line.

Jump Shots

Practice jump shots from different positions on the court and from the free throw line.

Combine dribbling with jump shots without and with opposition.

Set up shooting competitions against other teams. First team to score 10, 20 points wins the game. Use lay up shots and jump shots.

Set up challenges that involved dribbling, sending and receiving and shooting using a large playing area. Which is the first team to score 10, 20 points?

Now make up your own games and have some fun

Decide a playing area. Mark it out in some way. How many players will be in each team? What rules will you have? How will you start the game? How long will your game last? How will you make sure that everyone is involved in the game? Who will referee your game, time it and keep score?

Assessment

Knowledge (4)	• History of the game • Facts	• Rules
Skills (6)	• Dribbling • Shooting	• Sending and receiving • Dodging/markings
Application of skills (10)	• Use of dribbling to dodge and move • Ability to pass and receive accurately and on the move	• Ability to make space and use space • Ability to mark and defend

Links to NCERT syllabus

Theme: Orientation to sports skills, proficiency in sports and motor skills

Links to other subjects

Science: Experiences of this activity may be used to teach the Law of Reflection and Types of Bonding by using the processes and skills in passing, catching and dribbling (rebounding) the ball

Maths: Drawing comparisons, students will collect the scores (data) of both teams. The data will be used to compare the performances of two teams by drawing frequency polygons. Measures of central tendency (i.e. median, mean, mode) can also be calculated from the data.

The game of Basketball

- Condition the game to reinforce skill learning. For example pass without losing the ball. The team in possession must make 6 successful passes before attacking the basket.
- Teach different systems of play: 'man to man' marking, 'zone' marking, 'half court press', explaining when and how they are used.
- Set up knock out or league competitions that allow teams to play together often and get to understand each other's strengths and weaknesses.
- Teach students how to officiate and keep score. Begin by looking for and penalising just one or two obvious infringements in practice tasks and small sided games. For example, double dribble, shifting.

Category of Activity: Invasion Games

Name of Activity: Hockey

Hockey is a fast, exciting invasion game requiring high levels of skill, tactical awareness and mental and physical fitness. It involves two teams of players using curved sticks to try and score goals and beat the opposition. It can be played indoors or outdoors on any flat surface. It can also be played as a mini game or on ice. Hockey is played by both men and women.

At competency level students should learn and practice the basic skills of rolling dribbling, passing, receiving, stopping and shooting. They should play simple, small sided games so that all players are involved in the games. They should learn how to attack and score goals and how to work with others to defend and stop goals being scored. To do this they will need to learn how to keep possession by dribbling effectively and moving the ball accurately and speedily between players. As they progress, skills should become more consistent and efficient and players should be introduced to set play situations and different strategies of hockey.

At proficiency level students should be able to perform most individual skills proficiently and should understand the more complex strategies and systems of play demanded by the game. They should also understand and know their roles when involved in set play situations. For example when taking penalty corners.

Rules of the Game

Hockey is played by teams of up to 16 players, 11 of whom are permitted to be on the pitch at any one time.

- Only the flat side of the stick can be used to hit or control the ball. The stick must be held and not used in a dangerous way.
- The ball must not be played with any part of the stick when it is above shoulder height.
- The game is started and restarted after a goal is scored, with a pass back from the centre.
- Goals can only be scored from inside the shooting circle.
- Players must not play the ball dangerously or in a way which leads to dangerous play.

History of Hockey

Games like hockey, played with curved sticks and a ball have been played throughout history, in many countries, particularly in Asia. The modern game of field hockey grew from the game played in English public schools in the early 19th century. The game was first played in India, in Calcutta in 1885.

Since 1976 i.e. Montreal Olympic Games synthetic turfs are now mandatory for all the national & international competitions.

The FIH or federation international de hockey is the world hockey governing body, and has its headquarter at Lausanne Switzerland. The major international tournament are the World Cup, Olympic Games, Asian Games and the Champions Trophy.

Facts about Hockey

- The name 'hockey' comes from an old French word 'hoquet' meaning a shepherd's crook.
- Hockey was first played in the Olympic Games in 1908.
- In the Olympic Games in 1928 India won all five of its games without conceding a goal, going on to win gold in 1932, 1936, 1948, 1952, 1956, 1964 and 1980.
- The Indian Hockey Federation was formed at Gwalior in 1925.
- The first Indian sports teams to ever set foot in Australia/New Zealand (1926), Europe (1928) and Japan/USA (1932) were the Indian hockey teams.
- Sansarpur, a tiny village on the outskirts of Jalandhar has the distinction of producing 9 Olympians.

Basic Requirements/Equipment

- Any suitable indoor or outdoor space that can accommodate the group.
- A hockey stick and pair of shin guards.
- A range of different size balls that can be used for hitting and dribbling. Hard hockey balls should only be used when students have the skills to be able to control and play the ball safely.
- Goals for shooting at or into to score points.
- Bands or bibs that can be worn by different teams.
- Cones, markers, lime powder.
- Whistle.
- Students should be dressed so that they can play the game safely.

Including all Students

Space • Task • Equipment • People

Use STEP to modify hockey activities so that all students are included. Try these modifications or devise your own.

Space

- Increase or decrease the space between the sender and the receiver; for example, if players are closer together it improves the accuracy of the pass; if they are further apart, it provides more reaction time.
- Increase the playing space to encourage more movement; reduce the size of the space to encourage the development of passing skills.

Task

Passing & receiving

- Find the most appropriate way of passing the ball for each individual.

Dribbling

- Begin with static dribbling before introducing movement.
- Some students who have mobility or coordination impairments can move a short distance carrying the ball, drop it or throw it into play, and then continue moving.
- Wheelchair users may be able to dribble by holding the hockey stick in one hand and pushing the wheelchair with the other.

Scoring

- Increase the size of the goal to make it easier. Increase the distance from a target to make it more difficult.

Games playing

Have one or more unmarked player per side - always 'free and ready for a pass'.

Some players can act as 'link' players, carrying the ball between attacking and defending zones.

Let a player move up and down the sidelines, receiving a pass from inside the playing area and passing it back in to a player inside the area. This might allow a player to feel safe and enable them to join in the game.

Create zones with students of similar abilities playing with and against each other in the zones. Set up tackle-free zones.

Equipment

- Provide students with a range of balls that can be used for hitting; players can initially practise with the size of ball they find they can control best.
- A brightly-coloured ball may help the participation of students who have vision impairment.
- Provide a range of different sized and weight hockey sticks. Students should use one that suits their height.
- Plastic hockey sticks and balls/pucks might be advantageous when students are learning the game of hockey.

People

- Team numbers can be varied; for example, in order to balance a game, it may be best to play 4 v 2, where four players who are developing their skills play against two more competent players.
- Have one or more unmarked players per side who are always ready to receive a pass.
- Have different games playing at the same time, some involving large groups of students, some involving small numbers of students.
- Set up games in which all players have the opportunity of participating. For example do not always use a goalkeeper.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of playing games
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different games and rules of the games
- Skills of agility, balance and coordination
- Motivation and commitment to take part in the game
- Ability to lead others as a team captain, coach or referee
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Listen actively
- Communicate using appropriate words, intonation and body language
- Take criticism positively
- Identifies one's own strengths and weaknesses



Invasion Games Hockey

Class IX - X

PROFICIENCY LEVEL



Purpose of the activity

To cooperate with others to use individual and team skills and strategies to invade the space of the opposition to score goals and win the game.

Outcome of the activities

The outcome of participating in these activities will be:

- team spirit • cooperation • communication • focus on winning

Skills

Dribbling

Indian Dribble

- Drag the ball from left to right
- Roll the hands and wrists, generally the left hand controls the twisting and rotation.
- The right hand controls and stabilizes the ball.

Position of hands
top and right hand bottom



Passing

The Flick

This is used to lift the ball into the air.

- Hands apart on the stick.
- Step into the action.
- Left leg and shoulder point into the shot
- Body crouched and knees bent at start of the action.
- Lift the ball into the air, straightening the legs to help lift the ball.



The Jab Tackle

- Hold the stick in the left hand.
- Lunge at the ball, jabbing at it.
- Use the right hand to provide support.



Here are some practices

Dribbling

Set up dribbling practices requiring students to:

- Indian dribble, while stationary, while walking, jogging and running.
- Change speed, change direction.
- Dribble against opposition.

Set up dribbling relay challenges:

- Dribbling around cones
- Combining dribbling in different directions and dribbling and shooting



Passing and receiving a ball : In groups of 10 players: 'In and Out'

Player B runs to a cone. Player A passes the ball to Player B who returns it and runs forwards to receive another pass from Player A. Player B passes the ball to Player A and then sprints to the end of the playing area. Player C begins.



Invasion Games Hockey

Class IX - X

PROFICIENCY LEVEL



Gate Challenge

Player A dribbles the ball through Gate 1 and passes to player B. Player B dribbles the ball through Gate 2 and passes the ball back to Player A who has returned to position. Player C begins.

Return Pass

Player B stands in the middle of two cones. Player A passes the ball to the right and then to the left. Player B runs to receive and return the pass each time. How many passes in 20 seconds? Player C goes next.

Flicking the ball

Place a low barrier between two players. Flick the ball over the barrier.

Set up practices combining dribbling and flicking. For example, dribble the ball around markers and flick it over a low

barrier to try and score a goal or hit a target.

Dodging and feinting

Players A and B stand facing players C and D. Players A and B dribble the ball to Players C and D dodging past them to score a point.

Once the Jab Tackle is known use the above practice asking the defender to attempt a Jab Tackle when approached by the attacking player.

Shooting

Teach students to develop an effective shooting technique and how to create goal scoring opportunities.

Set up gates around the perimeter of the circle area. Players dribble the ball to one



Now make up your own games and have some fun

Decide a playing area. Mark it out in some way. How many players will be in each team? What rules will you have? How will you keep your game safe? How will you start the game? How long will your game last? How will you make sure that everyone is involved in the game? Who will officiate your game?

Assessment

Knowledge (4)	• History of the game • Rules • Facts
Skills (6)	• Dribbling • Passing and receiving • Shooting • Dodging/ marking/ tackling
Application of skills (10)	- Use of dribbling to dodge and move - Ability to pass and receive accurately and on the move - Ability to make space and use space - Ability to mark and defend - Use of more advanced techniques and strategies

Links to NCERT syllabus

Theme: Orientation to sports skills: proficiency in sports and motor skills

Links to other subjects

Maths: Impossible event, introduce this concept during a games lesson before teaching it in the classroom. Students are given 5 chances of scoring from a penalty shot. Ask them to decide the probability that they will be successful with all 5 chances. This information can be used in the classroom to help student's understand theoretical probabilities.

Language: Writing biosketches, when students understand the tactics and strategies of the game of hockey they watch a video of a famous hockey player. They identify the qualities of good sportspeople and write a bio sketch of the player they have observed.

Category of Activity: Invasion Games

Name of Activity: Kabaddi

Kabaddi is an invasion indigenous game of India. The game originated in South Asia, as a form of combat recreational activity. The two teams occupy opposite halves of a field and takes turn in sending a 'Raider' into the other half. In order to win points by tagging members of the opposite team and tries to return to his own half, holding his breath and chanting Kabaddi, Kabaddi..... The tagged members are declared out and are sent temporarily out of the field. The Raiding team earns one point for each player tagged. Defending team tries to refrain the raider from going back to his half individually or collectively. The Raider is considered out if he takes a breath before returning to his half or he or his any body part crosses/touches boundary line. In such an event the defending team earns a points. Team which earns most points in stipulated time is declared winner. Its not a power game as generally perceived. Its a game which needs reflexes, intelligence and judgement.

Rules of the Game

- The ground shall be leveled and soft.
- 13 mts. x 10 mts. space, is divided by a middle line, creating two halves.
- Each half 10 x 6.25 mts. is divided by a middle line known as court.
- Baulk line is 3 mts. from the center line.
- There shall be stripped of 1 mt. on each side of the play field called the Lobby.
- Each team has 12 players, 7 takes the ground at a time, 5 are reserved.
- If anti or anties who have gone out of bounds, holding the raider, raider is not out. On the contrary anti or anties are declared out.
- Players are revived in the same order in which they have gone out.
- Maximum duration of the match is two halves of 20 minutes each with a 5 minutes of break in between.
- Lona comprises of 2 bonus points. Team which scores most number of points, wins.

Facts about the Game

- The game as introduced in Indian Olympic Games in 1938 at Kolkata.
- KFI formerly known as AKFI was formed in 1950.
- Its a national game of Bangladesh.
- Its a state game of Tamilnadu, Andhra Pradesh and Punjab.
- First asian championship organised in 1980.
- Introduced in asian games for the 1st time in Beijing 1990.
- 1st Kabaddi world cup was played in 2004.

History of the Game

The game known as Hu Tu Tu in western India, Hu-Do-Do in eastern India and Bangladesh, Chedu-Gudu in southern India and Kaun-Bada in Northern India existed in this part of the world and has change through ages. It is also believed that this game is a version of Chakravyuha, an ancient war strategy and defensive formation used in Mahabharata. The game was demonstrated for the first time at the international level during 1936 Berlin Olympics by Hanuman Vyayam Pracharak Mandal Amravati, Maharashtra. The game has been in existence for over 4000 years. One school of thought is that this must have developed during prehistoric times when the man was forced to defend himself from sudden attacks from ferocious beasts. They used to form groups of individuals and attacked animals.

Basic Requirements/ Equipment

- Playing area
- Stop watch
- Marble powder
- Measuring tape
- Markers
- Cones
- Whistle

Including all Students

Space • Task • Equipment • People

Use STEP to modify Kabaddi activities so that all students are included. Try these modifications or devise your own.

Space

- Increase/decrease the area of the ground.
- Change the shape of the playing area.
- Loose surface sand.
- Different surfaces such as clay, synthetic, colourful, etc.
- 10 x 13 mtrs. of space for man & 10 x 12 mts. for woman.

Task

- One for one as defensive technique.
- Raider could take a breath.
- Two raider at a time.
- Time of raid/game can be increased or decreased.
- For Not tagging a player negative points could be given.

Equipment

- Instead of tagging by hand, paper or sticks of various sizes and shapes could be used.
- Tagging only by hand or foot may be applied.
- Blind Fold

People

- Team Number of player in a team could be varied.
- Instead of tagging players, any specific part could be tagged.
- Having one/two marked players.
- Tagging marked players will earn bonus points.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of games playing
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different games and rules of the games
- Skills of agility, balance and coordination
- Motivation and commitment to take part in the game
- Ability to lead others as a team captain, coach or referee
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Listen actively
- Takes criticism positively
- Communicate using appropriate words, intonation and body language
- Identifies one's own strengths and weaknesses



Invasion Games **Kabaddi**

Class IX - X

PROFICIENCY LEVEL



Purpose of the activity

To cooperate with others to use individual and team skills and strategies to invade the space of the opposition to score points and win the game.

Outcome of the activities

The outcome of participating in these activities will be:

- team spirit • cooperation • communication • focus on winning

Skills

Side Kick

- Take sideward right leg stance.
- Bend right knee.
- Balance yourself on right leg.
- Kick left leg sideways to tag the defender's nearest body part.



Back Kick

- On the pretext of coming back raider stops near the baulk line facing the mid line.
- Raider stops suddenly, bends forward and moves his one leg back to touch the defender coming on to catch him.
- Raider falls down to touch the center line.



Ankle Hold

- Apply the hold when raider tries to apply toe touch.
- Defender bends down and tries to catch the ankle of the stationary leg after diving.
- After taking the hold, pull the raider towards you to de-stabilise and breaking off cant.



Knee Hold

- Defender takes the position and put his left hand under the right knee and right hand catches and ankle of the same leg.
- Change the direction.
- Pull the attacker to de-stabilise and break his cant.



Catching the Hand/Wrist

- Defensive skill, when raider tries to touch with hand, defender quickly grapples his wrist.
- Pull the raider towards you, so that raider loses balance, falls and breaks his cant.



Here are some practices

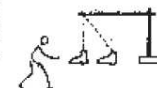
Players asked to perform this practice by count
1) Approach 2) Holding the ankle
3) Lifting the leg up
Reduce the number of counts and let the players perform by increasing the speed.



Each player will hold both the ankles of the player in front and move forward to reach the cone as shown in the figure and return to final position.



Player is asked to try to hold the moving object from hanger designed specially for ankle hold to improve catching accuracy.



Invasion Games **Kabaddi**

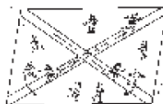
Class IX - X

PROFICIENCY LEVEL



Here are some practices

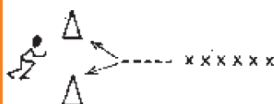
Side/Back Kicks/Raiding : A raiding path is made as shown in the figure with three raiders who are required to move only in the path. The rest of players try to assemble in one zone. They are prevented by the raiders who execute side kick to touch on them. In case they are touched they will have to take the raider's place. While the raider takes his place with the other, who tried to gather in one zone.



Knee Hold : The raider tries to execute hand touch / toe touch / side kick / back kick on the three anti in different zones with natural run forward and one of the defender tries to take on the raider with knee hold.



Ankle Hold : The raider will be asked to take 5 leg touches on the targets while the anti tries to hold his ankle and prevent his escape. The number of successes and failures are counted by changing the partners. This can be a competitive practice.



The players stand in players as one raider and the other as a defensive player. The raider tries to touch the toe of the anti from the starting point. This will improve the reach and the accuracy of the raider.



Now make up your own games and have some fun

Decide a playing area. Mark it out in some way. How many players will be in each team? What rules will you have? How will you start the game? How long will your game last? How will you make sure that everyone is involved in the game? Who will referee your game, time it and keep score?

Assessment

Knowledge (4)	• History of the game • Rules • Facts
Skills (6)	• Side Kick • Back Kick • Ankle Hold • Knee Hold • Catching the Hand/Wrist
Application of skills (10)	• Use of kicking for tagging the defenders. • Ability to hold knee and ankle strongly. • Ability to make space and use space • Ability to catch the attacker by hand/wrist

Links to NCERT syllabus

Theme: Knowledge and Proficiency in Sports and Motor Skills Acquisition-Kabaddi

Links to other subjects

Science :

Maths : A Kabaddi Event may be used to develop speaking competencies as well as abilities for analytical writings. Some of them may be engaged in providing running commentary to the audience as experts of the game and others may be asked to prepare an analytical write up highlighting the specific skills used by individual players.

The game of Kabaddi

- Condition the game to reinforce skill learning. For example
- Teach different systems of play:
- Set up knock out or league competitions that allow teams to play together often and get to understand each other's strengths and weaknesses.
- Teach students to referee and keep score. Begin by looking for and penalising just one or two obvious infringements in practice tasks and small sided games. For example.....

Category of Activity: Invasion Games

Name of Activity: Soccer

Soccer is world's most exciting and popular game. It is played between two teams of eleven players each on a rectangular field of grass or artificial surface having same size goals in the middle of each end line. One player acts as goalkeeper and other ten players act as field players. The goal keeper is generally allowed to touch the ball with hands or arms whereas field player use their feet to kick the ball into specific places, occasionally using their head or torso to intercept the ball in mid air. The main aim of the game is to score maximum number of goals by driving the ball in two opponent's goal.

Soccer is a very emotional game full of joy and despair, triumph and tragedy, often it swings widely between these extremes in the course of a single match, bringing drama and exhilaration in to the lives of million across the globe. What makes soccer to play and watch is the flow of the game and to end play. It's goals, spectacular saves, near misses and other goal mouth incidents.

Rules of the Game

- Soccer field measures 90-120 mts. in length and 45-90 mts. in width.
- Each goal measures 7.32 mts. in length and 2.44 mts. in height.
- Diameter of the centre circle is 18.30 mts.
- Penalty spot is 11 mts. from the middle of the goal perpendicularly.
- Deliberate handling of the ball by field players is not allowed.
- Duration of the game is 90 min., with 15 min. break after 45 minutes.

History of Soccer

The origin of soccer can be found in every part of the globe. Almost every culture has reference to history of soccer. In china the games seems to have been played as far back as 3000 yrs ago. Recorded facts support that Romans and Greeks use to play ball for fun and frolic. It is believed that modern soccer started in England. In the old form of soccer ill practices like kicking, biting and punching were allowed. King Edward III band soccer in 1365. World's oldest football club 'Sheffield Football Club' was established on 27th Oct. 1857. Football and Rugby association split in 1863, that laid the foundation of soccer in 1869. Soccer popularly spread rapidly in 1800's by British Sailors, Traders and Soldiers in different parts of the world. Despite the ban, soccer became to grow in medieval England and then it was introduced in English public schools in order to keep boys fit. Slowly game started becoming more organised with well defined teams, positions and training masters. Cobb, Morley is considered as the father of modern soccer. The game came to India also through british people. Initially matches were played between army teams. The game is played extensively in the country with a maximum of fan following in Goa, Kerela, West Bengal, Mizoram, Manipur and Sikkim. The oldest tournament of soccer was played in 1898 which was organized in Shimla by the name of 'Durrand Cup'. 1951-1962 was the golden period of Indian Soccer. When India won top honours in 1951 and 1956 Asian Games held in New Delhi and Jakarta and became the first Asian Nation to make it to the Olympic semifinals in 1956 at Melbourne.

Facts about Soccer

- Officially there are 17 laws of the game.
- Game is governed world over by FIFA. Which was constituted in 1906.
- FIFA (Federation De International Football Association) has their headquarters in Switzerland.
- Soccer is commonly known as Football.
- Soccer is a religion for more than a billion soccer lovers.
- Europeans have reached the final of each world cup except in 1930 and 1950.
- Until 1913 goal keepers wore same coloured jerseys as their team mates.
- 8 countries have won the world cup till now.
- Uruguay, Brazil, Argentina, Italy, Germany, France, England and Spain.
- Most Numbers of Goals scored in a match by one player is Ronaldo from Brazil.
- Most famous soccer players in the world are Pele, Beckham, Maradona and Ronaldo.
- Spain is the only country who won the Euro 2008 and World Cup 2010.

Basic Requirements/Equipment

- Football
- Markers
- Cones
- Bibs
- Sports Gear (Shin Guard, Jersey / Shorts, Gloves for the Goal Keeper)
- Marble Powder

Including all Students

Space • Task • Equipment • People

Use STEP to modify soccer activities so that all students are included. Try these modifications or devise your own.

Space

- Increase or decrease the space between the sender and the receiver; for example, if players are farther it improves the accuracy of the pass; if they are closer, it provides more reaction time.
- Increase the playing space to encourage more movement; reduce the size of the space to encourage the development of passing skills.

Task

Passing & receiving

- Find the most appropriate way of kicking the ball for each individual.

Dribbling

- Begin with static dribbling before introducing movement.
- Some students who have mobility or coordination impairments can move a short distance dribble the ball, drop it or throw it into play, and then continue moving.

Scoring

- Increase the size of the goal to make it easier. Increase the distance from a target to make it more difficult.

Games playing

Have one or more unmarked player per side - always 'free and ready for a pass'

Some players can act as 'link' players, carrying the ball between attacking and defending zones.

Let a player move up and down the sidelines, receiving a pass from inside the playing area and passing it back in to a player inside the area. This might allow a player to feel safe and enable them to join in the game.

Create zones with students of similar abilities playing with and against each other in the zones.

Set up tackle-free zones.

Equipment

- Provide students with a range of balls that can be used for kicking; players can initially practise with the size of ball which they find they can control best.
- A brightly-coloured ball may help the participation of students who have vision impairment.
- Provide a range of different sized and weight football. Students should use one that which suits their age group.

People

- Team numbers can be varied; for example, in order to balance a game, it may be best to play 4 v 2, where four players who are developing their skills play against two more competent players.
- Have one or more unmarked players per side who are always ready to receive a pass
- Have different games playing at the same time, some involving large groups of students, some involving small numbers of students.
- Set up games in which all players have the opportunity of participating. For example do not always use a goalkeeper.

Links to continuous and comprehensive assessment frame work for classes IX and X

Physical & Health Education /Games

- An appreciation and understanding of the physical fitness requirements of games playing
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different games and rules of the games
- Skills of agility, balance and coordination & Speed
- Motivation and commitment to take part in the game
- Ability to lead others as a team captain, coach or referee
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Listen actively
- Communicate using appropriate words, intonation and body language
- Takes criticism positively
- Identifies one's own strengths and weaknesses



Invasion Games Soccer

Class IX - X

PROFICIENCY LEVEL



Purpose of the activity

To cooperate with others to use individual and team skills and strategies to invade the space of the opposition to score goals and win the game.

Outcome of the activities

The outcome of participating in these activities will be:
• team spirit • cooperation • communication • focus on winning

Skills

Trapping with the sole of the foot

- Lift your foot not too high with toe pointing upwards.
- Allow the ball to wedge itself under your shoe.
- Develop soft touch.
- Trap the ball dead.



Controlling the ball with inside of the foot

- Have good balance position.
- Raise your foot to receive the ball.
- Move your foot backward to absorb the shock.
- Longer your foot stays in contact with the ball.
- More control you will have.



Controlling your thigh

- To be used when the ball comes to you on an awkward height.
- Lean slightly backward to receive the ball.
- Bend your supporting leg.
- Balance yourself.



Controlling on chest

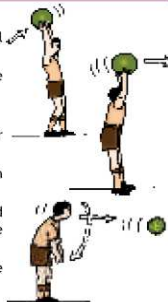
- Square your body towards the flight of the ball.
- Extend your arms and meet the ball with your chest pushed outwards.
- Balance your self.
- Avoid the ball hitting or your arms or hands.
- Arch your back and push your chest.
- Don't tense your muscles.
- Move back to absorb the shock.
- Move your shoulder down as you bring the ball down to your feet.
- Make sure your knees are bent and your feet are wide apart to maintain balance.



Throw in

is awarded when opposing team kicks the ball outside the touch line/side line.

- Throw must be taken from the place where ball has crossed line.
- Stand or run-up to line before you throw.
- Take ball over your head, spread your fingers around the ball.
- Take the ball back behind your head, arch your back.
- Bring your weight on your front leg and whip your body forward as you throw the ball.
- Use body weight to add power to the throw.



Invasion Games Soccer

Class IX - X

PROFICIENCY LEVEL



Fetching the Ball

- 12 players, numbered from 1 to 4, sit in a circle, in the centre of which there are 4 balls. A number from 1 to 4 is called out i.e. 2. All players with the number 2 run clock wise around the circle and back into the circle through their former space. They grab a ball, which they take back to their place via the same route as before. The first one to arrive is awarded 2 points.



Destroying the Wall

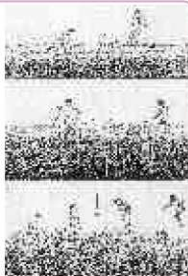
- The field is divided into 2 halves separated by a narrow strip. The teams are balanced out. Each has a player from the opposite team amongst them. The players have to try to kick the ball to their own man on the opposite side. A feat which requires him to break free cleverly while his own side passes him the ball at just the right moment.



If he succeeds, the player who passed him the ball then joins him on the other side, so that there are now 2 teammates among the opponents.

Football Tennis

- The game involved applying the acquired techniques in playing from under competition conditions. The rules are adopted at the technical level:
- The ball bounces once per player.
- Once on the pitch the second player plays directly.
- 4 against 4 the ball can only one bounce on the field, otherwise it has to be played directly.
- Just like volleyball, football-tennis only allows contact with the ball on three occasions.
- The ball may not bounce.



Now make up your own games and have some fun

Decide a playing area. Mark it out in some way. How many players will be in each team? What rules will you have? How will you keep your game safe? How will you start the game? How long will your game last? How will you make sure that everyone is involved in the game? Who will umpire your game?

Assessment

Knowledge (4)	• History of the game • Rules • Facts
Skills (6)	• Dribbling • Controlling the ball • Trapping • Throw in
Application of skills (10)	Use of dribbling to dodge and move Ability to pass and receive accurately and on the move Ability to make space and use space Ability to mark and defend Use of more advanced techniques and strategies

Links to NCERT syllabus

Theme: Knowledge and Proficiency in Sports and Motor Skills Acquisition-Football

Links to other subjects

Mathematics: This activity can be used in a number of ways for transaction of Mathematics. For example, by observing football field, the concept of symmetry, or concept of area and perimeter of the rectangular field can be explained; Or The experiences can also be used for teaching of surface area & volume and mid-point theorem.

Language: This activity can be utilized for developing various language abilities, such as use of Articles and Prepositions, identification of Subject and Predicate correctly, and write a sequence in active and passive voice.

Social Science: Teachers of Social Sciences can use the experiences in a number of ways while teaching the concepts like seasonal winds or ocean currents.

Category of Activity: Net/Wall Games

Name of Activity: Badminton

Badminton is a racquet sport played by either two opposing players (singles) or two opposing pairs (doubles), who take positions on opposite halves of a rectangular court that is divided by a net. Each team/player tries to score points by grounding the shuttle on the opponent's court. The game is played to a predetermined number of points (i.e. 21). If the player/team who reaches 21 earliest wins the game. If the points become 20 all, then the game is to be won by difference of 2 points upto 28. How so ever the score becomes 29 all, then the player/team who scores 30th point wins the game. Badminton is a rebound game. It is not permitted to drag the shuttle on the racquet. Because of this rule it is essential for the players to hit the shuttle at the right time. If the shuttle is not hit in a control manner, the points is awarded to the opponent.

At competency level students should learn and practice Basic fundamental skills of Grip & Stance (serving and receiving), High Serve, Low serve and Overhead clears. As the progress skills should become more consistent and efficient. And the players should be able to anticipate the path of the shuttle and the action of the opponent.

At proficiency level students should be able to attain high variation of service (flick, drive, short), Fore hand and back hand clear (attacking and defensive), Net & Drop shot and Smash. At this point player should understand both offensive and defensive play using different strokes.

Rules of the Game

- The game of Badminton is of 21 points and best of three set for both men and women.
- When the score becomes 20 all, the side which gains a two point lead first, shall win game. If the score becomes 29-all, the side scoring the 30th point shall win that game.
- The server and receiver stand diagonally. The serve is legal when it falls with in the specified court i.e. left / right service court.
- When scores are even i.e. 0,2,4,6 service must be done from right to right 'court' and visa versa.
- Both feet of the server and the receiver shall remain in contact with the surface of the court in a stationary position from the start of the service until the service is delivered.
- The head of the racket must contact with the shuttle below the waist line during service.

Facts about Badminton

- Badminton is an Olympic Sport played first in the 1992 Olympic Games in Barcelona.
- The number of feather in shuttlecock is fixed i.e. 16.
- Only two Indian won the All England Championship till date
Prakash Padukone 1980
Pullela Gopichand 2001.
- Saina Nehwal since 2003 has won 16 titles at International level.

History of Badminton

Badminton quickly spread from England to the United States, Canada, Australia and New Zealand, and made big strides in Europe. Although men first played it, women became enthusiastic about it, and interest now is about equally divided. The first All-England championship for men was held in 1899 and in 1900 the pioneer tournament for women was arranged. These, however, were regarded as "unofficial" and 1904 marked the beginning of the official All-England matches. Organized shuttle badminton in India started in the year 1934 with the formation of all India badminton association which has been subsequently remained as "Badminton Association of India" most of the states formed their association and got affiliated to the National Association. The first All India Badminton championship was held at earlier calcutta in 1934. Mr. VA Madgaonkar won the honour of being the first Badminton champion of India. In 1934, the International Badminton Federation (IBF) was organized with nine members - Canada, Denmark, England, France, Ireland, Netherlands, New Zealand, Scotland and Wales.

Basic Requirements/ Equipment

- Any suitable indoor or outdoor space that can accommodate the group
- A net or rope, placed at 5 feet height
- Racquets and Shuttle Cocks.
- Lime powder to create playing areas

Including all Students

Space • Task • Equipment • People

Use STEP to modify badminton activities so that all students are included. Try these modifications or devise your own.

Space

- Increase the playing space to encourage more movement; reduce the size of the space to encourage the development of overhead shot skills.
- Play on different shaped courts. For example make the courts long and narrow to encourage longer hits in less space, or make the courts wide and shorter to encourage players to use peripheral vision and play the shuttle wide.
- Vary the size of the courts depending on the ability of the students. For example increase the playing area for a competent player when playing against those still developing their skills.

Task

Passing & receiving

- Some players will find it easier for them to join in the game if they are able to hit the shuttle hard.
- Some players find it easier to play with a lighter and wider racquet. In some cases it may be necessary for these individuals to practice the skill of sending and receiving separately until competency has improved.
- Some players may need to spend more time practicing individual skills before they are able to play in a game situations.
- Allow players to serve the shuttle high and low from inside the court and from back gallery.

Equipment

- Provide players with a range of shuttle cocks. Players can initially practise with the shuttle they find can be controlled best.
- A brightly coloured shuttle or shuttle with a sound may help the participation of students who have vision impairment.
- Hitting balloon or a beach ball with hand will may slow down the game and allow more time for decision making.
- Use some adjustable vertical stands with a ring on top to develop precision and control in high and low serving.

People

- Team numbers can be varied; for example, in order to balance a game, it may be best to play 1 v 2, 1 v 3 or 2 v 3, 2 v 4 where larger group who are developing their skills play against more competent players.
- Play the game seated. Reduce the court area and increase or decrease the height of the net. Players must remain seated and cannot lift their seats when hitting the shuttle.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of games
- Motivation and commitment to take part in the game
- An involvement in sports/physical education programmes
- Ability to lead others as a team captain, coach or referee
- Team work
- An awareness of rules of safety
- A knowledge of different games and rules of the games
- An evidence of being self disciplined
- Skills of agility, balance and coordination

Life Skills

- Listen actively
- Takes criticism positively
- Communicate using appropriate words, intonation and body language
- Identifies one's own strengths and weaknesses
- Gets along with others.



Net/Wall Games **Badminton**

Class IX-X

PROFICIENCY LEVEL



Purpose of the activity

Playing individually or with a partner to beat the opponents and win the game

Outcome of the activities

The outcome of participating in these activities will be:

- Team spirit • Cooperation • Communication • Focus on winning.

Skills

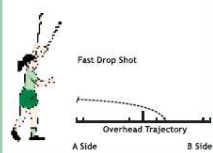
Backhand grip

- Hold the racket as you would on a forehand grip.
- Turn the racket anti-clockwise so that the V shape moves leftwards.
- Place your thumb against the back level of the handle for greater leverage and power.
- The racket handle shall also rest loosely in your fingers.



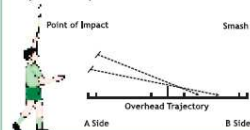
Forehand Drop Shot

- Bend your elbow and lock your wrist preparing to swing forward.
- Raise your non-racket hand and point at the shuttle and contact the shuttle as high as possible and out in front of your forehead.
- Slice or tap the shuttle as you hit it, reducing the speed of the racket head.
- Follow through with your racket and shift your weight from your rear foot to your front foot.



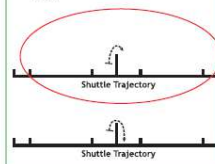
Smash

- Turn your body and stand sideways to the net with your non-racket shoulder facing the net.
- Raise your non-racket hand and point at the shuttle. Contact the shuttle as high as using a strong throwing action as if you are going to throw your racket high and forward through the air.
- Snap down your wrist at the point of impact giving the shuttle extra power and angle towards your opponent's court.
- Follow through with your racket and shift your weight from your rear foot to your front foot and move back to your base position.



Net Shot

- Play with forehand grip for forehand shots or the backhand grip for backhand shots.
- Extend the racket arm and keep the racket high to ensure the shuttle is hit as early as possible. The racket face shall be parallel to the floor and let the shuttle bounce off the racket face.
- Lunge movement and the parallel racket face will cause the shuttle to tumble over the net.



Here are some practices

- The feeder stands at short service line and lift the shuttle towards the end line for practice of drop shot.
- The student take the position at the center of the court and feeder lift the shuttle for smash.
- Student take stance at the center and practice for net shot.
- Students can play competitive game by using the smash, drop shot and net shot.
- In absence of or no partner one can practice against the wall.

Net/Wall Games **Badminton**

Class IX-X

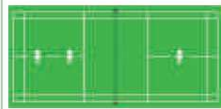
PROFICIENCY LEVEL



Drills

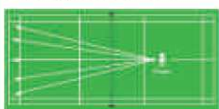
2 Versus 1

Two players on one side of the court must assume a front back position and play as they would in a singles match. On the other side, there will be only one player. This will create a very tough and pressured condition, that will enable the individual to enhance his competency.



Multiple Shuttles • Overhead Strokes

The feeder plays the shuttles into different areas of your backcourt. You will then use your forehand, backhand or around the head to play the clears, drop shots or smashes. Return to your base position after each shot. This badminton drill is meant to improve speed and accuracy in executing overhead strokes.



Now make up your own games and have some fun

How many players will play at a time? What rules will you have? Which type of racquet will you use? How will you start the game? How long will you play for? How will you make sure that everyone is involved in the game?

Assessment

Knowledge (4)	- History - Basic rules and skills - Facts
Skills (6)	- Backhand Grip - Forehand Drop shot - Smash - Net Shot
Application of skills (10)	- Drop Shot land before the short service line. - Execution of smash and Net shot. - Positioning on the court.

Links to NCERT syllabus

Theme: Games and Sports : Badminton

Links to other subjects

Science : Physics: Laws of lever (to grip the racket), Laws of friction (for appropriate foot movement in court), Laws of motion (To break inertia and action and reaction for smash), **Biology:** (Knowledge of various body systems for proper training and Conditioning and what are the various effects of exercises on the system)

Mathematics : The experiences of Badminton may be utilised, especially the counting of score, marking of court with the help of Pythagoras theorem for diagonal.

Social Science:

Geography : (To locate the position and condition of the countries who play Badminton).

The game of Badminton

- Condition the game to reinforce skill learning. For example pass using specific passes only, or set up zoned areas in which only player can move.
- Teach different systems of play: Front back, Side ways, and how they will rotate. Explaining when and how these are used. Try different attacking formations.
- Set up knock out or league competitions that allow players to play together often and get to understand each other's strengths and weaknesses.
- Teach students how to officiate and keep score. Begin by looking for and penalising just one or two obvious infringements in practice tasks and small sided games. For example, net faults.

Category of Activity: Net Games

Name of Activity: Table Tennis

The game is also known as ping-pong. In which two or four players hit a light weight hollow ball back and forth using Table Tennis rackets. The game is played on a table divided by a net, except for the initial serve, players must allow the ball played towards them only after one bounce on their side of the table and must return in such a way that it bounces on the opposite side. Point has scored if the player is not able to send the ball across within the rules. The game is fast and demands quick reactions. Skilled player can apply several varieties of spin to the ball, altering its trajectory and limiting opponents options. You need to be able to hit the ball well and keep it low over the net. You also need to learn to hit the ball accurately and hard at the same time. The game required highest degree of physical fitness and mental concentration. Fred Perry world's mens single's champion in 1928-29, later achieved greater fame at Wimbledon, perhaps it would not be quite true to say that he move to the larger court when his game became too slow for the table but certainly it will be true to say that no sport requires faster reaction and more delicate muscular co-ordination than Table Tennis

Rules of the Game

- Table Tennis Table is 9 ft. long, 5 ft. wide and 2.5 ft high.
- Net is 6 inches high from the table.
- A game of Table Tennis is played upto 11 points.
- A player or the pair who first scores 11 points wins unless both players or pairs score 10 points then the game is won by the player or pairs who gains 2 point lead.
- If a player cause the table to move whilst the ball is in play, player losses a point.
- A player shall score a point if his opponents free hand touches the playing surface or the net assembly.
- Service receiving and end are decided by toss. Game start with legal service.

History of Table Tennis

The game of Table Tennis probably descended from the game of 'Royal Tennis', which was played in the medieval era (12th century A.D.) Table Tennis was probably played with improvised equipment in England during the last quarter of 19th century. Evidences show that DAVID FOSTER in England patented an action game of Tennis on Table in 1890. One year later John Jaques came out with a game called GOSSIMA. None of these game were successful due to ineffective rubber ball and cork, both had wild bounce. In 1900 a celluloid ball was introduced by Jaques and the name was given as 'Ping-Pong'. The game quickly caught on with the public under many names but Ping-Pong and Table Tennis were two most popular names. Ping-Pong was a trademarks of parker brothers of US and they wanted a large amount of money for their trademark. So, all settled with the name, Table Tennis. China the current olympic champion, they won all the gold medals at Beijing olympics. The game was brought to India during 1st half of 20th century. Initially, it was an after dinner amusement for British Officers in India until Table Tennis Federation of India came into existence in 1937.

Facts about Table Tennis

- Table Tennis is controlled by ITTF worldwide.
- ITTF (International Table Tennis Federation) was founded in 1926 with headquarters in Berlin.
- Introduced in olympics in 1988 in Seyol South Korea.
- First world championship was held in London in 1926.
- TTFI was formed in 1937 at Calcutta now known as Kolkata.
- Table Tennis ball was not really hollow, it is slightly pressurised by a Gas.
- Certain top players can put up upto 900 rpm of spin to Table Tennis balls.
- Table Tennis was banned in Soviet Union from 1930-1950. It was believed to be harmful to eyes.
- Table Tennis is the most popular rackets sport in the world.
- Jackie Bellinger and List Lomas created a record of hitting the ball back and forth 173 times in one minute.
- China, Sweden and South Korea are the world powers in Table Tennis currently.
- Until 2001 Table Tennis was played upto 21 points.
- After sydney olympics in 2000, the ball size was increase to 40mm for improved TV viewing.

Basic Requirements/Equipment

- Table Tennis Tables
- T.T. Rackets and Balls
- A Hall to acomodate students
- Open space marked with lines
- Wall marked with Straight line at the height of 76 cm.

Including all Students

Space • Task • Equipment • People

Use STEP to modify Table Tennis activities so that all students are included. Try these modifications or devise your own.

Space

- Increase the playing space to encourage more movement; reduce the size of the space to encourage the development of forehand and backhand strokes.
- Play on different tables. For example the school tables can be used by keeping the books at the center of the table for service practice.
- Vary the size of the tables depending on the ability of the students. For example the length and height of the table could be increase or decreased at the competency of the player develops.
- For practice of strokes and task wall can be used.

Task

Passing & receiving

- Some players will find it easier for them to join in the game if they are able to hit the ball softly.
- Some players find it easier to play with a lighter and wider racquet. In some cases it may be necessary for these individuals to practice the skill of sending and receiving separately until competency has improved.
- Some players may need to spend more time practicing individual skills before they are able to play in a game situations.
- Allow players to serve the ball from near/further from the table.

Equipment

- Provide players with a range of balls. Players can initially practice with the tennis balls, plastic balls and while using their palm as racquets.
- A brightly-coloured bigger/larger balls with a sound may help the participation of students who have vision impairment.
- Polly racket could be introduced for initiating the game.
- Use some adjustable vertical stands with a ring on top to develop precision and control in high and low serving.

People

- Team numbers can be varied; for example, in order to balance a game, it may be best to play 1 v 2, 1 v 3 or 2 v 3, where larger group who are developing their skills play against more competent players.
- Play the game seated. Reduce the table area, use miniature table and increase or decrease the height of the net. Players must remain seated and cannot lift their seats when hitting the ball.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of games playing
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different games and rules of the games
- Skills of agility, balance and coordination
- Motivation and commitment to take part in the game
- Ability to lead others as a team captain, coach or referee
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Listen actively
- Communicate using appropriate words, intonation and body language
- Gets along with others.
- Takes criticism positively
- Identifies one's own strengths and weaknesses





Purpose of the activity

Playing individually or with a partner to beat the opponents and win the game

Outcome of the activities

The outcome of participating in these activities will be:

- team spirit • cooperation • communication • focus on winning

Skills

Forehand Drive

- Keep arm close to the torso.
- Forearm make 90° with the upperarm.
- Draw the forearm back to another 45°.
- Let the waist turn naturally along with the arm and shift your weight towards the right foot.
- Swing forward with a slight upward motion while shifting your weight back to left foot.
- Elbow should be used as a pivot point and should only move a little forward in the follow throw.



Backhand Drive

- From ready position.
- Waste turn left with Racket towards 9 O'clock position.
- Contact with the ball is made in the front of the body slightly after the top of the bounce.
- Elbow acts again as pivot point.
- Snap the forearm forward in slightly upward direction.
- Power comes with the flick of the wrist.
- Follow through until the racket points after the ball.



Blocking is a backup shot, when there isn't enough time for a full drive or loop. Stroke allows player to use opponent force against him/her.

- Adjust the racket angle according to the severity of topspin. More the spin, the more one should close the racket.
- Involve a little backspin and follow through.
- Execute immediately after the bounce to keep control and speed.
- Hit the ball as it is rising of the surface of the table on your side using 50% of the stroke action before hitting the ball and 50% after hitting the ball.



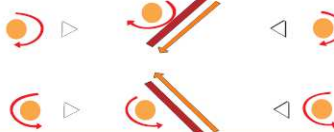
Drive is a light topspin stroke that produces a low ball trajectory. It is primary offensive stroke and is applied to force opponent to make an error. The complete body is used for consistency and power.



Returning with Spin: Easiest return is that which keeps spin in the same direction.

Topsin to Backspin: Topspin service tumbles forward, if you chop downwards you are playing in the same direction as the spin.

Backspin to Topspin: Backspin service tumbles backward, if you play up and over the ball you are playing in the same direction as the spin.



Smash is the hardest drive you can play. It is a put away stroke and is generally applied to any ball that is high and close enough to the opponent's side. It combines waist, forearm, wrist, movement to the full extent. It is similar to drive and can be applied in both ways forehand and backhand. But the difference is

- Longer back swing, greater way transfer during swing.
- Faster and more intense snapping of forearm while contacting the ball.
- Depending on the weight, the racket is closed more than usual to keep the ball on the table.
- Keep a longer follow through and please remember to keep an open racket against backspin and a closed one against topspin.



Here are some practices

Rounder's Play is a table tennis lead up game, which is played by using backhand push only. On one table as many as ten players could play this game. Players should stand around the table, one player will serve across and call the opposite player standing diagonally, who will return the ball with backhand to the backhand of the player who standing next to the player who have served earlier. This way all players will keep rotating around the table and pushing the ball with the backhand across the net. The player who misses will earn a point, the game is played for a specific scheduled time i.e. 2 minutes. Player who earns the least number of points becomes ultimate leader.



Wall Practice: Half table is arranged against the wall, and two players are made to practice against the wall, individually and simultaneously. We may use forehand and backhand push against the wall. The target areas in different dimensions can be marked on the wall with circles and squares. For forehand push players will chop the ball at the right side of the body and thereafter will follow will same as done from the backhand.



Now make up your own games and have some fun

Decide a playing area. Mark it out in some way. How many players will play at a time? What rules will they follow? How will you keep your game safe? How will you start the game? How long will your game last? How will you make sure that everyone is involved in the game? Who will umpire your game?

Assessment

Knowledge (4)	• History of the game • Rules • Facts
Skills (6)	• Drives • Blocking • Smash
Application of skills (10)	- Ability to hit the drive with forehand and backhand. - Ability to deliver the return of powerful strokes of opponent with forehand and backhand blocks. - Ability to kill the high ball with forehand and backhand smashes. - Use of variation in drives like top spin, loop & side spin.

Links to NCERT syllabus

Theme: Orientation to sports skills: proficiency in sports and motor skills

Category of Activity: Net/Wall Games

Name of Activity: Volleyball

Volleyball is a net game that involves two teams of twelve players (six playing and six substitutes). Each team works together to hit an inflated ball over a high net. Each team tries to score points by grounding the ball on the other team's court. Games are played to a predetermined number of points (i.e. 25 points). They must be won by a lead of 2 points. Volleyball is a rebound game. It is not permitted to catch or hold the ball; every contact must be a rebound action. Because of this rule, it is essential for the player to be in the right place at the right time if the ball is to be played in a controlled manner. Therefore, good anticipation and movement skills should be taught to participants.

At competency level students should learn and practice the basic skills of sending and receiving a ball over a high net. They should play simple 3 touch volleyball games working as a team to keep the ball in play and ground it on the opponent's side of the court. As they progress skills should become more consistent and efficient players should be able to anticipate the path of the ball and the actions of the other members of the team and their opponent.

At proficiency level students should attain high proficiency at most individual skills and should understand both offensive and defensive play and be able to use different strategies and tactics when playing competitive games.

Rules of the Game

Volleyball is a fast game played by two teams of 6 players each. It can be played indoors or outdoors. A player on one of the teams begins a 'rally' by serving the ball from behind the back line of the court, over the net, and into the opponent's court. The receiving team must not let the ball be grounded within their court. The rally continues, with each team allowed up to three consecutive touches, until either a team grounds the ball on the opponent's court and wins the rally or a team commits a fault and loses the rally. The team that wins the rally is awarded a point, and serves the ball to start the next rally. The ball is usually played with the hands or arms, but players can legally strike or push the ball with any part of the body.

Common faults include:

- catching and throwing the ball;
- two consecutive contacts with the ball made by the same player, except while blocking.
- four consecutive contacts with the ball made by the same team.
- touching the net during play
- crossing the centre line.
- causing the ball to touch the ground outside the opponents' court or without first passing over the net;
- Violation of rotation.

History of Volleyball

Volleyball was created by a physical education director in the United States. He created a new game based on some elements of tennis, handball and basketball. Originally named Mintonette it was created as a gentle indoor sport for older players to be able to exert a bit of athletic effort by keeping the ball in the air.

The idea of using a net was borrowed from tennis. It was raised to a height above the average man's height.

During a demonstration game, someone remarked that the players seemed to be volleying the ball back and forth over the net, and perhaps 'volleyball' would be a more descriptive name for the sport.

Facts about Volleyball

Facts about Volleyball

- The first game of Volleyball was played in 1885
- It is the second most popular sport in the world, exceeded only by soccer
- Volleyball is an Olympic sport
- Beach Volleyball, played by two people is also an Olympic sport

Basic Requirements/Equipment

- Any suitable indoor or outdoor space that can accommodate the group
- A net or rope, placed at above head level height
- A range of different size light balls that can be volleyed
- Lime powder to create playing areas

Including all Students

Space • Task • Equipment • People

Use STEP to modify volleyball activities so that all students are included. Try these modifications or devise your own.

Space

- Increase the playing space to encourage more movement; reduce the size of the space to encourage the development of passing skills.
- Play on different shaped courts. For example make the courts long and narrow to encourage longer pass in less space, or make the courts wide and shorter to encourage players to use peripheral vision and play the ball wide.
- Vary the size of the courts depending on the ability of the students. For example increase the playing area for a team of more competent players when playing against those still developing their skills.

Task

Passing & receiving

- Some players will find it easier for them to join in the game if they are able to catch the ball or if they are permitted to touch the ball more than once before it is passed. This will allow them to maintain control of the ball before passing it.
- Some players find it easier to retrieve a larger ball, in some cases, it may be necessary for these individuals to practice the skills until their competency has improved (see also Equipment).
- Some players may need to spend more time practicing individual skills before they are applied to game situations.
- Allow players to serve the ball from inside the court, throw or volley the ball in order to get the game started easily.

Equipment

- Provide students with a range of different weight/size. Players can initially practise with the ball they find can be controlled best.
- A brightly-coloured ball may help the participation of students who have vision impairment.
- Use angular adjustable stands with heavy material with a ball tied with a string to improve smashing and jumping skills.
- Use adjustable vertical stands with a ring on top to develop and control passing skills.

People

- Team numbers can be varied; for example, in order to balance a game, it may be best to play 9 v 4, 6 v 3 or 4 v 2, where larger group who are developing their skills play against more competent players.
- Play the game seated. Reduce the court area and lower the net. All players must remain seated and cannot lift their seats when playing the ball.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work fore classes IX and X

- An appreciation and understanding of the physical fitness requirements of games
- An involvement in sports/physical education programmes
- Team work
- A knowledge of different games and rules of the games
- Skills of agility, balance and coordination
- Motivation and commitment to take part in the game
- Ability to lead others as a team captain, coach or referee
- An awareness of rules of safety
- An evidence of being self disciplined

Life Skills

- Listen actively
- Communicate using appropriate words, intonation and body language
- Gets along with others.
- Takes criticism positively
- Identifies one's own strengths and weaknesses





Purpose of the activity

To cooperate with others to use individual and team skills and strategies to overcome the opposition

Outcome of the activities

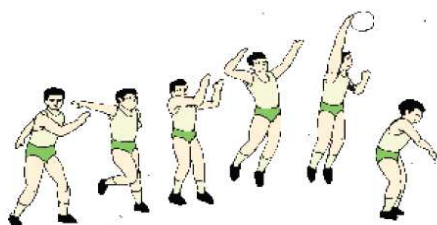
The outcome of participating in these activities will be:

- Team spirit • Cooperation • Communication • Focus on winning.

Skills

The Smash

- Run and approach as per the height, distance and speed of the ball.
- Swing the arms back behind the body. Bend slightly and jump off both feet.
- Hit the ball between the head and the hitting shoulder, in front of the body with an outstretched arm.
- Land in a balanced position on both feet and shift weight from toe to heel. Flex knees to avoid injury.



The Block

- Block is the first line of defence against the smash. It may be performed by one, two or three front-row players who jump at the net.
- Stand in a balanced position about half a metre from the net, feet shoulder width apart.
- Watch the opposition while developing their attack and move quickly to where it is anticipated.
- Use side steps or cross steps to move along the net.
- Coordinate with the timings of the jump of attacker and raise hands above and across the net to block the smash.



Here are some practices

Set up sending and receiving practices requiring students to:

- Overhead pass, underhand pass the ball.
- Keep the ball in the air. Play in a circle or small group: how long can you keep the ball in the air?

- Move to receive passes: from a ready position players should move right or left to receive a pass and return it.
- Play simple games that combine serving, overhead pass and underhand passes.



The Smash

Striking the ball against the wall
Player A strikes the ball on the surface keeping in view the force and direction in a manner that the ball hit the wall and deflects within the reach of Player B and the rally goes on.



Blocking action

Mark a chalk line on the wall. Practice the blocking action. Jump using vigorous knee extension and controlled arm movement. Both hands and must touch the wall or fence.

Practice blocking at the net with one, two or three players.



Now make up your own games and have some fun

How many players will be in each team? What rules will you have? What equipment will you use? How will you start the game? How long will you play for? How will you make sure that everyone is involved in the game?

Assessment

Knowledge (4)	- History of the game - Facts - Rules
Skills (6)	- Ready position - Overhead pass, underhand pass, serve - Smash, block
Application of skills (10)	- Ability to send the ball using overhead pass and underarm pass - Successful serves - Accuracy of passes - Positioning on court - Attacking and defensive play

The game of Volleyball

- Condition the game to reinforce skill learning. For example pass using specific passes only, or set up zoned areas in which only specified players are permitted.
- Teach different systems of play: 4-2, 5-1, explaining when and how they are used. Try different attacking formations. For example have the setter in the middle of the net with a potential striker on either side.
- Set up knock out or league competitions that allow teams to play together often and get to understand each other's strengths and weaknesses.
- Teach students how to officiate and keep score. Begin by looking for and penalising just one or two obvious infringements in practice tasks and small sided games. For example, net faults.

Links to NCERT syllabus

Theme: Orientation to sports skills: proficiency in sports and motor skills

Links to other subjects

Maths : Applications of trigonometry: using smash and block skills students will be told about the line of sight to the angles of elevation and depressions and factors using them to calculate height and distance.

Science : Effects of force: using the techniques of passing, smashing and blocking students will be helped to understand the effects of force. For example speed of the moving body, bringing the body to rest, changing the direction of the moving body.

3.3 Individual Games

3.3.1 Example Activities (only illustrative): Gymnastics, Skating, Judo, Wrestling, Boxing, Fencing, etc.

3.1.1 Inclusion: Efforts should be made that each child participates. Let each child choose a sport of his/her liking and modify the activity as per his/her requirement. Use visual signs to start game so that students with hearing impairments can be involved. The students must find unique and creative ways to include CWSN who are their classmates. Though few of the strategies for inclusion have been outlined for some games in boxes attached below, if movement is not possible at all, then aided umpiring or aided cheering should be considered for CWSN. If some learning is possible, let the CWSN learn about the intricacies of the game. If they are interested in art work or music, let them create their own version of the game in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers.

3.1.2 Life Skill Imbided/ Acquired:

- Learning to Excel, Self-Awareness, Empathy
- Learning about sports/games through other formats such as fine arts

3.1.3 Outcomes/ Values Imbided:

- Taking responsibility for one's involvement in activity (Self-Awareness)
- Personal satisfaction, self reliance and self accountability
- Improved self esteem and confidence
- A desire to compete for oneself

SECONDARY PHYSICAL EDUCATION CURRICULUM CARDS (SPEC)

CATEGORY OF ACTIVITY : INDIVIDUAL SPORTS

The focus of work in gymnastics is to help students understand how to combine movements and actions together accurately to produce outcomes that are aesthetically pleasing to observe and engaging for audiences.

Examples of activities through which students can learn how to accurately repeat actions, sequences and phrases include are:

- Jump rope
- Rhythmic gymnastics
- Ice skating
- Gymnastics
- Synchronised swimming
- Juggling and circus skills
- Diving
- Trampolining
- Cheerleading

The focus of learning should be around the way in which student's progress in their application of the required skills in more challenging, intricate and complex routines. Learning should include:

- Developing skills and using them in increasingly complex routines and performances (DS),
- Using different compositional ideas to create interesting routines and performances (CI),
- Having the physical fitness and mental capacity needed to carry out the demands of the activity (P&M),
- Knowing what they do well and what they need to practice in order to improve further (IM).

As students progress in their understanding of these elements of gymnastics they should focus on the specific knowledge, skills and understanding that will help them to improve the overall success of a performance. For example students should understand and develop aspects of fitness that will enable them to complete performances showing fluency, quality and control throughout. They should also develop a sufficiently wide movement vocabulary so that they can select actions and movements that produce the best aesthetically pleasing and engaging outcomes for audiences.



The outcomes of learning about, and participating in these activities will be:

- Taking responsibility for one's own involvement in activity
- Personal satisfaction
- Self reliance and self accountability
- Improved self esteem

Students should also be able to make informed choices about whether they wish to engage in activities requiring them to perform routines and sequences as part of their own healthy lifestyle management.

Category of Activity: Individual Sports

Name of Activity: Gymnastics

Gymnastics is a graceful and artistic sport involving the performance of movements and balances. It requires a combination of physical strength, flexibility, agility, coordination, balance, and grace. It combines individual movements together to produce routines and performances for the purposes of competitions and displays. All of the gymnastic sports are governed by the Fédération Internationale de Gymnastique (FIG) with each country having its own national governing body affiliated to FIG, Gymnastics Federation of India.

At competency level students should learn and practice the correct way of performing different movements and balances. These might include some of the more recognised skills like forward rolls, handstands and cartwheels. These skills should be linked to produce short routines and displays that show quality, control and fluency. As gymnasts become stronger the skills should be performed with quality and control.

At proficiency level students should attain high proficiency in individual skills, performing them consistently with control and grace. They will also be able to use their movement vocabulary to perform with others and to participate in similar sports like rhythmic gymnastics and sports acrobatics.

Do's and Don'ts

Do's

- Gymnasts must be dressed appropriately so that clothing does not hinder the activity or cause any issues of safety.
- Mats should be used to protect gymnasts when moving and balancing.
- Gymnasts should always warm up before performing skills and actions. They should focus on strengthening muscles and flexibility.
- Equipment such as boxes and pommels should only be used with expert supervision.
- Always perform under the guidance, supervision and assistance of Expert coaches.

Don'ts

- Do not wear jewellery
- No eatables while you are inside the gymnasium i.e. chewing gums, toffees
- No talking during performance.
- Don't do without supervision
- Do not perform tricks on cemented floor
- Do not attempt skills you cannot do by yourself safely

Facts about the Game

- Gymnastics was included in the first modern Olympic Games held in 1896
- Women first competed in gymnastics in the 1928 Olympic Games
- Gymnastics came of age in India, when at the 2010 Commonwealth Games, Ashish Kumar won the first-ever medal in gymnastics for India. He won a silver & bronze medal.
- The Gymnastics Federation of India (GFI), pioneer of Gymnastics in India, came into existence in the year 1951.

History of the Game

Gymnastics dates back to the time of ancient Greece. The early Greeks practiced gymnastics to prepare for war. Activities like jumping, running, discus throwing, wrestling, and boxing helped develop the muscles needed for hand-to-hand combat. During this period the term 'gymnast' described those who participated in these activities.

Gymnastics became a central component of ancient Greek education and was mandatory for all students. Gymnasias, buildings with open-air courts where the training took place, evolved into schools where gymnastics, rhetoric, music, and mathematics were taught.

It was in the early 19th century that the introduction of Ling's Swedish form of free gymnastics and Jahn's apparatus-based gymnastics became the standards form of gymnastics taught and performed in competitions.

Basic Requirements/ Equipment

- Gymnasts should wear clothing that will keep them safe and not impede movement
- Make sure the conditions of the floor will allow a gymnast to land or fall safely

Including all Students

Space · Task · Equipment · People

Use STEP to modify Gymnastic activities so that all students are included. Try these modifications or devise your own.

Space

- Create tactile pathways to enable students who have a visual impairment to make transitions or move around independently. For example stick tape over string on the floor to create tactile pathways.
- Give a student time to explore the space of a mat or piece of apparatus so that they know its boundaries, height etc.

Task

- Find out what is possible for each student and what skills you can introduce them to and what they can improve.
- Allow students to use support in order to be able to perform skills. For example let them perform against a wall, from a chair or while being supported by a partner.
- Help students to find the most effective way of linking individual movements. For example let them crawl, roll or slide across the floor or mat or travel by walking or pushing in a wheelchair.
- Some students may need to improve specific skills before they are linked together.
- Some students may find it difficult to sequence movements and actions together. If so, reduce the number of movements that are linked or let somebody tell the student what to do next so that they don't get stuck.

Equipment

- Allow students to use equipment to help support them. For example let them balance while holding onto the back of a chair.
- Let them explore equipment and find ways in which they can use equipment safely.
- Some students may be able to perform balances using large exercise balls:



People

- Students should work with different individuals and in different sized groups. They should learn to help, support each other and to be supported.

Physical & Health Education /Games

Links to continuous and comprehensive assessment frame work for classes IX and X

- An appreciation and understanding of the physical fitness requirements of gymnastics
- An involvement in sports/physical education programmes
- Team work (where applicable)
- A knowledge of different sports, particularly those relating to gymnastics
- Skills of agility, balance and coordination
- Motivation and commitment to take part in gymnastics
- Ability to lead others as a captain, coach or judge
- An awareness of rules of safety of both self, the equipment and working area
- An evidence of being self disciplined

Life Skills

- Listen actively
- Takes criticism positively
- Be original, flexible and imaginative in the creation of exciting routines
- Communicate using appropriate words, intonation and body language
- Identifies one's own strengths and weaknesses



**Purpose of the activity**

To participate for oneself in activity that is enjoyable and rewarding.

Outcome of the activities

- taking responsibility for one's involvement in activity
- personal satisfaction, self reliance and self accountability
- improved self esteem and confidence • desired to compete for one self

Try these partner balances**Perform different balances:**

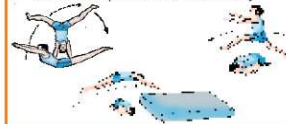
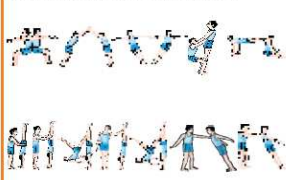
- Facing a partner
- Next to a partner
- Back to back with a partner

**Perform opposite actions to a partner:**

- High/low
- Large/small
- Fast/slow
- Still/moving

**Perform movements over a partner:**

- Make different shapes for a partner to move over
- Move over a partner in different ways

**Try these counter balances****Partly supporting a partner's body weight****Counter balance and counter tension****Supporting the weight of a partner****Try these Sports Acrobatic balances**

Two make the same shape and one makes a different shape

**All three in different shapes****In larger groups****Try this challenge**

Compose, practice and refine pair, trio and/or group displays and perform them to audiences of classmates and parents. Include different pair/trio balances and changes in direction, body shape, speed and levels to add variety and interest to the routines. Include different partner formations:

SPATIAL VARIATIONS

following meeting parting passing alongside over/under around circling

**Now make up your own sequences, balances and have some fun**

Decide a working area. Mark it out in what ways and sequences, the group will perform. How long will you perform the sequences? How will you make sure that everyone is involved in the performance?

Assessment

Knowledge (4)	• History of the game • Facts • Do's and Don'ts
Skills (6)	• Working with partners • Working opposite partners • Acrobatic balances
Application of skills (10)	• Using different positions with or without partners • Ability to make same or different shapes with partners using acrobatic balances.

Links to NCERT syllabus

Theme: Knowledge and Proficiency in Sports and Motor Skills Acquisition-Gymnastics

Links to other subjects

English: This activity can be utilized for developing the ability of creative writing. Based on the observation of various movements, and specially the rhythmic movements, students may asked to prepare a write up reflecting the artistic dimensions of the activity.

Science: The actions of this activity may be suitably utilized while transacting the lesson on motion, especially the concepts of uniform and non-uniform motion along a straight line, acceleration-uniform and uniformly accelerated motion and uniform circular motion.

3.4 Adventure Sports

3.4.1 Example Activities (illustrative only): Trekking; Nature Bathing (walking in natural surroundings, such as forests, mountains, alongside rivers, etc.), wall/rock climbing; rappelling; camping; rafting; mountain biking; skiing; personal survival and lifesaving, first-aid, etc.

3.4.2 Inclusion: Provide a buddy to help the Child with Special Needs to do the activity or to accomplish as much of the given task as possible. Include students by using a wheel-chair, if required. The students must find unique and creative ways to include CWSN who are their classmates. If some learning is possible, let the CWSN learn about the natural surroundings. Teach them survival skills specifically adapted to them. If they are interested in art work or music, let them create their own version of the adventure sports in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers.

3.4.3 Life Skills Imbibed/ Acquired:

- Solving problems and having the courage to overcome fear/ anxieties in challenging situations and environments (Problem Solving, Decision Making)
- Team spirit (Interpersonal and Intrapersonal Skills)
- Courage

3.4.4 Outcomes/ Values Imbibed:

- Sense of achievement and satisfaction
- Knowing one's own limitations and taking risks safely
- Closeness to nature
- Nature bathing

SECONDARY PHYSICAL EDUCATION CURRICULUM CARDS (SPECC)

CATEGORY OF ACTIVITY : ADVENTURE

When involved in adventure activities students should learn how to solve problems and overcome challenges presented by themselves, others and the environment safely and effectively. Students should progress from undertaking challenges in and around familiar surroundings to unfamiliar environments. An unfamiliar environment might be a local park, a different school site or sports centre site, a water environment as well as more challenging wooded and hilly regions.

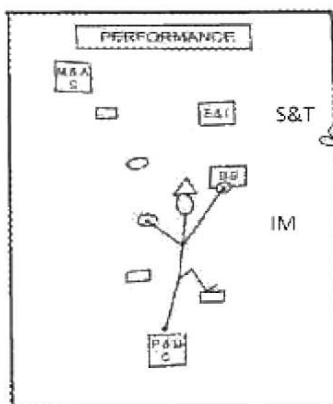
Examples of adventure activities are:

- | | | | |
|---|---------------------|-------------------|------------|
| • Orienteering | • Personal survival | • Life saving | • Climbing |
| • Rapplling | • Rafting | • Mountain biking | • Skiing |
| • Expeditions by different modes of transport for example walking, boating, cycling | | | • Camping |

The focus of learning should be around the way in which student's progress in their application of the required skills in more challenging and complex situations and activities. Learning should include:

- Developing skills and using them in familiar and unfamiliar environments and increasingly challenging adventure situations (DS)
- Using different strategies to bring about successful outcomes(ST)
- Having the physical fitness and mental capacity needed to carry out the demands of the activity (P&M)
- Knowing what they do well and what they need to do to practice in order to improve further (IM)

As student's progress in their understanding of the skills and knowledge required to overcome challenges they should focus on the specific knowledge, skills and understanding that will help them to improve the overall success of an outcome. For example students should understand and develop individual skills and techniques so that they can use them effectively when involved in adventurous activities. They should also improve aspects of fitness that will enable them to overcome challenges safely and effectively. Students will also need to learn to work with others to solve problems which will require them to learn to take responsibility for the roles, engagement and support they choose to give the rest of their group, team or partner.



The outcomes of learning about, and participating in these activities will be:

- Sense of achievement and satisfaction
- Knowing one's own limitations and taking risks safely
- Closeness to nature

Students should also be able to make informed choices about whether they wish to engage in activities requiring them to solve problems and overcome challenges presented by themselves, other's and the environment as part of their own healthy lifestyle management.

Category of Activity: **ADVENTURE**

Name of Activity: Team building and solving problems

Team building activities are challenging problem-solving tasks designed to help group members develop their capacity to work effectively together. The activities range from simple, straightforward challenges to more elaborate tasks that can involve ropes courses, night-time activities and exercises lasting several days. They require students to think, to try out ideas and to come up with solutions that can be tried and reviewed. An important part of team building activities is participants' reflection and discussion about the activity, how they approached the situation, and possible points of learning. Students should have time to reflect on the strengths and weaknesses of team members and their contributions to the success, or otherwise of the activity.

These activities provide opportunities for students:

- ♦ To learn how to work with others effectively including:
 - Listening to other's ideas and suggestions.
 - Making collective decisions and acting on these decisions.
 - Generating original, flexible and imaginative ideas.
 - Raising questions, identifying and analyzing problems in order to solve them.
 - Elaborating and building on ideas and suggestions.
- ♦ To consider the contribution they make to their team including:
 - The ideas they contribute.
 - The way they listen and respond to other's ideas and suggestions.
 - The support they provide to all team members.
- ♦ To consider aspects of safety when engaged in problem solving activities.

At competency level students should be given simple problems that can be solved with minimum of equipment. They should spend time reflecting and talking about how they went about solving the problem, why there were, or were not, successful and how each member of the team contributed to the decisions that were made.

At proficiency level students should be placed in challenging situations and unfamiliar environments that demand high levels of skill, team work and the ability to solve problems through the appropriate selection of solutions and the necessary skills to bring about those solutions.

Team Building: some do's and don't

- Do give students time to talk about the solutions they will put into practice.
- Do let students make mistakes (safely) so that they are able to learn about trying out solutions, making changes and reflecting on what strategies are successful and why.
- Do keep the groups small. Everybody should have the opportunity to contribute and be fully involved in the challenge.
- Do ensure the area is safe from objects and remove any that might cause a hazard.
- Don't rush students. Give them the time they need to make the mistakes and think through the solutions.

Basic Requirements/Equipment

- This will depend on the activity being undertaken. Any equipment should be safe to use and used safely by students. It is possible to use improvised equipment but it must be used safely. Part of the process of solving the problem should be helping students to consider the safe implications of the equipment choices they make.
- Students will need to be dressed appropriately to be able to participate safely and fully.

Including all Students

Space • Task • Equipment • People

Use STEP to modify Team Building and Problem Solving activities so that all students are included. Try these modifications or devise your own.

Space	• Create a safe area for the activity. • Outline or highlight the boundaries of the play area with brightly coloured tape for students with low vision or attention difficulties. • Use brightly coloured or highly visible items to mark boundaries. • Increase the playing space to encourage more movement; reduce the size of the space when activities involve stepping onto objects.
Task	• Simplify the instructions to make the task easier. • Provide suggestions or ask questions to guide student's thinking. • Give time for all students to think, discuss and try out ideas. • Let students solve problems in their own ways. If their solutions fail help them to think of other ways of solving the problem. • Help students to support each other when they are working as teams, recognising the strengths and weaknesses of all team members. • When orienteering, teach students to turn their body round the map so it shows what is in front of them.
Equipment	• Lower or increase the height of barriers. • Use smaller targets or objects to make the task harder and larger targets or objects to make the task easier. • To increase the difficulty of an orienteering course, place controls on identical features.
People	• Allocate specific roles so that all members of the team have to be involved. • Ensure the whole group listen to all members of the team and give consideration to all ideas and suggestions.
Physical & Health Education /Games	Links to the continuous and comprehensive assessment framework for classes XI and X • An appreciation and understanding of the physical fitness requirements of adventure activities. • An involvement in sports/physical education programmes. • Team work. • A knowledge of different sports and their etiquettes. • Skills of agility, balance and coordination. • Motivation and leadership. • Ability to lead others as a team captain, coach or referee. • An awareness of safety as it relates to adventure activities. • An evidence of being self disciplined.

Life Skills Adventure activities provide exciting, real environments and contexts in which students are able to develop life skills. These include:

Thinking skills

- Original, flexible and imaginative
- Raise questions, identify and analyse problems.
- Implement a well thought out decision and take responsibility.
- Generate new ideas with fluency.
- Elaborate/build on new ideas.

Social skills

- Identify, verbalise and respond effectively to others' emotions in an empathetic manner.
- Get along well with others.
- Takes criticism positively.
- Listen actively.
- Communicate using appropriate words, intonation and body language.

Emotional skills

- Identifies one's own strengths and weaknesses
- Be comfortable with one's own self and overcome weaknesses for positive self-concept
- Ability to express and respond to emotions with an awareness of the consequences





Purpose of the activity

To solve problems and overcome challenges presented by themselves, others and the environment safely and effectively and, in doing so, to overcome fear/anxieties in challenging situations and environments.

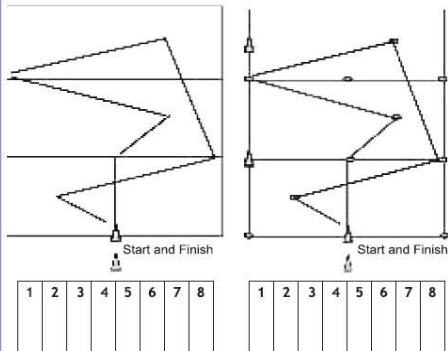
Outcome of the activities

- The outcomes of participating in these activities will be
- a sense of achievement and satisfaction
 - knowing one's own limitations and taking risks safely
 - closeness to nature

Try these challenges

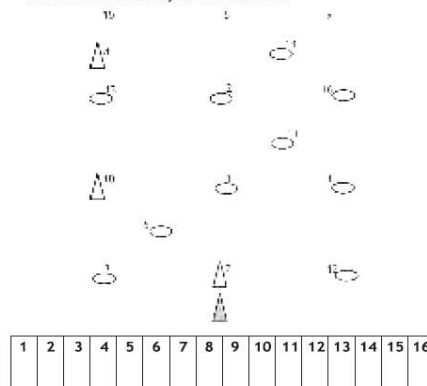
Line Orienteering

- Set out 6 to 10 control points around an area. At each control point place a number or letter. Give each pair or small group a map of the area with a route drawn on it that takes in a number of the control points (which should not be marked on the map). Ask students to follow the route and find the control points. They should mark each control point on the map once they find it.



Score Orienteering

- Set out as many control points as possible. At each control point place a number, letter or simple task. Give students a specific amount of time (say 10 minutes) to visit as many controls as possible. Controls may be visited in any order. Control cards should be marked to show they have been visited.



Orienteering courses

Set up orienteering challenges on the school site using maps created by teachers or students. Maps should show the main features of the school grounds and include a key to the symbols used. The control points should be shown on the maps. Allow students to visit the controls in any order and to choose their own routes.



Take part in orienteering challenges in unfamiliar surroundings. Courses should include at least 10 control points. To complete these challenge students will need to be able to interpret maps, orientate them, know their position at all times and be able to adjust their plans and routes as necessary.



Try these challenges

Now try some timed challenge

Take part in timed orienteering events which include between 6 and 12 controls. Do this either in familiar or unfamiliar surroundings. Students should copy the control points from a master map onto their own maps and plan their route to visit them. How long does it take each student (or pair) to complete the course?

Assessment

Knowledge (4)	• Symbols and keys • Map scale • Rules of orienteering • Safety rules
Skills (6)	• Orientation of map to terrain • 'Thumbing' maps • Knowing position at all times • Route planning
Application of skills (10)	• Accuracy of copying control points/route planning • Speed and accuracy • Recognising and following features • Fitness to complete the courses • Overall time for the event

Links to NCERT syllabus

Theme: Orientation to Sports Skills: proficiency in sports and motor skills

Links to other subjects

Language: Students may write a brief report on the experiences of the activities highlighting the challenges faced and solutions found by the teams.

Social Science: The experiences of teams in map reading, students may be asked to locate rivers, national highways, important cities, forest areas in the geographical map of a State.

CHAPTER 4

STRAND 2: HEALTH AND FITNESS

4.1 Exemplar Activities (illustrative only): It should be ensured that all students participate in Mass P.T. / Yoga. Any other activity, which leads to a connection of the physical body with the mind and with the inner workings of the body, and also leads to an improvement in overall health and fitness, can also be taken up, such as Aerobics, Dance, Calisthenics, Jogging, Cross Country Run, working out using weights/gym equipment, Tai-Chi etc. Children who are ready for it, may in addition, also participate in learning the nuances of meditation and its impact on stress management.

4.2 Inclusion: Efforts should be made that each child participates. Modify the activity as per his/her requirement. Class mates can come up with creative ways for inclusion. If movement is not possible at all, then aided movement can be considered for CWSN (Children with Special Needs). If some learning is possible, let the CWSN learn about the intricacies of the activity. Meditation can be taken up. If they are interested in art work or music, let them create their own version of the game in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers.

4.3 Life Skills Imbibed/ Acquired:

Exercising regularly and safely for personal well being

4.4 Outcomes/ Values Imbibed:

- A commitment to exercising safely and effectively for the benefit of personal health and wellness.
- Learning about how body responds to health and fitness interventions.
- An understanding of the connection with the inner workings of the body and how the body responds to external stimuli

Category of Activity: Health and Fitness

Name of Activity: Aerobics

The word aerobics means 'with oxygen'. It is a type of physical exercise that combines rhythmic aerobic exercise with stretching and strength training routines with the objective of improving all elements of fitness (flexibility, muscular strength, and cardio-vascular fitness). It is usually performed to music and may be practiced in a group setting led by a teacher, although it can be done solo and without musical accompaniment. The goal of aerobics is the prevention of illness and the promotion of physical fitness.

At competency level students should learn and practice low-impact aerobics. Routines should include basic floor-based rhythmic exercises combined with stretching and some strength training.

At proficiency level students should attain high proficiency in high-impact/high intensity aerobics which features lots of foot movements that involve lifting off the ground, jumping, hopping and jogging. In addition routine could include additional steps, the use of exercise balls and/or dumbbells.

Etiquettes of Aerobics

- It is very important to warm up and cool down before and after exercise to permit a slow build up to an individual's target heart rate for aerobic training and to avoid injury to muscles, tendons and ligaments.
- When lifting weights, students should not train the same muscle groups on consecutive days. Allow at least one or two days of rest between training sessions.
- Always pay careful attention to one's posture while lifting weights.
- Always wear comfortable well fitting footwear that cushions the feet and offers good ankle support.
- Try to take moderate exercise three or four times a week rather than intensive exercise intermittently.
- Be careful while exercising outside. Avoid very hot weather conditions and don't exercise in deserted areas.
- If at any time during the exercise you feel dizzy, nauseous, faint or in pain stop exercising immediately.

History of the Game

The term 'Aerobics' was devised by Dr. Kenneth H. Cooper, an exercise physiologist for the San Antonio Air Force Hospital, Texas, to describe the system of exercise that he devised to help prevent coronary heart disease. Dr. Cooper originally formulated aerobic exercises specifically for astronauts, but soon realized that the same set of exercises are useful for the general public as well, especially those who are overweight, who are more likely to develop various heart diseases and other circulatory disorders.

Facts about the Game

- Aerobic movements should be rhythmic and repetitive. The movements should involve the large muscle groups of the arms and legs.
- Aerobic activity should be undertaken for at least 20 minutes to be beneficial to health.
- Aerobic activities include swimming, running, cycling and walking.
- Aerobic activity improves the heart, lungs and cardiovascular system.

Basic Requirements/ Equipment

- Any suitable indoor flooring (preferably wooden)
- A music system
- Floor/exercise mats for vigorous training and toning
- Dumbbells for adding variety in different upper body exercises and strengthening core muscles
- Exercise balls to increase muscle strength and strengthen all of the principle muscle groups
- An elevated platform (e.g. a step) to add variety. The height for beginners should be no more than 10cms rising to 30cms for more experienced participants.

Including all Students

Space • Task • Equipment • People

Use STEP to modify fitness and aerobics activities so that all students are included. Try these modifications or devise your own.

Space

- Perform the stepping patterns and actions in a confined space, almost staying on the same spot.
- Include actions and movements that take students off the spot moving forwards, backwards and sideways in the space.
- Ensure there is sufficient turning and stopping space for students who have mobility impairments.
- Make sure the area is free of obstructions for students who have visual, mobility or coordination difficulties.

Task

- Increase/decrease the number of actions in a routine
- Simplify the movements or increase the intensity by adding arm or other body movements
- Students in wheel chairs can create simple routine to the beats of the music
- Movement skills may be performed more effectively with support from such things as a chair, wall, the floor or a partner.
- Teach students the step formations so that they can apply perform them in sequence and to the beat of music.
- Provide frequent rest periods, or the opportunity to be seated for some part of the session.
- Include a different action that provides a similar challenge. For example shoulder shrugs may provide a similar challenge to hopping or jumping for students who have physical impairments.

Equipment

- Provide students with DUMBELLS or Exercise Balls to add variety to program
- Lower or increase the height of platforms for stepping onto and off.
- Use any type of platform or a raised surface instead of bench.

People

- Let students create their own movements, stepping patterns and actions.
- Work in pairs to create routines.
- Lead others through routines that students have created themselves
- Work with a partner who is able to offer support to another student.

Physical & Health Education /Games

- Links to continuous and comprehensive assessment frame work for classes IX and X
- An appreciation and understanding of the physical fitness requirements of Aerobics
 - An involvement in sports/physical education programmes
 - Team work
 - A knowledge of different fitness activities and the etiquettes of participating
 - Skills of agility, balance and coordination
 - Motivation and commitment to take part in Aerobics
 - Ability to lead others
 - An awareness of rules of safety
 - An evidence of being self disciplined

Life Skills

- Be original, flexible and imaginative in creating routines that are enjoyable and increase heart rates sufficiently
- Generate new ideas with fluency
- Elaborate/build on new ideas
- Listen attentively
- Be comfortable with one's own self and overcome weaknesses for positive self-concept





Purpose of the activity

To exercise regularly and safely for personal well-being

Outcome of the activities

understanding the place of regular activity as part of an overall healthy lifestyle. Commitment to exercising safely and effectively for the benefit of personal health and well being.

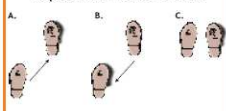
Floor workout

It is possible to combine moves learnt at competency level along with these moves to make choreography little challenging

Skills

Mambo

- To start with Mambo move step forward and back, forward and back with the same foot. Repeat with the other foot.



Shading indicates transfer of body weight.

Cha-Cha-Cha

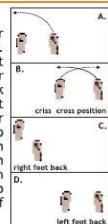
- With a Cha-Cha-Cha, you're just doing three steps really fast - instead of one, two, it's one, two, three.



Shading indicates transfer of body weight.

Jazz Square

- Start with your feet together. Cross your right foot over your left, step back with your left foot, step your right foot out to the side, then step forward on your left. Each step takes up two counts of music.



Kick Ball Change

- To do a kick ball change, kick your right foot out in front of you or across your body. Tap the ball of your right foot down on the ground and shift your weight onto it, then immediately step back onto your left foot. This is the "ball change" portion of the move.



Try putting these steps and actions together with music

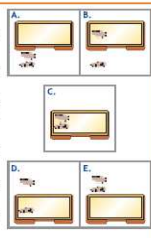
- Step touch(x2) • V-step(x2) • Jazz square (x2) • Kick ball change (x2) • Grapevine • Kick ball change • V-step • Cha-cha-cha

Learn these step patterns

Over the top

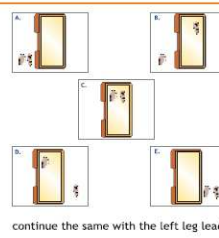
- With your bench in front of you, position yourself to the far left end of the bench.
- Turn your body to the right; your bench should now be on your left side.
- Step up with the left foot, and then step up with the right foot so that both feet are on top of the bench together.
- Step down to the left with your left foot; follow with the right foot.
- Reverse back over the step to start position.

NOTE- For added intensity, add a hop when at the top of the step bench.



A-step

- With the bench vertically oriented, stand to the lower left corner of the bench.
- Shift body weight to the left foot and step up to the front of the step with the right foot.
- Bring the left foot up so that it is also on the bench.
- Step down and back off the bench with the right foot, followed by the left making letter A on the bench.



continue the same with the left leg lead



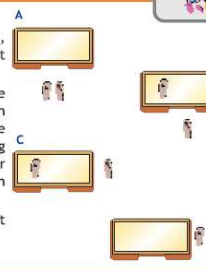
Turn step

- A turn step traces the shape of an upside-down letter U. Start with standing on left side of bench and facing sideways.
- Step with the left foot onto the nearest end of the bench, turning the entire body 180 degrees to the left.
- Place the right foot on the opposite end of the bench.
- Finally turn the entire body to the left again and step down and off the near side of the bench at the other end, leading with your right foot.
- Reverse the steps, leading off with your right foot and rotating 180 degrees to the right as you get on and off the bench, to return to your starting position.



L-step

- With your bench in front of you, position yourself to the far right end of the bench.
- Step up on the bench with the left foot. Lift the right knee in the air and step out wide to the right side of the bench placing the right foot on the floor followed by the left foot down next to the right.
- Do the reverse steps back to start position to complete the L step.



Try using the steps in these different combinations

- Basic step(x2) • V-step (x2) • L-step • Over the top • A-step (x2) • Turn step • Over the top • Knee up • Basic step (x2)
- L-step • Step tap (x2) • Astep • Challenge your coordination by combining moves with different type of music. • Change the order of the steps. • Can you add your own steps? • Can you make your routine longer? • Can you add arm actions to make the routine more challenging? • Try making up your own routines and teach them to each other.

Assessment

Knowledge	Maximum 4 marks	- Importance of physical activity as part of a healthy lifestyle - Importance of wellness - Effect of exercise on various body systems and their functioning - Calculation of Target Heart Rate (THR)
Application of skills	Maximum 16 marks	- Different high intensity floor movements - Different high intensity moves using platforms - Co-ordination of movements with music - Co-ordination of body movements - Ability to work within target heart rate zone - Ability to work aerobically for sustained periods of time - Ability to create routines at the correct intensity - Ability to lead routines and aerobic workouts

Links to NCERT syllabus

Theme: Fitness: concept of fitness

Links to other subjects

Science: the muscles: understanding of the accumulation of lactic acid in muscles due to a lack of oxygen leading to fatigue (tiredness) after aerobic activities.

Language Rhyming words: students create their own raps using rhyming words that they put to music or sing while performing aerobic routines.

YOGA

Over a prolonged period of time, too much stress leads to too much cortisol being released in our bodies, which in turn lowers the immune functions and metabolism, leading to rapid weight gain, susceptibility of body to pathogens, osteoporosis, blood pressure imbalance, muscle weakness, etc. It is proven that long term stress also has links to insomnia, chronic fatigue syndrome, depression, thyroid disorders, etc. Modern research accepts three aspects of yoga (*Asanas*, *Pranayama* and meditation) as one of the best methods for moderating the production of cortisol, thereby managing the stress response of the body. By reducing cortisol levels, yoga therefore raises the immunity levels of the body. Secondly, when we hold our body in a yoga posture for a few breaths/counts, our parasympathetic nervous system is stimulated, which in turn lowers our BP to enable a better post-stress response. Thirdly, exercise in the gym or outdoors cannot massage our internal organs, which are nothing but muscles performing a particular function. Yoga keeps these muscles exercised and active. Fourthly, yoga is able to enhance the body's natural defense mechanism against free radicals. There are many more benefits of Yoga, that students may like to research on themselves.

Category of Activity : Yoga

Name of Activity: Yoga

The word Yoga comes from Sanskrit word 'Yuj' that means bonding of connection, join or unite. This implies joining or integrating all aspects of the individual - Body, Mind & Spirit, to achieve a happy balanced & useful life, and spiritually uniting the individual with the 'Supreme'. Yoga is considered as one of the six branches of classical philosophy and is referred to throughout the 'Vedas'. Ancient Indian scriptures, the oldest texts in existence. Yoga is a spiritual quest. Its purpose is to help each one of us achieve our highest potential and to experience enduring health and happiness. While practicing Yoga we can extend our healthy productive years far beyond the expected norms and at the same time, improve the quality of life.

Yoga is truly a science of human personality. It has a very efficient system of postural and breathing exercise, which promotes the complete health including physical, physiological, emotional, behavioural, environmental and social aspects. Yoga is very helpful for school going students because now a days school children are suffering from physical, mental and emotional problems. Yoga helps school children to overcome stress, strain, anxiety, tension and provides relaxation. Yoga is not a single exercise, it has many aspects like Suryanamaskar, Yogasana, Pranayama and Meditation. These exercises are very effective for maintaining physical purity by reducing obesity and mental tension. It also contributes in developing moral and ethical values to lead a happy and contented life.

Rules of Yoga

- ◆ Yoga should be practiced empty stomach
- ◆ Wear loose and comfortable clothes for practicing yoga
- ◆ Use thin yoga mat or thick bed sheet for yoga
- ◆ Food should be taken after ½ hour of practicing yoga
- ◆ Girls should not practice yogasana during menstruation
- ◆ Like any other workout you must begin with easy poses
- ◆ Relax for 10 second atleast after yoga exercise
- ◆ Duration of each posture should be increased gradually
- ◆ Practice yoga preferably close to nature

History of Yoga

The history of yoga is indeed very old. Nothing can be said firmly, about the origin of yoga. Only it can be alluded that yoga originated in India. The available evidences show that history of yoga is related to the Indus valley civilisation.

Yoga is also mentioned in Mahabharata, Ramayana and Upanishads. Sage Patanjali also wrote about yoga in 147 BC. During this period, yoga had been developed enough. Even Kabir, Tulsidas and Surdas mentioned about yoga in their writings.

Facts about Yoga

- ◆ Yoga has Eight steps:
- ◆ Yama (Social discipline) - refraining from violence, telling lies, casual sex and stealing.
- ◆ Niyama 'Observance' - purity, contentment and tolerance.
- ◆ Asanas - Physical Exercise (Postures).
- ◆ Pranayama - Breathing techniques.
- ◆ Pratyahara - Control over senses.
- ◆ Dharna 'Concentration' - able to hold mind on an object.
- ◆ Dhyana 'Meditation' - ability to focus on one thing or nothing without divergence.
- ◆ Samadhi 'Absorption' - realisation of essential nature of self and the divine pleasure.

Basic Requirements/ Equipment

- ◆ Any suitable well ventilated indoor or outdoor accommodation for yoga
- ◆ Soft mat and comfortable dress.



Purpose of the activity

To exercise regularly and safely for personal well-being and to enhance physical flexibility, mental balance increased attention span.

Outcome of the activities

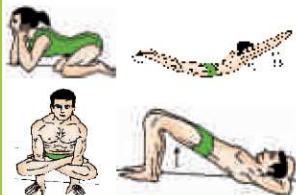
Understanding the place of regular activity as part of an overall healthy lifestyle, greater physical and mental coordination, harmony with nature leading to inner transformation of consciousness.

Skills

Asanas

Open the energy channels, chakras and physick centers of the body. They not only purify and strengthen the body but also control and focus mind. They are one of the eight limbs of classical yogas.

Asana should be steady and comfortable, firm yet relaxed. They promote muscle flexibility, bone strength, heart tissue strength, messages the internal organs and brings various internal and glandular functions into balance.



Pranayam

Is an aspect of yoga that deals with breathing. It is the control of the motion of inhalation, exhalation and retention of vital energy. Proper breathing brings more oxygen to the blood and to the brain, and controls the vital life energy.

Ujjayi : In this breathing is done through your throat instead of nose. Sit erect in any comfortable posture, Spine erect. Inhale slowly drawing air by both nostrils in such a way that while inhaling the touch of air is experienced in the throat and some sound is produced. During inhalation do not bulge the abdomen, let chest expand. Exhale slowly and during this process chest should go inside, abdomen remain steady.



Meditation

is a form of stress management that allows our heart and mind to experience and oasis of peace and love within our heart and mind. It creates positive and peaceful thoughts to bring peace to our mind. It is one of the best method to bring about transformation and nurture the natural qualities within. While practice of meditation one has to be very patient and the mind does not want to focus.

One should increase duration of meditation and shift focus from gross body to subtle breathing.



Here are some practices of Pranayama

Bhastrika : Bellow Breathing : Bhastrika means Bellows in Sanskrit. Air is drawn in and out of the abdomen just as blacksmith uses his bellows. Sit in a comfortable position/ Asanas breath in through both nostrils till the lungs are full and diaphragm is stretched. Breath out gently.



Anuloma-Viloma

- Lung expansion
- Rhythmic breathing
- Inner and outer retention
- Neuro muscular lockes
- Breathing ratio 1:2:4 (inhale:retention:exhale)



Try some of these yogic asanas

Sarvangasana (Shoulder Stand)

- Lie in Supine position
- Raise your feet upwards
- Take the support of hands on the back and let the elbows rest on the ground
- Keep whole body state upwards, body weight remains on shoulders and neck. Let chin touch the chest. Hold, return slowly and relax.



Pawanmuktasana (Gas release pose)

- Lie in supine position. Raise your legs upwards
- Slowly bring the knees closer to your chest
- Lock knees by bringing both arms together
- While exhaling raise head to the knees.
- Hold, return slowly and relax.



Dhanurasana (Bow Pose)

- Lie in prone position
- Fold your knees and bring them closer to your hips
- Hold ankles with both hands
- Lift body weight by pulling the legs and neck upwards and pose like a bow
- Hold 20-30 seconds with normal breathing return back slowly



Kapalbhati (Blowing in Firm Pose) : Kapal means skull, Bhati means shine. This pranayam cleanses the respiratory system, particularly the nasal passage in the skull. This is done in a sitting position. The muscle of the stomach should be moved freely in this process, thereby throwing large quantity of CO₂ outside resulting in more oxygen absorption in the body. This increases O₂ in blood, hence the need for O₂ is lessened and breathing centre is calmed down.



Kneel and sit on your heels pointing outward. Keep your back straight and rest your hands on your thighs. Relax the muscles in your face in stomach.



Slowly breathe in deeply through your nostrils until your abdominal muscles contract like your stomach is sucked in. Breathe without any additional effort until your lungs are full.



Then exhale forcefully through your nostrils as well. You can do ten repetitions of this breathing exercise and make sure to take a break between each round especially if you feel a bit lightheaded.

Now design your own postures based on observation of nature and have fun.

- How you will choose your object.
- How will you create that shape using your body.
- Find out the focus area.

Assessment

Knowledge (4)	• History of the yoga • Rules • Facts
Skills (6)	• Yogic asanas • Meditation • Suryanamaskar • Pranayama
Application of skills (10)	• Beginning of each pose • Breath control • Ability to concentrate • Finishing

Links to NCERT syllabus

Theme: Health and physical fitness and orientation to sports skills

CHAPTER 5

STRAND 3: SEWA (Social Empowerment through Work Education and Action)

5.1 Introduction

Several years ago, the noted educationist *Paulo Freire* pointed out that there is no such thing as neutral education. Any education, to be meaningful, has to fit into the context of the society in which it is given and which is relevant to the times. In the context of the multiplicity and the rapidity of the changes that are taking place, the students need to know and understand the contexts in which they are living today and the demands that will be made on them, in the immediate future, to fit into the changing patterns of society.

SEWA aims to develop a whole person in their intellectual, personal, social, emotional and social growth. Learners engaged in this program are expected to be life-long learners and through experiential learning develop as active citizens and caring and compassionate humans. The experiential and constructive modes of learning emphasize the immediate personal experience of the learner and view learning as a process.

SEWA takes learning beyond the walls of the classroom and sometimes even beyond the boundaries of the school, building bridges with the authentic and real world in meaningful and positive ways. The following maybe noted with regard to SEWA:

- SEWA is an integral component of HPE.
- This aspect aims to focus on the mental/emotional and social health of the child
- All students of classes IX to XII (for XII, only till end of the first semester/ term) will participate in SEWA program around the year.

5.2 Objective:

There is an urgent need to foster strong mental and social health amongst today's children so that they can connect with their peers, their elders, the community, the environment, etc. The main objective of the SEWA projects is to direct children's mind in constructive activities with positive outcomes through the facilitation of creative and critical thinking. This would help them to develop self-confidence and self-esteem.

Another objective of this programme is to underline the significance of the interdependence of all human beings and our dependence on the environment in this shrinking global village. Students must acknowledge that they have a responsibility towards the less privileged, the disadvantaged, the CWSN (Divyang), the society, and the environment. The principle of giving to society has to become second nature to them.

5.3 The SEWA Philosophy

SEWA is all about social or community service; it can include environmental, civic responsibilities or democracy or health and fitness related projects, international and other projects too, as long as the project is able to connect the child to his surroundings or to a cause, and is able to generate a sense of responsibility towards it (even if it is towards health and fitness of the class itself). The Social Empowerment component to a large extent inspires SEWA philosophy, which in the Indian environment refers to the concept of service to the community.

5.4 Note to Class Teachers

SEWA has been designed to integrate social awareness into the regular curriculum of the students. The teacher must be careful in facilitating the child's activities so as to provide a suitable learning environment. This in turn would also give a boost to a positive school environment.

The teachers need to create opportunities for students to engage with learning activities to develop core competencies such as:

- a) Social Awareness, Self Awareness and Empathy
- b) Self Management and Leadership Skills
- c) Creative and Critical Thinking
- d) Interpersonal Skills and Effective Communication Skills
- e) Responsible Decision-making through Problem Solving

The teachers need to be open-minded about errors committed by learners while implementing the SEWA programme. The learners may find themselves in ambiguous situations and sometimes suffer from moral conflicts. As adults, we need to facilitate the widening of the scope for the learner so that they find alternative ways of making informed decisions. Here, one cannot undermine the responsibility of the school as a community. Thus, one can develop and establish a caring community encouraging collaborative learning activities by weaving Self-empowerment into their daily school activities.

5.5 The learning outcomes expected to be developed and fostered through participation in SEWA are experiential:

The Learner:

- Develops Life Skills of **Self-Awareness and Empathy**. *
- Develops Creative and Critical Thinking Skills. *
- Becomes a **caring and compassionate** individual.*
- Responds as a socially empowered change maker. *
- Acquires the skills to be an active leader and initiator of change.
- Plans, implements and delivers projects connected to the real world.
- Visualizes and participates in a world going beyond the classroom and often/ sometimes beyond the boundaries of the school.
- Formulates strategies to deliver meaningful programs and projects
- Critiques premises as a **reflective enquirer**.
- Demonstrates fair play and **non-judgmental ethical behavior**. *
- Actively engages in SEWA activities as an individual and at a team level.
- Participates in various activities in **age appropriate ways across disciplines**.
- Selects and applies skills, facts and compositional ideas.
- **Competes with oneself** to improve **self-performance** and **evaluate strategies** for further enhancement. *
- Knows, understand and applies rules.
 - * Integrated values across HPE

The integrated SEWA program helps to acquire the following learning skills:

- Plan, initiate and implement activities
- Learn to work in teams and collaborate through organizing activities/events in terms of skills, interest, motivation and professional growth
- Identify and nurture areas of strength and identify areas requiring further growth
- Engage with issues of social concern in the community, society, state and nation
- Develop new life skills and strategies and become lifelong learners.

5.6 Guidelines for Schools

- School can Design and announce school SEWA policy.
- School can also decide on yearly focus theme for SEWA and class-wise sub themes.
- Each class as a whole can decide to take up one SEWA activity for the entire year
- The choice of activity can be left to the students of the class, with guidance and facilitation by the class teacher and will depend upon the school policy too.
- Schools are encouraged to allow children to suggest SEWA themes for the year.
- Once a SEWA activity is decided for a particular school/class/year, the class students themselves will decide upon the role of each student of the class.
- Orient parents about SEWA and seek support from stakeholders.
- Appoint School SEWA Mentor and Class-wise SEWA Mentors, if required. Mentors could also be from amongst the parents or teachers.
- Arrange administrative support for the activities involving government and outside agencies.
- Dedicate day/s for SEWA exhibition or presentation day at the end of the year or as suitable.
- Ensure that each child in a class actively participates in his/her assigned role of SEWA.
- Arrange training and create support structure for all involved as required.
- Ensure 100% dedicated involvement.

5.7 Guidelines for Students

- Discuss how they can improve/impact the community/ environment/ health and fitness of the students and choose the focus area for the project.
- Brainstorm and create mind-maps on the chosen area
- Identify the causes they want to support and choose one/or more ways of carrying it forward.
- Outline the objectives of the projects they have chosen and present plans for the implementation as well as ways of measuring the success of the project.
- Assign roles to each member of the class community by consensus. Ensure each and every child is included.
- Learn to research on the chosen area of SEWA
- Seek guidance from the teacher when they need it.
- Learn how to plan, implement, review and take responsibility for their decisions.
- Examine the effect of their intervention and support for the causes they have chosen and present them to the rest of the class/school.
- Capture the hours spent as well as documents as evidence wherever required in the student Portfolio/dossier
- Share the impact of the SEWA work undertaken as Power Point with the school community and as part of a special exhibition at the end of the year, clearly highlighting the role of each student in the class.

5.8 What forms a Social Empowerment activity?

The activities conducted 'in school' as part of Eco-clubs, Sports Club, Literacy Clubs or 'out of school' as community outreach activities etc. can be considered as Social Empowerment activities. It may range from a small role as 'volunteer' and a 'contributor' to running an entire project over the year. Social Empowerment activities are bound to germinate some thought process in young minds.

The class may decide to take up any innovative social empowerment activity every year; students may decide the role of each child; at the end of each year the class as a whole may present its project report.

Even sports activities can be taken up as a SEWA project by the class. Some of the activities under sports that can be taken up are as follows (illustrative list):

- Organizing sports meet for CWSN (Children with Special Needs)
- Planning, organizing and delivering a League tournament (Basketball, Cricket, Football)
- Planning and holding a friendly cricket match between alumni and the current grade XI and XII
- Organizing sports competition for primary school
- Organized Inter-class/ Inter-school sporting activities (basketball, volleyball, swimming, hockey, netball, squash, cricket and boxing)
- Long distance runs (half and full marathons) for a cause
- Researching on Yoga, Running/Jogging, Dance, Trekking/ Hiking/Biking/Cycling, Camping, Military training as part of planned projects.

There are multiple other possibilities of projects that can be taken up under SEWA, such as (illustrative list):

- Organizing a fund raising Musical Extravaganza for school
- Holding an Art Exhibition for fund raising
- Inviting professionals from industry to develop career pathways (App on mobile)
- Running school café with focus on nutrition
- School gardening project
- Collaborating as part of Photography Club and create Exhibitions across the city with a social message.
- Projects on social awareness or cross curricular themes initiated, planned and implemented by students with teacher as initiator.
- As volunteer for '**in school activities**' such as organizing a school-based event based on Life Skills.
- Participating or volunteering in Youth Parliament or mock UN Sessions
- Activities from 'Revised School Health Manual (**see under Resources**)
- Life Skills Activities (Creative and Critical Thinking, Problem Solving and Decision Making, Effective Communication, Self Awareness and Empathy) (**see under Resources**)
- 'Buddies' or 'Peer Mentors' for **Adolescence Education, School Health Program, Life Skills Program** etc.

- Anti Bullying or Anti Ragging Committee and awareness raising
- As volunteer for charities '**outside of school**' such as orphanages, old-age homes
- Collecting and distributing used and unused books and clothes to the underprivileged
- **Volunteer work** with stray animals and organizations connected with the same cause
- Helping to raise funds for beneficiaries involving natural disasters (flood, earthquake victims)
- Adopting an old age home for interactive activities
- Adopting an orphanage for conducting joyful activities
- **Online volunteering** for counseling peers for raising awareness regarding career pathways.
- **Enrichment Activities** of different Ministries can be taken up in project mode, such as **Swachhta Abhiyan for neighbouring community, Ek Bharat Shrestha Bharat** (upto Oct 2018), **Paryatan Parv – creating awareness about historical sites and tourist spots in your city**, etc.
- Organising and volunteering for various 'in-school activities' and Language Club, Theatre and Dramatics Club, Social Science Club, Dance club, Science Club, Science Fairs, Heritage Club, Nature Clubs.

5.9 Activities complying with SEWA Criteria

SEWA activities require involvement and interaction. When students assume a passive role and no contributory service is performed, it cannot be defined as a SEWA activity/project.

Activities which do NOT fall under SEWA:

- An activity through which a student attains financial or some other type of benefit (unless this benefit is passed on in full to a worthy cause).
- Getting involved in effortless, monotonous, and repetitive work – like returning library books to the shelves.
- Work experience that only benefits an individual student.
- Activities that cause division among different groups in the community.
- Activities with a bias to any religion or cultural sector which may hurt the sentiment of any other person in any form.
- Regular recreational or community activities of a temporary nature - like a visit to a museum, the theatre, concert, or sports event unless it clearly inspires work in a related activity in which a student is already engaged.
- Any unsupervised or recorded activity where there is no guide or responsible adult onsite to evaluate and confirm student performance and evaluate accordingly.

5.10 Guidelines for Class Teacher/Mentor for conduct of SEWA

- Support students in identification and selection of the causes they want to support and take up as projects, brainstorm and create mind-maps.
- Provide supervision, consultation, guidance to students and create support structures required whenever they need it including for research.
- Intervene positively to ensure participation of each and every child in the class, including CWSN
- Guide students on how to plan, implement, review and take responsibility for their decisions.

- Guide students on upkeep of Portfolio/dossier, making a report, analyzing data, creating presentations, video films, channels on social media, websites.
- Plan and prepare SEWA exhibition or presentation day at the end of the year.

5.11 Procedures

1. Fill out a My SEWA promise form. The description of the activity needs to be in complete simple sentences and describe the SEWA activity intended to be taken up by the class.
2. Each student in consultation with the teacher and parents decide and create an hourly schedule of activities in accordance with role assigned. This form must be signed by a parent and submitted before the activity begins to the school's SEWA Mentor.
3. Fill out 'Reflective Musings' at the end of every 4 hours given to the project and keep attaching it to the SEWA dossier. (The time is given in hours and not in periods with the intention that if the child does any additional work outside school hours, it can be reflected here).
4. SEWA hours will be accounted for both in school as well as out of school activities, provided they are agreed upon by the mentor.
5. It is expected from a SEWA volunteer that they would be honest in recording their activities.
6. Complete your SEWA classes/periods before the last date.
7. All the forms must be completed and signed and attached with relevant evidences, together with a Self-Appraisal Form for classes IX-XII and a summary list of the SEWA projects/hours as items of SEWA dossier/scrapbook.
8. The visual evidence (photographs, videos, etc.), testimonials and certifications must be there to support the project.

5.12

My SEWA Promise Form (illustrative)

Dear Student,

SEWA is a firm step to prepare you for life. It is a voluntary project experience. You have to complete **My SEWA Promise Form** and obtain prior approval for the activity/project. Selection of a SEWA activity, development, implementation of the proposal and evaluation of the activity is the responsibility of each student. Signature of the parent indicates review and approval of this proposal.

Student's Name: _____ Class: _____

(Print or type)

Brief Description of the Activity:

Duration (Days and Time): _____ Estimated Hours: _____

Name of Mentor Teacher: _____

Student Signature: _____ Date: _____

Parent Signature: _____ Date: _____

5.13 SEWA Hourly Schedule (illustrative)

Hour Count	Date and Day	Proposed Activity Plan
Hour 1		
Hour 2		
Hour 3		
Hour 4		
Hour 5		
Hour 6		

5.14

SEWA Hour Log (illustrative)

STUDENT NAME: _____

PROJECT: _____

Date	Activity	Hours	Mentor's Signature

Mentor's Observation (Suggestive)

Attendance: _____

Involvement: _____

Regularity: _____

Commitment: _____

Additional Comments: _____

The activity/project was (circle appropriate response):

Satisfactorily completed

Not Satisfactorily completed

Activity/Project Mentor's signature

Name

Seal of school

5.15**SEWA Self Appraisal Form (illustrative)**

The following questions should be addressed at the end of each activity/project. These are guiding questions. Candidates can either answer on this form or write a reflective, continuous text incorporating responses to these questions.

My Name_____
My Activity / Project_____
My Commitment Towards the Project/ Activity

This Activity/ Project has been a great learning experience because

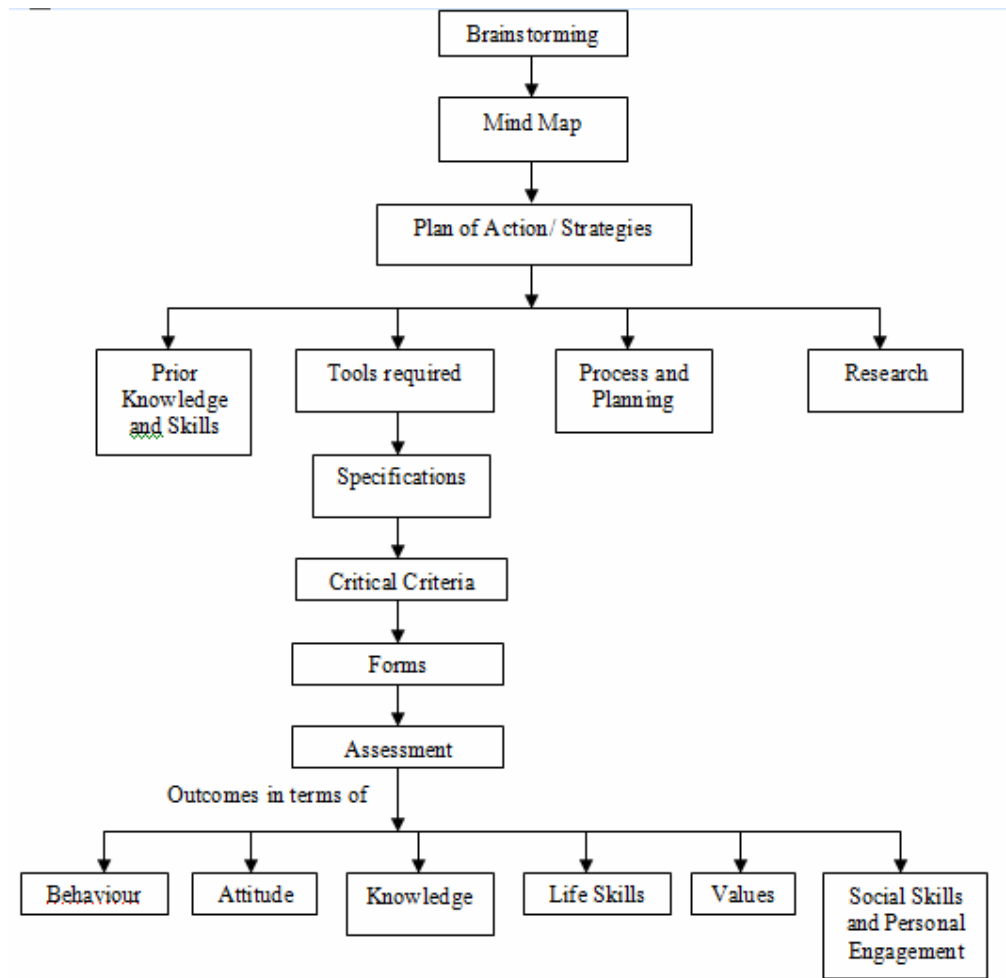
I initially felt that the project could not have achieved its outcomes because

The project has definitely changed me as a person in terms of behaviour, attitude and life skills because

The details of beneficiary(ies). Any significant comment received from them; please quote

The challenges I faced and the things I might do differently next time so as to improve?

5.16 Illustrative Flow Chart for Conducting a Project/Report/ Event (Can be Quarterly/ Bi-Annual / Annual)



5.17 Assessment and Evaluation

The following strategies may be taken up for assessing the individual/ group projects. In case of group, they all get marked the same way.

Tools, Techniques and Strategies:

1. For activities being done, a portfolio or dossier may be maintained individually by each student.
2. Report at the end of the project may be assessed through a rubric developed by teachers and students.
3. Rubric for assessing will depend on the project/ activity being taken up.

5.18 Exemplar Projects under Social Empowerment sub-strand of SEWA

(These may be taken up in age-appropriate ways across IX - XII)

The projects given here are only exemplar projects and are illustrative/suggestive in nature. These are given so that the child/class may be able to understand the topic/activity. This will help the child/class to plan the activity/project accordingly. The child/class may take/choose any other project/activity which has a positive impact on the environment, community, society, the disadvantaged, etc.

Project-1: 'Swachha Vidyalaya Swachha Bharat'

Project Focus- Cleanliness and Sanitation

Duration- Term/Annual

Key Objectives:

Learner will:

- identify clean and dirty places.
- bring attitudinal change towards cleanliness and sanitation.
- be able to distinguish between benefits of cleanliness and the disadvantages of uncleanliness, including the health hazards.
- make the community aware of the result of not practising cleanliness.
- know the importance of cleanliness in neighbourhoods, parks, market places, roads and cities.
- know how to appeal for clean places.
- be aware of unclean and unhealthy surroundings as breeding ground of epidemics and diseases.
- be able to highlight cleanliness as an important value in day-to-day life.
- Develop a creative methodology to create awareness in community and test it

SE Component

- To be able to take care of personal hygiene and being organized with belongings.
- To learn to keep household items and personal belongings in proper place (before and after photos).
- To be able to live life of cleanliness through word and example.
- To learn the art of **proper waste disposal and be able to sensitize other people about it.**

"We must get obsessed about the cleanliness of our city."

Role of Mentor/ Teacher:

- Initiate a project in consultation with students
- Act as an initiator and motivate learners to be ever vigilant in maintaining cleanliness at all public places such as markets, parks, gardens, bus stands, railway stations, movie halls, and malls, etc., as well as while using public transport, public utilities.
- Focus on the tidiness of Class Room, Library, Assembly Hall and Computer Room.
- Respect National property.
- Generate awareness of health and hygiene amongst the slum dwellers.

Project Process:

Prepare:

- Brainstorming and discussion sessions to be organised for students.
- Identify the area to focus on and prepare a **road map** to achieve targets.

The following ideas can be further explored (illustrative only):

- a) Disposal of human waste properly and safely

- b) Creating sensitization amongst community members about personal hygiene
- c) Spreading awareness about sanitized and clean toilets and contribution required to maintain public utilities
- d) Proper garbage disposal
- e) School Sanitation
- f) Personal Hygiene
- g) Drinking Water Testing
- h) Green and Blue Bins
- i) Recycling
- j) Water Conservation
- k) Water Table
- l) Interacting with City Sanitary Workers
- m) Spending a day with sanitary workers
- n) Visiting a city water works
- o) Adopt a Park/ Lake/ Pond

Collect the above data and read prepared report of the class, then segregate the areas where 'Mission Cleanliness' can be accomplished. Reflect and form groups and get the project rolling.

Suggestions: (May be done in groups under the supervision of a Mentor/ Adult/ Peer Mentor)

Organize Cleanliness Month:

- For cleanliness drive arrange advertisement competition for students' in schools.
- Identify surroundings or a locality which need assistance by doing a field survey of the surrounding community area.
- Create awareness and take up projects to ensure cleanliness of water sources like lakes, rivers, ponds and other such bodies that are getting polluted due to insensitivity of human beings.
- Segregate groups who can provide solutions to most aspects of cleanliness through researching articles, TV programmes, and video on YouTube or by speaking to the authorities and residents.
- Students can prepare Street Plays and present them to community members, using creative medium like-posters, placards for slogan march to generate awareness.
- Project on 'Cleanliness Drive' of a nearby public place may be taken up in groups.
- Don't miss to click the photographs of the area before the cleanliness drive and after that.

Reflective Musings:

- Discussions will be held in class on the activities of the project. The students will think, talk and write about what they have learned and observed.
- Questions will be discussed in class about their experiences and response of the community; e.g.,
 - Describe what have you learned and felt about your project?
 - How far was the activity beneficial for you?

- What have you learned about yourself and your surroundings from this project?
- How do you think we can solve problem of cleanliness and sanitation? Where did you find maximum dirt and squalor?
- How can we make the project more effective?
- The students will be given a Proforma to fill in (Self Assessment) so that they can assess their own learning from the project.
- Share and Celebrate
- An assembly can be arranged to award all participants.
- The students will display the charts and models on school notice-board.
- Certificates can be awarded to students.
- The students can make future plans about continuing the activities/projects by taking them to the community.
- The class room can also be decorated with charts and models.
- The students can also keep imparting information regarding cleanliness through practical demonstration to other students.
- The report of the project may be published in the newspapers and the school's magazine.

Activity Report for Cleanliness/ Sanitation Drive (illustrative only):

S. No.	Identified Locality	Steps taken for cleaning up	Awareness generated	Solutions recommended

Student to write and update their activity report:

Date	Activity	Learning Experience	Outcome

Students to give details of their learning experience:**Learning Outcomes**

Learner will:

- learn that they must keep their surrounding areas and themselves clean.
- raise awareness among other students and their community members about personal hygiene and keeping their surrounding environment clean.
- become aware citizens and will be able to spread awareness amongst the people around them.
- go through the process of initiating, planning and implementing a project based on cleanliness and sanitation.

Key Messages

- Share your knowledge, experience and skills with others.
- Take utmost care of both personal hygiene and environmental hygiene.
- Do not throw garbage or litter at public places.
- Keep your surrounding areas clean in order to make your environment pleasant.

Assessment

Rubric may be developed in consultation with teachers

Project - 2: "Dignity of Labour"

Project Focus – Empathy and Compassion

Target Point- As individuals we should encourage students to respect all jobs and understand the value and dignity of work. Sweepers, shoe makers, laborers and launderers contribute to comfortable living.

We should respect people for their perseverance, hard work and effort. If we have to accord dignity to labour, social services must be commended and community has to be sensitive to individuals and learn to understand and respect them.

Key Objectives:

Learner will:

- understand the value of toil.
- understand the importance of different occupations in our social system – such as, ice-cream lorry, balloon man, chai stall, kite seller, bangle seller, knife sharpener, food lorry, etc.
- learn to respect people from different vocations of life. *
- understand and value of Human Rights.
- be empathetic and compassionate. *
- respect people despite nature of work involved in their vocations. *
- instill love for labour. *

* values integrated across SEWA

Role of mentor teacher / Peer Mentor:

- Initiate and brainstorm a collaborative project.
- Deducing inferences from comparative study of life situations.
- Discussing consequences of disliking a type of work and attitudinal problems related to it.
- Suggest remedies.
- Instill respect for all types of work.
- Be able to support discussions with anecdotes and examples from the life of great people (M.K. Gandhi, Abraham Lincoln, Martin Luther King, Lal Bahadur Shastri), who believed in dignity of labour and practised it as well.

Project Process:

- Divide students in groups of around ten.
- Organise brainstorming sessions with the students.
- Collect quotations and quips.
- Collect Newspaper cuttings indicating both - respect for Human Rights and violation of Human Rights.
- Share stories and anecdotes highlighting the theme.
- Prepare an action plan and roadmap to achieve it.
- Analyze the action plan.
- Collect views of elders/parents/other adults.

- Organise outing in specific area to identify and correlate the project.

Suggestive Activities:

- One group could contribute to community work by regularizing and facilitating the job of people from different walks of life in their respective areas/ apartment complexes by making them aware of hygiene, etc.
- Collect funds in cash / kind to recognize and reward the contribution of helpers on special occasions like New Year / Labour Day. Keep proper records of this collection.
- Organise a discussion in class where people were victimised due to their profession and how Human Rights were violated in such situations.
- Celebrate World Human Rights Day (10th December) and Labour Day (1st May).
- Address the issue through creative arts, perform street plays, interviews of the school helpers (getting to know them better).
- Understand the importance of knowing how to work with the hand.

Reflective Musings:

- Discussion sessions will be organized to have a better understanding of Human Rights.
- Students can discuss about the importance of different vocations in a social structure.
 - Why must a human being be seen and treated beyond his/her occupation.
 - Basic courtesies that should be extended to one and all.
 - How do they need to change their attitude and behaviour to be more humane compassionate and empathetic.
 - What are the social or mental problems that arise from lack of respect for labour in different categories?
 - How can we appreciate the contribution of helpers?
 - Develop a code of personal behaviour consistent with the social and physical aspects.
 - In a Journal explore the life skills you have developed in the process.
- Elucidate the ideas you have gathered from your preparation on the value of 'Dignity of Labour'.

"It is dignity for a man to labor in his vocation."

Interview Questionnaires

- Understand the problems of ten different community helpers.
- Share experiences in class discussion and dissect problems and threats.

S. No.	Name and address	Occupational problems and threats	Assistance required	Suggestions

Activity reports (to be updated by students):

Date	Name and address	Activity	Outcome/s	Change in attitude

Assessment

Rubric may be developed in consultation with teachers

Project - 3: "Empathy"

Project Focus- Facilitating inclusivity

Target Point- The concern about the fate of others, the ability to realize another person's insecurities and fears and ability to put oneself in their shoes and willingness to extend a supportive hand makes for empathy.

Individuals, communities, countries will not be able to get socially empowered without EMPATHY.

It is also ability to appreciate, understand and accept other person's emotions. It improves inter-personal relations especially with people of different abilities, backgrounds, regions and nationalities.

Key Outcomes:

Learner will:

- be sensitive to the needs of others
- support inclusivity and develop a positive attitude
- develop compassion and value human life
- support and help people in distress
- develop a humane outlook
- express love, care and compassion towards the disadvantaged and CWSN (Divyang)
- be able to communicate the value of empathy
- understand the importance of inclusivity and support it
- sensitize peers as well as community members about inclusivity and help prepare a conducive environment for the same
- develop skills of self awareness and critical thinking towards the under privileged

Role of Mentor/ Teacher:

The mentor/teacher should:

- help students understand implications of life situations -discrete difference between sympathy and empathy;
- guide students to communicate value of empathy through examples;
- organize rotation mentoring of CWSN (Divyang)
- support and create conducive environment for promoting inclusivity.
- Initiate, brainstorm, plan, organize and collaborate with students.

Project Process

Prepare: (Suggestive ideas)

- Organise brainstorming sessions with the students
- Discuss the scope of project and prepare a road map
- Draft an action plan
- Make 'who needs my help' worksheet

- Participate in prayer services. Express feelings in form of poem/ story.
- Write letters to sick or distressed or visit old age homes / orphanages (read to them or play with them)
- Role-play, creating situations which call for a manifestation of empathy.
- Identify or compose a poem on the subject and read it to the class.
- Ask them to work on 'who needs my help' worksheets prepared during the 'Prepare' phase. They can depict it through words or drawing thinking about the needs of others and provide assistance without being asked. (Show the writings and pictures)
- Discuss how we can help CWSN, fighting with terminal diseases like Cancer, belong to disadvantaged groups.
- Plan their interaction, on rotation, with CWSN.

Reflective Musings:

- Talk about empathy with students, ask them to discuss it within their peer group and family.
- Discussions will be held in class on the activities of the project. The students will think, talk and write about what they have learned and observed.
- Questions will be discussed in class about their experiences and response of the community; e.g.

"I believe empathy is the most essential quality of civilization."

- Describe what have you learned and felt about your project?
- How far was the activity beneficial for you?
- What have you learned about inclusivity from this project?
- The students will be given a Proforma to fill in so that they can assess their own learning from the project.
- The teacher will also fill the Proforma to assess and rate the performance of the students.

Share and Celebrate

- Students share awards and certificates for practicing the value after relating situations and elaborating on them.
- An assembly can be arranged to award the outstanding students.
- The report of the project may be published in the newspapers and the school's magazine.

Assessment

Rubric may be developed in consultation with teachers

Project - 4: Care for Homeless Children

Project Focus- Child Rights

Target Point- Groups as community volunteers participate in a programme to give happiness to children living in shelters. This would also increase awareness about the issue of homelessness. This SE project will also focus on every child's right for special protection and care. Children have the right to an adequate standard of living, health care, education and services, and to play and recreation.

Learning Outcomes:

Learner

- understands and appreciates every child's right to an optional standard of living, health care, education and services, and to play and recreation. These also include a balanced diet, a warm bed to sleep in, and access to schooling.
- is aware about issues of homelessness.
- develops empathy for other children who may be less privileged than them but not less creative or talented.
- expands their horizon of society and develop an understanding of child rights.
- assesses impact of one's work.
- supports underprivileged children.
- helps create a social environment that supports and respects every child's rights.
- develops deep insight into the living conditions of underprivileged children.

Role of mentor/ teacher:

The teacher/ Mentor/Initiator

- help students develop an action plan.
- provide them with an understanding of Child Rights.
- help them with all support in terms of logistics.
- facilitate the process and provide them all scaffolding required.

Project Process:

- help students in identifying a shelter for children.
- guide students to understand the complexities involved by a few pre-project activities.
- brainstorm and ask what they think their objective is.
- coordinate with the authorities concerned and complete any official formalities required in the school and in the shelter.

Suggestive activities

- Plan to clean a shelter. The improved aesthetics will add cheer to the House.
- Identify needs of various Shelters in the community (Read the concept and complete the Survey Form). Look up which Shelter has the direst need to be painted. Steps for painting the Shelter:

- a) A group of students may go and take measurement of the area to be painted- the rooms, the compound wall and the outside wall.
- b) Discuss the budget that will be involved in purchasing the paints and discuss how to arrange for any donation from the community.
- c) Organise a donation drive.
- d) Meet the local authorities.
- e) Get budget allocated for cleaning

Reflective Musings:

- Discussions will be held in the class on the activities of the project. The students will think, talk and write about what they have learned and observed.
- Questions will be discussed in class about their experiences and response of the community; e.g.:
 - i. Describe what you have learned and felt about your project.
 - ii. How far was the activity beneficial for you?
 - iii. What have you learned about child rights from this project?
- What can be your future plans about continuing to support such children in terms of their other basic requirements?

Share and Celebrate

- An assembly can be arranged to award the outstanding students.
- The students may display activity pictures (before and after) on school notice-board.
- Certificates can be awarded to all students.
- The report of the project be published in the newspapers and the school's magazine.

Survey Form - Suggestive

1. Please read the following concept and complete the survey:

A group of students from _____ (School's name) are interested in giving a makeover to a House like yours. These children have decided to bring happiness to a group of their friends by adding colour to their life and be friends with them. However, as the resource is limited, they are interested to find out which of the Shelters have the urgent need for it.

Survey form to identify Shelter for Makeover

i) Select how you feel about the qualities of your Shelter:

Quality/Scale Low _____ High 1, 2, 3, 4, 5

Maintenance of rooms

Maintenance of bathrooms

Number of games played

Colour of your room-wall

Classes conducted

ii) After reading the above service description, how interested would you be in using the described service?

- Not at all interested
- Not very interested
- Neither interested nor uninterested
- Somewhat interested
- Extremely interested

iii) Which features are the most valuable in the above description?

iv) Do you find anything unappealing in the concept? Please Write.

v) How often do you get such opportunities from other community groups?

- Once in a year
- Once in two years
- Less often
- Never seen

vi) Do you want us to do anything more for you in addition to what we offering? List any three in order of you preference.

Alternate Suggestive Activities:

- Celebration of festivals with children in Orphanages.
- Adopting an Orphanage/Slum/Village and help to skill children (Communicative Skills, Etiquette, Exploring viable job opportunities)

Assessment

Rubric may be developed in consultation with teachers

Project - 5: Being Safe and Responsible

Project Focus - First Aid/ Health Club; Disaster Prevention and Mitigation

Target Point - To bring awareness in the society about safety concern, reactions to different types of dangers and how to give first aid during emergencies.

Learning Outcomes:

Learner will

- understand importance of being safe and responsible.
- understand the importance of first aid, dealing with cuts and bruises, heat exhaustion and heat stroke, breathing difficulties, cuts nosebleeds, choking, basic sports injuries
- practice first aid skills in order to empower them to help people in emergencies.
- learn to prepare a first aid kit.

Cross-Curricular Linkages

- The students will learn basics of first aid.
- The students will be trained practically about first aid skills.

Project Process

- The students will be provided tips for facing danger.
- Informative lecture-demonstration sessions will be arranged with doctors from different hospitals including a dentist.
- The students will be provided first aid boxes.
- The students will be divided into four groups for conducting the project. A project manager from within the group will check the progress of the students for their field work. The project manager will bring a camera to make video of first aid provision to others.
- After collecting data about the topic, the students will discuss various dangers in the classroom and will come up with life saving and precautionary reactions. They will be asked the following questions:
 - What is your very first response to danger?
 - Why is first aid not a common practice?
 - How can it be made common practice among people of the community?
 - Can you explain different situations in which first aid is required?
 - What can be your first reaction towards an injured person?
 - What will you do, if you see an unconscious person lying in a pool of blood?
 - What can be done to make first aid a common practice?
- The students will go to the hospitals in order to attend lectures of the doctors about first aid. Each group of students will visit 3 doctors. The students will also make videos of the sessions held with the doctors. 'First aid' videos will be shown to students.
- Practice of first aid will be done in the classroom.

- The students will learn how to check temperature and blood pressure of a person.
- Charts and models will be prepared by students.
- The students will perform first aid in real life. They will treat the injured students and their community members. They will keep a record of those who will be treated.
- The students will teach students of lower class about different first aid techniques.

Reflective Musings:

- Students will share their experience of working on the project with their teachers and class fellows.
- Students will be asked the following questions about their project and present it in the form of a report:
 - What did you learn after conducting this project?
 - Did you feel that this project made a difference to your life and the lives of others?
 - What problems did you face during the project?
 - Do you think that the project was successful?
- The students will develop a proforma to fill in, so that they can assess and judge their performance.
- The teacher will also develop a proforma to assess and rate the performance of the students.
- Each student will present a Report.

Share and Celebrate:

- Health Mela: A Health Mela can be organised to sensitize people about the importance of first aid. Demonstrations and lectures on administering first-aid can be presented.
- Exhibition: An exhibition will be held during the Mela. Charts and models made by the students can be displayed in the exhibition.
- Speeches: Speeches/ Lecture-demonstrations can be done by the students to spread awareness about first aid.
- Publicity: The report of the project may be published in the school's magazine and newspapers.

Assessment

Rubric may be developed in consultation with teachers

Project - 6: Environment Conscious Citizens as Part of Eco Clubs

Project Rationale -

Our world is changing, and changing fast. Our environment is pressured due to over-exploitation of our finite natural resources, climate change, and rapidly changing economic and social situations. This is leading to us leaving behind a complicated and difficult mess for our future generations to deal with. Unless the young generation does not build an appreciation for nature and see value in its preservation, we will continue to deplete our natural resources, causing irreparable damage to our planet.

Our education systems must ensure our children develop an understanding of the environmental systems and learn new skills and new ways of living sustainably with respect for themselves, each other, their communities and their surrounding environment.

Education has been globally recognized as a key solution to achieving sustainability in development and current lifestyle approaches. To achieve this, it is important to target all the stakeholders by empowering them to take conservation action. Classes IX to XII are the most crucial years of laying foundation for professional life, thus an intervention at this stage is most impactful in shaping the society.

Project Focus-

This is a leadership building exercise and will help the students to become a thinking and environmentally conscious individual. It is a journey of self-evaluation and personal and professional growth.

Target Point-

The following activities that the senior secondary school (Classes IX to XII) students of all the CBSE schools, can undertake through its Social Empowerment through Work Education and Action (SEWA) programme. You can choose 1 activity from each section.

6.1. SELF HELP

6.1.1 Learning Outcomes:

Students will –

1. Connect with nature
2. Adopt practices that will benefit the environment
3. Prepare a plan and suggest steps your family can take to become a sustainable household.
4. Manage domestic waste produced in their homes

6.1.2 Activities –

Did you know that nature has a therapeutic effect on us? It has been scientifically proven that, being in the proximity of nature encourages physical activity, reduces negative

emotions, enhances recovery from illness and eventually has positive effects on physical and mental health. Nature can be an individual's first step to achieving holistic well being.

6.1.2.1 Connecting with Nature

- a) Go on a walk in a park/garden/forest nearby. Choose a time when there is a likelihood of minimum disturbance.
 - b) Take a deep breath and feel the air (warm/cool).
 - c) Visit regularly and observe different kinds of trees that grow there.
 - d) Compare their size, kinds of leaves, flowers, seeds, bark, canopy etc.
 - e) Observe different kinds of birds, insects any other animal that you see on the walk.
 - f) Look closely at the birds and insects having an affinity to a particular kind of tree. Find out if there is a symbiotic relationship.
 - g) Choose a plant and observe it closely to find some additional information about the tree such as flowers, fruits, seeds, bark, trunk, any special adaptation, size, kind of soil it grows on etc.
 - h) Find the name of the tree, its importance in nature and for humans.
 - i) Collect or draw pictures of its leaves, fruit, flower and other prominent parts.
 - j) Create herbariums with fallen leaves, flowers and twigs of the tree.
 - k) Look for a special feature that helps the plant adapt in the climate of your region.
 - l) Make a list of books and publications that you referred for additional information on the tree.
 - m) Prepare a portfolio for the tree capturing detailed information about the tree.
 - n) Read National/International publications and websites on environmental themes regularly.
- **Refer to field guides on the Indian Landscape on Birds, Mammals, Reptiles, Trees and Marine life**

6.1.2.2 Set up a small kitchen/herb garden at your school. This can be your first step to healthier living while conserving resources. If possible, take help from a gardener or a visit a nursery nearby.

- a) Identify a space in your school, where you can start your kitchen garden. You can grow vegetables/herbs in pots as well.
- b) Ensure that it gets enough sunlight.
- c) Analyze the space available and decide upon the herbs/vegetables you can grow.
- d) Choose the herbs/vegetables that are easy to grow and are seasonal.
- e) Procure the seeds, soil, pots (optional), manure and basic gardening tools.
- f) Water your garden regularly.
- g) Consult a gardener on the steps to be taken to care for the plants.
- h) Harvest the vegetables/herbs and cook your favourite dishes with them.
- i) Involve others in looking after the garden.

6.1.2.3 Prepare a plan to make the households of all students and teachers of a class more efficient and sustainably functioning unit.

a) Prepare a chart to evaluate the monthly household expenditure on various items used by your family and the waste generated. Talk to your parents and other family members to collect the information.

Items	Monthly Expenditure	List of waste generated
Groceries	INR	Packaging material- Plastic bags, tetra packs, cartons, plastic bottles etc.
Fruits & Vegetables	INR	Food waste
Clothing (monthly average)	INR	Old clothes, buttons, bed sheets, old shoes etc.
Electricity	INR	
Transport	INR	
Cooking Gas	INR	
Water	Litres	Waste water from kitchen, laundry etc.

b) A sustainable household should have minimal impact on the environment. For this, it should use minimal resources and generate as less waste as possible. To ensure this, suggest ways in which use of resources and generation of household waste can be minimized.

c) Reuse grey water or waste water from the kitchen and laundry for gardening or floor cleaning.

d) Repair, Reuse and Recycle household waste as much as possible.

e) Reduce the use of electricity and cooking gas

f) Use eco friendly means of transport such as public transport or CNG vehicles.

g) Practice the above ways and review the chart to measure the extent to which your household has become low cost and sustainable.

6.1.2.4 Segregation and proper disposal of waste in every household will help combat the issue of waste management in out towns and cities by reducing the burden on its landfills. It is important to segregate waste at source itself. Sensitize family members of households and start segregating waste at each selected home.

a) Keep separate containers for dry and wet waste in the kitchen.

b) Keep two bags for dry waste collection- paper and plastic, for the rest of the household waste

c) Keep plastic from the kitchen clean and dry and drop into the dry waste bin. Keep glass/plastic containers rinsed of food matter. Give away the recyclable waste items to the kabadiwala/junk dealers or rag pickers.

d) Send kitchen waste to the community compost pits. You may sensitize and encourage your community to start composting wet waste from the kitchen.

6.2 COMMUNITY OUTREACH ACTIVITIES

6.2.1 Learning Outcomes:

Students will –

1. Conduct awareness campaigns in School and neighbourhood community.
2. Conduct survey on utilization of resources, quality of soil, water, air and sanitary conditions
3. Prepare a report based on the survey and inform the local authorities about the issues.
4. Adopt a neighbourhood community for greening and cleanliness.
5. Suggest innovative solutions for sensitization of the community and dealing with local environmental issues.

6.2.2 Activities –

6.2.2.1 Start a Birding club in your school

- a) Find a group of nature enthusiasts (conservation leaders) in your school who volunteer to be the core working committee for the Birding club. Give an interesting name to your club.
- b) Organize the Birding club core committee meeting to plan the activities of the club.

Arrange for some binoculars, if possible.

- Conduct regular nature walks especially during winters.
- To start with looking at some common birds.
- Be attentive to the different kinds of bird calls you hear during the walk.
- Observe their size, colour of feathers, colour of the eyes and beak and claws if possible.
- Try to find out the different kinds of nests birds make.
- Follow some basic rules during birding walks such as, maintaining a distance from nests and nesting colonies to ensure that there is no stress caused to the birds.
- Learn some interesting facts and stories about birds and share them among your birding community members.
- Refer to books
- Conduct regular meetings for the core committee to share knowledge and gain from each other's experience.
- Conduct presentations for others in the school to sensitize them about issues concerning the birds.

6.2.2.2 In the 21st century, it has become utmost essential for the schools to become green entities and undertake activities that will empower their students and teachers to take conservation action and become leaders for nature conservation. Prepare an annual calendar of activities that will offer them opportunities to explore, learn and practice sustainable living. Student committees can be formulated to undertake following activities during the year.

- Publish quarterly e-newsletter on Sustainability and Conservation of environment, "The Green Gene". Students will design e-newsletter. The following are the suggested sections; however, students may use their own creativity to design it. –

- i. Editor's Column
- ii. News Alert
- iii. New species discovered
- iv. People for the Planet (Conservationists, scientists, authors for nature etc.)

- v. Sustainable practices – Try at Home
- vi. Activity section (Crossword, Quiz, picture quiz, puzzles etc.)
- vii. Reader's Column (Nature art, posters, stories, poems, photographs etc. contributed by the readers)
- viii. Circulate the newsletter to all the stakeholders.
- Suggest methods to reuse of greywater in school. Share the ideas with the school authorities and support them in the implementation.
- Track journey of waste in your school from source to destination
- Segregate waste in your classroom and prepare a plan to dispose each kind of waste sustainably. Attempt to become a zero waste classroom and showcase your classroom as a model classroom for others to follow.

6.2.2.3 Survey your local community to find out the environmental issues. Prepare a set of questions that you will need to ask to collect relevant information on sanitary conditions, quality of air, soil and practices that have a negative impact on the environmental health.

Prepare a report on the above with respect to your school/community highlighting the issues and its impact on them. Draft a letter to the school/local authorities informing them about the issue and send the letter to them along with the report.

6.2.2.4 Make a School Compost pit- Organic waste constitutes 35-40% of the municipal solid waste generated in India. This waste can be recycled by the method of composting. Composting ensures that this waste is not carelessly thrown or left to rot but nutrients are recycled and returned to the soil.

- a) A group of students may conduct a survey on the kind of waste produced in the school.
- b) Identify a cool, shady corner in your school compound or garden where a pit can be dug. Cover the pit with a net or mesh to keep away flies and birds.
- c) Start a waste segregation project in the school. Install two dustbins in the school for biodegradable and non-biodegradable waste.
- d) Put a layer of biodegradable waste (Bits of paper, leaves, twigs, fruit peels, leftover food etc.) into the pit and cover it with a thin layer of soil or dried leaves to prevent bad odour.
- e) Turn the waste over and over once every three days. In about 45 days, the pure, rich and organic waste will be ready to be used in the school's garden.

6.2.2.5 Plan an awareness campaign for water conservation/plastic free school/neighbourhood in your school and execute it.

- a) Create a poster to dissuade the local community members from using plastic bag or waste water and display the posters in public places.
- b) Write slogans against use of plastic bags/water wastage/pollution.
- d) Have these community members take pledge to avoid using plastic bags/ prevent water wastage.

6.2.2.6 Form groups of volunteers in your neighbourhood for making it greener and cleaner. Undertake any of the following activities in the locality-

- a) Conduct cleanliness drives in the locality
- b) Carry out plantation drive in the locality

- c) Install dustbins in the area
- d) Write a letter to the local authorities to ban plastics
- e) Run anti fire cracker campaigns in the locality.
- f) Encourage community households to segregate waste and educate them about proper disposal of waste.

6.3 PRE VOCATIONAL AND SKILL DEVELOPMENT ACTIVITIES

6.3.1 Learning Outcomes:

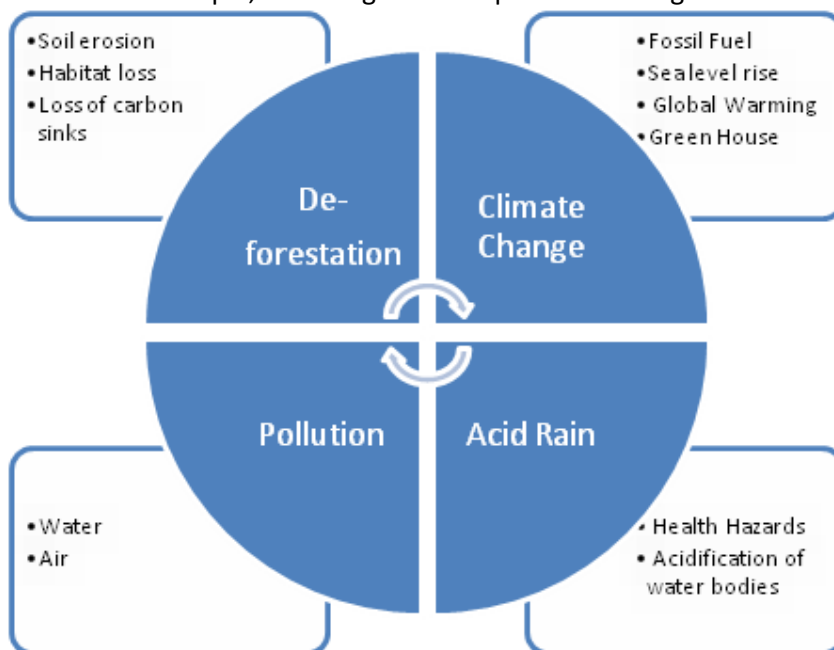
Students will –

1. Prepare a plan to start a small scale eco-friendly business (Entrepreneurship)
2. Set up Vermicompost pits/compost bins, Upcycle (Paper, Glass bottles, plastic), installing vertical gardens for earning profits.

6.3.2 Activities –

6.3.2.1 As more consumers demand that companies behave in a socially responsible way, it's becoming more common for businesses to implement environment friendly practices. You can take this initiative one step further by starting an eco friendly business and scale it.

- Prepare a mind- map of desirable and sustainable future in local community or neighbourhood. For example, following is the map for describing environmental issues-



- List the changes needed in the local community to ensure that the business does not harm or degrade the environment in any way. Each required change is a business opportunity.
- The business can be service/product based.
- Fix upon a business based on your knowledge and skills.
- Describe your business idea. (What to sell? How to sell? Where to sell? Who will buy? Why will he buy?)

- Find the investment on the basis of operational and human resource costs. Fix the pricing.
- Plan a fundraising activity (refer to next activity).
- Analyze the risks & threats. Prepare a strategy to overcome it.
- Analyze strengths and opportunities and plan to use them for running your business.
- Build your network. Promote your product/service (Make a poster advertisement for your product/service).
- Few eco friendly businesses are- Selling upcycled (paper bags, cloth bags etc.) or energy efficient products, garden products, nursery, environmental radio programme etc.

6.3.3. Fund- Raising for Eco Friendly businesses-

- Explain who you are, what you are all about and why someone should support you in 15 seconds.
- Remember fundraising is not just about raising money, it's also about building relationships with your community for the longer term.
- Tell the prospective supporters following things.



- Share a report of expenditure with your donors/supporters to ensure transparency and credibility in your efforts.

6.3.4. Environmental consciousness and sustainability should infuse in every aspect of our living. This will require every individual to develop certain skills that will enable them to manage their resources more efficiently.

- Make a list of skills that are required to manage resources in a more sustainable way such as vermicomposting, paper recycling, gardening, rainwater harvesting etc.
- Find an expert and invite him/her to conduct a workshop.
- Organize the workshop in the school.
- Have students form groups and undertake the project.
- Organize an exhibition to display the projects.

Project - 7: Reduce, Recycle, Reuse (most important 3R's) and Now Respect

Project Focus – Conservation, Caring for the Planet, Segregation of garbage

Target Area - It enables children to learn about the original source of material and also which materials can be recycled.

Every living organism is important in this world, be it an elephant, a banyan tree, a rabbit, an insect, a mustard plant, or inanimate resources such as water, air or soil. They are members of one or the other food chain and are dependent on one another. Every food chain starts from a plant source and man is the last consumer in almost all the food chains. But with increasing population the resources are depleting. We need to establish a balance between human populations and available resources so that renewable sources find sufficient time to renew themselves and others can be recycled and reused.

Learning Outcomes:

Learners-

- learn about the original source of material goods such as glass, aluminium, iron, paper, plastic, petroleum, coal.
- learn the importance of segregating garbage.
- learn which materials can be recycled. .
- learn to coordinate between plan and action, within the volunteer group as well as with the target group.
- find new ways of cooperating with each other.
- learn social skills and ability to solve problems in a group.
- understand the importance of conserving resources.
- explore and internalize the importance of Reduce, Recycle, Reuse.
- learn to use resources judiciously.

Project Process: Prepare:

- Students will make a rough layout and plan the activities to practically implement the project.
- Conduct a class discussion. Discuss the meaning of recycling. (The teacher may tell a story with a message - "There is enough for everyone's need but not for their greed").
- Students will make a list of things that can be recycled at home or at school.
- Discuss the reasons for recycling. Ask students if they know what the source of the original material is.
- Many students do not know the actual origin of materials and how material is recycled. Prepare and use the resource sheets to sequence the steps from original product to recycling for each material.
- Draw story boards about where materials come from. Display stories.
- Identify locality or target area for the execution of the project.
- Form groups of 10 to 12 students and elect a group leader for each group. The students in each group should preferably be from the same residential area to make it practically easy for them to target their project area.

- Divide larger areas into smaller target areas, and allot them to each group accordingly.
- Do a door to door survey to find out things that are needed to be recycled by the people living in the neighbourhood and collect data to fill in the provided survey sheet.
- Talk to the local area welfare society and arrange a presentation.
- Conduct a survey on environmental hygiene of your school (classroom, corridors, washroom, public spaces) and suggest solutions.
- Prepare a presentation to :-
 - spread awareness about Reuse and Recycling.
 - sensitize people about conservation of nature by recycling.
 - make residents aware about the benefits of segregating the trash.
 - tell them about the various benefits of understanding the origin of various goods so that recycling becomes easy for them..
- Ask students to prepare two lists by following the steps given below:
 - Make a list of all man-made things around them.
 - Try to find out where they come from.
 - The materials, about which they have a doubt (its origin), will be marked in the list.
 - The teacher will help them find the origins of these materials.
- Share the list prepared by you with the residents and prepare a consent list of those who would agree to segregate the trash in order to facilitate the garbage disposal.
- Prepare an evaluation sheet after monitoring and taking feedback from the residents to make a record of people to know how they have benefitted from the project.

Reflective Musings:

- After the collection of the data from survey, ask students to assemble all the collected data at one place.
We have to start caring about our planet. That is why we should recycle. "Why should we recycle? To talk is good, to act is better."
- Guide students to research and prepare two lists- one with the materials that can be recycled and another one with the materials that cannot be recycled.
- Guide students to prepare a presentation highlighting the following:
 - Meaning of Recycling.
 - The need for reuse.
 - Does it help in easy disposal if the garbage is segregated?
 - Why do some materials need to be recycled while others cannot?
 - Why does man need to control greed and utilise Mother Earth's resources thoughtfully?
 - Why do we need to respect the resources provided by nature?
 - What should be reduced and why?
- Discussions will be held in class on the activities of the project. The students will think, talk and write about what they have learned and observed.
- Questions will be discussed in class about their experiences and response of the community; e.g.,

- Describe what you have learned and felt about your project:
 - How far was the activity beneficial for you?
 - What have you learned about yourself and your surroundings from this project?
 - How do you think we can sensitize people about conserving and respecting resources?
 - How can we make the project more effective?
- The students will be given a Performa to fill in so that they can assess their own learning from the project.

Share and Celebrate:

- An assembly can be arranged to award the outstanding students.
- The students will display the charts and models on school notice-board.
- Certificates can be awarded to all students.
- The classroom can also be decorated with charts and models.
- The students can also keep imparting information regarding cleanliness through a practical demonstration to other students.
- The report of the project may be published in the newspapers and the school's magazine.

Survey Sheet

SN	Name	Residential Address	People who started segregating garbage	People who did not start segregating garbage	People who were benefitted (Those who Changed)

Student Evaluation Sheet to be filled by the Mentor after the completion of each activity:-

Scheduled Activity	Proposed Date	Suggested number of hours	Hours invested	Date of completion of the activity	Learning Outcomes achieved	Skills developed

Self Assessment

1. The experience was a great learning experience because

2. The next time, i will ensure

3. The community needs that were fulfilled

4. The community needs that were not addressed include

5. The things that i would do differently next time include

6. I think we can be better equipped for future involvement in the community by

Overall Assessment

Rubric may be developed in consultation with teachers

Activities under SEWA?

Activities leading to 'Physical Fitness' as an outcome and contributing to a healthy lifestyle will fall under SEWA.

The assessment criteria will be evidence based taking the readings from Health Card (**Fitness, Actometer and Nutrometer**). These will be used as scientific evidence towards fulfilling the weighting assigned to this component. These activities need to be taken up in larger groups and organized as a motivational and aspirational tool of outreach to the community.

The illustrative list of activities suggested under this theme are as under:

- Being part of **adventure camps** either at school or as part of collaboration with uniformed services, this is in addition to the 'adventure' activities under the strand
- Part of '*Swachh Bharat*' activities such as cleaning and clearing fields and other initiatives of Ministries.
- Creating leagues of Sporting activities (basketball, volleyball, swimming, hockey, netball, squash, cricket and boxing) as interclass, school, city, district or even at national levels
- Long distance runs (half and full marathons). 'Fun runs' for a cause
- Yoga, Running/ Jogging with fitness trackers with a goal in mind at the end of the year.
- Dance and choreography in groups
- Trekking/ Hiking/ Biking/ Cycling as meaningful fitness activities with a goal in mind at the end of the year.
- Camping, Military training with a goal in mind at the end of the year.
- Gardening and creating herb gardens/medicinal gardens/vegetable garden
- Disciplined and responsible dietary habits as outcome-based fitness projects

Managing Sport Events: An Exemplar Activity:

All participation in any of the above activities or those under scheme of games and sports must be consistent and on a daily basis. The **by-product and outcome** of these will be **health and wellness and overall fitness**. **Physical fitness** also leads to choosing **good dietary practices**, thus ensuring **good nutrition habits**.

Organizing and managing sport events are complex. It includes integration of modern management skills like budgeting, sponsorship management, venue management logistic management, facility management are required.

Learning outcomes:

The learner:

- Creates court/ground marking as per specifications
- Learns to use equipment for marking such as nails, ropes, pegs, hammer, measuring tape, chalk powder
- Prepares fixtures as per the specifications:

- Maintains props and equipment as per the requirement e.g. pressure for various balls, plans budgets, organizes venue, logistics
- Implements to make it a positive learning experience
- Marks restricted area around the field servings, area, pitch, scorers table
- Uses chalk powder to make a 5 cm line as per the dimension of the field depending on the game.
- Understands cross curricular linkages through concept of dimensions (Length, breadth, depth on height), radius, diameter
- Understands the methods of conducting a league and implements them

League Format

League is a way of conducting a tournament where each team plays against all the teams or within a group. In league format, teams play all the pre-fixed matches and get the advantage to recover even if the team losses the first or second match.

For example, in a tournament, if 4 groups are made and each group has 4 teams in each group, one team may play against 3 other teams.

Likewise, the champion of all 4 groups move to the next level. In the next level, the group champion teams may play against each other (all the teams) and the winner is decided based on the maximum number of wins. This method is known as league-cum-league.

The other method is league-cum-knockout where in the champion team of a group plays with the other group champion and the winners play the final.

The method of league or league-cum-knockout solely depends on the organizers. Organizers decide on the basis of time availability, no. grounds available, funds and no. of teams.

In a league format, the total no. of matches is calculated as **$n(n-1)/2$**

'n' is the total number of teams.

Each group has 4 teams. So the total no. of matches in each group will be

$$n(n-1)/2$$

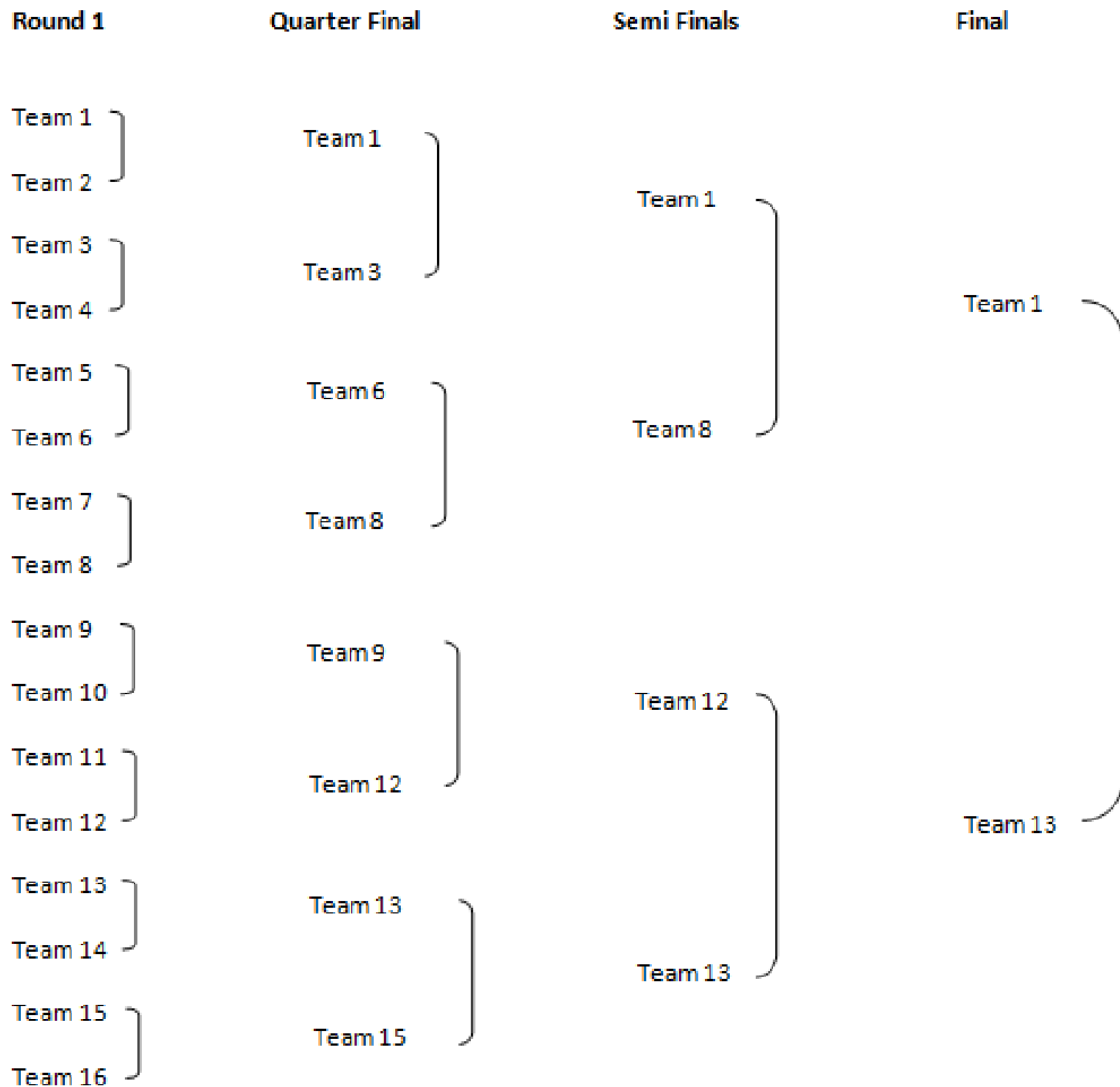
$$4(4-1)/2 = 6 \text{ matches}$$

Total no. of matches including all the groups will be 24 only (6 matches per group X 4 groups).

Post group league, it may continue as league format or knockout format.

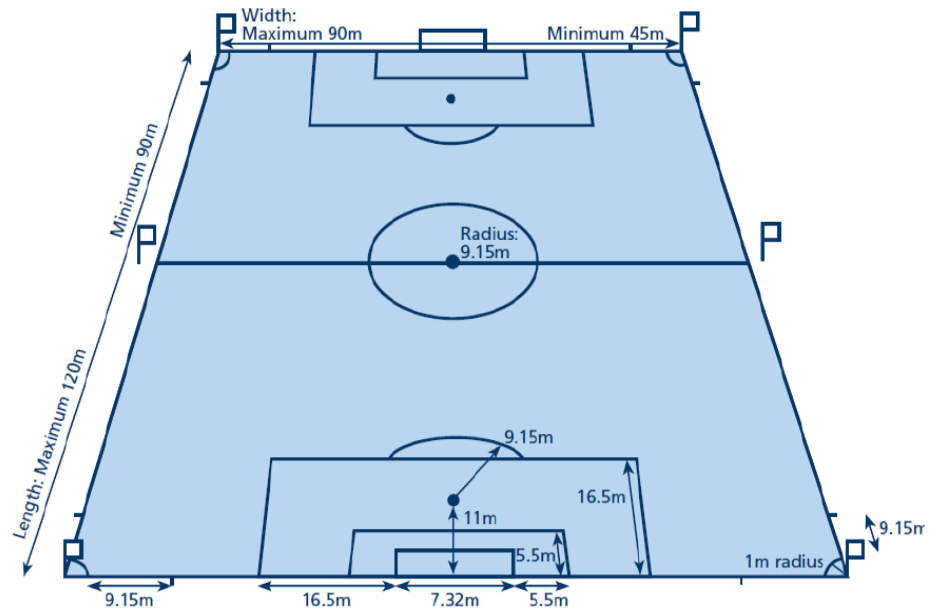
Knockout Format

Knockout is another way of conducting a tournament where in the teams get knocked out on losing. The winning teams keep moving to the next level and finally 2 teams compete for the championship.

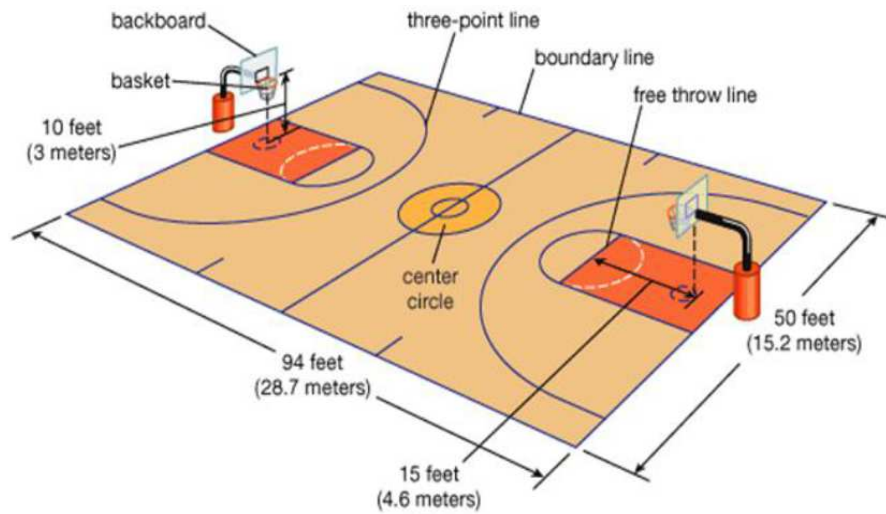


The above fixture is applicable only if the total no. of teams is exponential power of 2 that means $2^2 = 2 \times 2 = 4$, $2^3 = 2 \times 2 \times 2 = 8$ and so on (16, 32, 64).

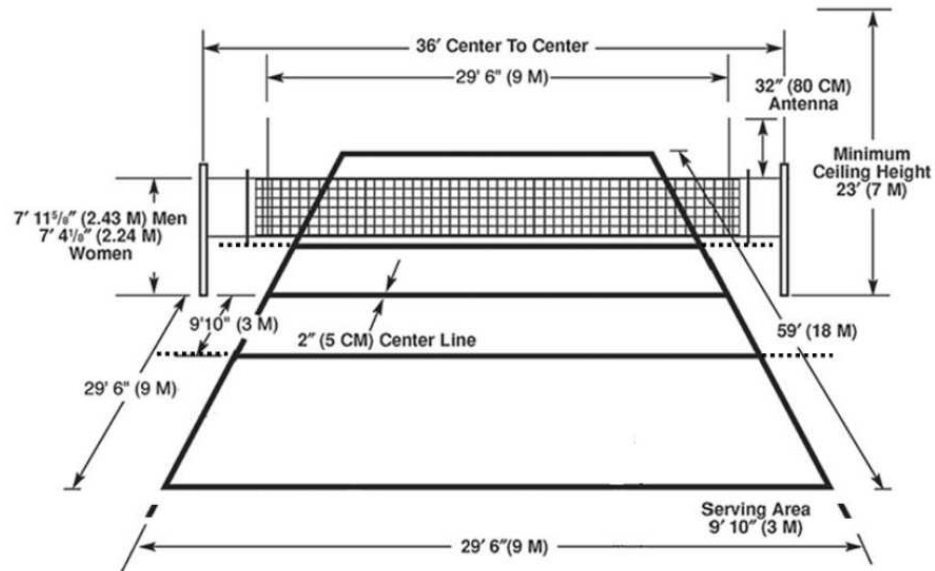
Football: Dimension of the Field



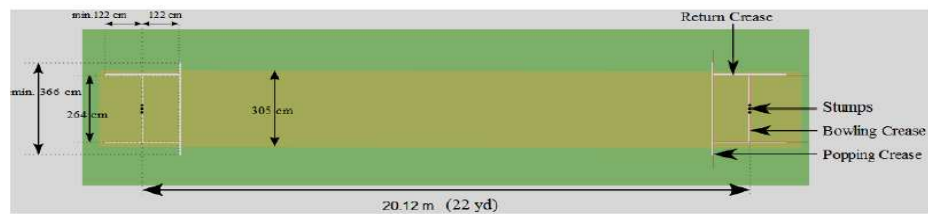
Basketball: Dimension of the Court



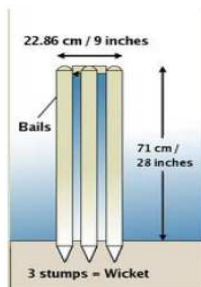
Volleyball: Dimension of the Court



Cricket: Dimension of the Pitch



Pitch Dimension



Wicket/ Stumps Measurement

Maintaining the Props and Equipment?

Check the pressure carefully. Pressures for various balls are:

Football - 0.6 – 1.1 atmosphere (600 – 1,100 g/cm²) at sea level

Basketball – 3.17 – 4.0 atmosphere (3170 – 4000 g/cm²) at sea level

Volleyball - 0.30 - 0.325 atmosphere (300 – 325 g/cm²) at sea level

Before using balls:

1. Inflate balls to correct pressures.
2. Before you inflate the balls, moisten the needle.
3. To inflate balls, squeeze balls while gradually adding a small amount of air at a time.
4. Inflating balls with too much air at once will damage the inner tube/ bladder.
5. Avoid inflating balls with machines as it may over inflate resulting in bursting.

After using balls:

1. Deflate little air after use. If the same air pressure remains in balls after use, balls may expand or deform.
2. Wipe the surface with a soft cloth.
3. If you are unable to remove dirt easily, wipe balls with a moistened cloth.
4. If you are unable to remove dirt with water, wipe balls with a cloth moistened with water-diluted mild detergent.
5. If you use mild detergent to clean balls, thoroughly wipe off any remaining detergent to ensure that it does not remain on the ball surface. (Detergent may cause stain).
6. If you use water to clean balls, wipe the ball afterwards with a dry cloth.
7. Dry balls out of direct sunlight in a well-ventilated place.
8. If the ball has been soaked by rain, wipe away moisture and dirt using a cloth. Dry the ball out of direct sunlight in a well-ventilated place.

To store balls:

1. Avoid leaving balls in a place that is exposed to direct sunlight.
2. Avoid storing balls in hot or damp places.
3. Store balls in a well-ventilated place.
4. Inflate balls regularly, in a well-ventilated place out of direct sunlight.

To maintain props and equipment:

1. After the activity, use a dry cloth to wipe the props/ equipment and store in a well-ventilated place out of direct sunlight.
2. Check the condition of the props/ equipment regularly to avoid any unobserved crack/ breakage.
3. Do not leave the props/ equipment in direct sunlight for the whole day. It would reduce the life of props/ equipment.
4. Do not store the props and equipment made of iron/ metal in a damp place. The moisture may lead to rusting.
5. The equipment which has not been in use for long duration (posts, flags, poles, hurdles etc.) needs special care.
6. Wrap it properly and store it in a well-ventilated place out of direct sunlight. Such equipment should be checked at least once in a year to ensure the good condition.
7. Do not apply water in any leather props and equipment. Always use dry cloth to clean.

Project/ Activity 8: Studying the nutrition and health status of people in a peer group/ village/city slum/ tribal area/ neighbourhood

The nutrition and health status of the people reflect and present status and future prospects of a country. Enhancement of the nutrition and health status of the people should, therefore, be the first priority of the national planning for development. Study of the factors responsible for the present status of nutrition and health will lead to acquisition of facts on the basis of which proper planning for the enhancement of their status can be made.

Specific Activities

- Adoption of a village/city slum/tribal area or even peer group/neighbourhood
- Preliminary identification of nutritional and health problems of the community.
- Preparation of questionnaire/interview schedule to elicit background and information from family such as:
 - General information: head of the family, type of family
 - Composition of the family
 - Meal pattern of the family
 - Monthly expenditure pattern on food, clothing, housing, education, medicine, fuel, transport, saving, remittance of debt, recreation, other items.
 - Details of monthly food expenditure.
 - Food produced at home.
 - Food given under special condition
 - Methods of cooking.
 - Food items stored in the home
 - Food items which are considered "good" and "not-good".
 - Commonly occurring health problems:
- deficiency / diseases of children
- other common ailments of children
- commonly occurring ailments in the family
 - Measures taken to get rid of the ailments
 - Environmental sanitation problem:
- procedure of disposal of wastes (solid or liquid)
- source of water supply and mode of water storage at home
 - Hygienic habits followed
 - Health services available
- Conduct of Survey (Students in groups may develop a questionnaire for the survey)
- Analysis of data and preparation of reports on main findings in respect of:
 - socio-economic conditions;
 - environmental sanitation problems;
 - commonly prevalent health problems;
 - malnutrition problems of children, mothers and the community;
 - undesirable nutrition, health and sanitation practices in the community;
 - practicable intervention measures to enhance the nutrition and health status;

- Helping in community health programmes and enhancing the nutrition, health and environmental status of the community through door-to-door contact programmes.
- Presentation through feedback videos/posters/pamphlets

Process

1. May be done individually, in pairs or in groups
2. Form may be developed for data collection
3. Online data analysis and graphical presentation of findings

Assessment

Rubric may be developed in consultation with teachers

Project/ Activity 9: Participating in the community health programme through door-to-door contact programmes.

Malnutrition and infection are the major causes of the precarious status of health in the developing world. Malnutrition is not only due to poverty or non-availability of food resulting from social and distributive injustice, but also due to ignorance of nutritional facts and undesirable practices. Malnutrition problems can be resolved to a great extent if judicious selection of food is made possible within economic means and the available foods are better utilized. Infectious diseases are caused mainly by the lingering existence of two fundamental problems of environmental sanitation, mainly unsafe water supply and unhygienic disposal of waste, specially human excreta. The application of modern scientific knowledge to environmental sanitation can lead to 80 percent of the diseases being effectively controlled.

Thus, by developing desirable nutrition, health and environmental sanitation practices in the communities, health problems can be considerably resolved. This can be achieved through environment-based education for all age groups of population. A door to door contact programme is the most effective way of environment-based education. Without any nutrition, health and sanitation intervention, the status of nutrition, health and sanitation in the community can be enhanced through functional education by door to door contact.

Process

- May be done in groups
- Developing a checklist to collect data
- Analyze data and prepare a graph
- Record the findings in the report

Specific Activities

- Correlating the nutrition, health and sanitation problems in the adopted community. With the community health programmes being implemented and preparing a checklist of specific practices desirable in the community such as:
 - Gives supplementary foods to the child from the age of four months.
 - Gives milk to the child in katori and not in a bottle.
 - Feeds the child several times a day.
 - Feeds the child even when sick.
 - Immunizes the child.
 - Washes vegetables before cutting.

- Makes use of surplus cooking water.
- Uses green leafy vegetables regularly.
- Uses raw vegetables/fruits/sprouted grains regularly.
- Keeps the home surroundings clean.
- Uses waste water for growing plants.
- Throws garbage in a pit
- Keeps teeth clean.
- Keeps nails trimmed and clean
- Keeps hair clean and combed.
- Keeps clothes clean.
- Uses clean toilet facilities
- Distributing families among members of the project team for door-to-door contact and preparing a time schedule for door-to-door contact programmes, explaining the importance of desirable practices for better nutrition, health and sanitation and recording the practices present in the family in the checklist of desirable practices.
- Discussing the problems encountered by the team members after every 3 contacts, analyzing why a particular desirable practice is not achieved, finding out possible solutions to reinforce the programme.

Process:

- May be done in groups
- Developing a checklist to collect data
- Analyze data and prepare graphs
- Record the findings in the report

Reporting and Consolidation

- Consolidating the records of desirable practices on the first and last contact programme for the entire community and seeing the impact of the programme on the basis of improvement in practice percentage.

Assessment:

- Assessing individual performance of the project team members on the basis of their integrity and honesty and improvement in practice percentage in the families assigned to them.

Project / Activity 10: First Aid: Awareness raising and demonstration

First aid is the immediate and temporary care given to the victim of an accident or sudden illness. The main purpose of first aid is to preserve life, assist recovery and prevent aggravation of the condition until the availability of a doctor, or during transport to a casualty home or hospital.

Specific Activities

- Preparation and use of First Aid Kit.
- Dressing of wounds and bandaging.
- Management of simple injuries and emergencies:
 - bleeding
 - shock

- drowning
- burns
- snakebites
- fractures
- poisoning

Activity 11: Plantation of Shade/ Fuel/ Ornamental/ Avenue trees

- Writing a play and enacting the procedures
- Showing a video film
- Making a video film
- Importance of trees for ecological balance of the environment.
- Local and exotic trees for various purposes.
- Factors affecting normal growth of the plants.
- Specific problems pertaining to certain tree species and their solution.
- Raising seedlings in the nursery, nursery management.
- Vegetative propagation of ornamental trees.
- Planning layout.
- Planting and after care.

Specific Activities

- Identification of shade/fuel/ornamental/avenue trees.
- Preparation of herbaria of various trees.
- Phenological observations on vegetative growth, emergence of new shoots/leaves, flowering, fruiting, etc.
- Identification of seeds, seed treatment before sowing in the nursery.
- Preparation of nursery beds for sowing the seeds.
- Raising seedlings in the nursery and nursery management.
- Vegetative propagation by cuttings, layerage.
- Layout for planting
- Digging pits for planting.
- Preparation of soil-manure mixture for filling the pits.
- Transfer of seedlings for plantation.
- Planting with the help of planting board or rope.
- Providing tree-guards/fencing for protection (made of iron bars/empty old drums/thorny/ twigs/bricks/ barbed wire/live fence, etc.)
- After care of the plants: watering, weeding mulching, hoeing, protection against disease, pests, animals, adverse weather conditions, etc.

Project/ Activity 12: Acquaintance with common fertilizers and pesticides and their application with appropriate equipment.

- Elements of plant nutrition, Common fertilizers nitrogenous, phosphates.
- Concept of bio-fertilizers, micronutrients, Common insecticides, fungicides, weedicides.
- Calculation of doses.
- Plant protection equipments; various types of sprayers and dusters.
- Use and maintenance of plant protection equipments.
- Methods of fertilizers application soil and foliar application.

Specific Activities:

- Identification of various fertilizers, fungicides, insecticides, weedicides, bio-fertilizers.
- Identification of various parts of sprayers and dusters.
- Calibration of plant protection equipments.
- Calculation of doses of fertilizers, pesticides, etc. for specific purpose.
- Preparation of working solution of plant protection chemicals.
- Use of plant protection equipments.
- Fertilizer application through basal dressing, top dressing and foliar spraying.
- Use of bio-fertilizers for legume crops.
- Band placement of fertilizers in horticultural crops.
- General observation of crops/plants/after application of fertilizers/pesticides and their comparison with the untreated ones.

Assessment:

Data Collection, analysis and their reporting through graphs, presentations and written reports, rubric for assessment may be developed

Project/ Activity 13: Acquaintance with Common Pests and Diseases of Plants and Use of Simple Chemicals and Plant Protection Equipment

- Significance of pests and diseases in agriculture.
- General idea about biological and integrated control measures.
- Common insecticides, fungicides, weedicides.
- Common plant protection equipments, their construction details, simple repairs and maintenance.
- Precautions while using plant protection chemicals.
- Common pests of important field crops, vegetable and fruit crops.
- Common diseases of important field crops, vegetables and fruit crops.

Specific Activities

- Collection and preservation of insects, their larvae, pupae, eggs.
- Collection and preservation of diseases affected plant parts.
- Identification and description of pests and diseases of crops.
- Identification of plant protection chemicals.
- Estimation of crop's damage due to pests and diseases.
- Cleaning, maintenance and simple repairs of plant protection equipments.
- Operation of plant protection equipments.
- Preparation of working solutions of plant protection chemicals.
- Observation of plant after application of plant protection chemicals.
- Comparison between the treated and untreated plants.
- Seed treatment with fungicides.

Assessment:

Data Collection, analysis and their reporting through graphs, presentations and written reports, rubric for assessment may be developed

Project / Activity 14: Preparation of Family Budget and Maintenance of Daily Household Accounts.

Specific Activities

- Identifying importance of household accounts.
- Learning the procedure of recording transactions.
- Keeping records of expenses, vouchers, receipts, bill, etc.
- Preparing simple receipts & payment account in the register systematically & neatly.
- Comparing past receipts and payments with present receipts and payments.
- Discriminating between necessities, comforts and luxuries of different families.
- Preparing a list of consumable articles of the family.
- Collecting comparative prices for the required consumable articles.
- Allocating the family income on various heads.
- Preparing family budget.
- Making a comparative study of the budget of families from lower class, lower middle and middle class.

Assessment:

Data Collection, analysis and their reporting through graphs, presentations and written reports, rubric for assessment may be developed

Project / Activity 15: Helping school authorities in organizing

(a) picnics, tours, excursions, functions

(b) exhibitions.

Specific Activities

- Helping school authorities in organizing picnics, tours, excursions and school functions:
 - planning the programme;
 - forming groups for different functions such as conveyance, food, games and entertainment, collection of funds and maintenance of accounts;
 - making arrangements/preparation of each activity;
 - organizing/performing activities on the day of the picnic, tour/excursion, function;
 - evaluation of the success of the programme/effectiveness of the activity undertaken.
- Helping school authorities in organizing exhibitions:
 - planning the programme;
 - collecting/making exhibits and keeping them safely;
 - collecting suitable tables, boards, etc. for display;
 - cleaning and decorating the exhibition hall or ground;
 - displaying the exhibits on proper spots according to plan;
 - doing reception duty on the day of the exhibition;
 - explaining exhibits to the visitors;
 - collecting the exhibits after the exhibition and restoring them to their owners/the school authorities;
 - putting back the furniture, etc. in its proper place.

Assessment:

Writing a report and making an audio visual film on the entire process including the planning stage.

Project / Activity 16: Participation in Adult-Literacy Programmes

Specific Activities

- Survey of the neighbourhood and identification of adult illiterates.
- Making door-to-door visits and persuading them to join literacy classes.
- Grouping the illiterates according to their age, occupation and interests.
- Grouping students on the basis of their known capabilities and interests.
- Selecting literacy materials with the guidance and help of the teacher.
- Making spatial and physical arrangements for conducting the programme.
- Making adequate preparation for teaching, including the selection of teaching aids.
- Teaching adults in groups.
- Getting together in class and reviewing the progress of work and problems, if any
- Modifying the teaching methods and procedures in the light of experience.
- Evaluating the progress of adult literacy and maintaining records.
- Materials, Tools and Equipment Required : Charts, maps, register, almirah, etc.

Procedure:

- Develop a survey form and conduct the same
- Develop a pre test and post test and administrator
- Conducting an end of the project assessment for the adult learners
- Compare the results of pre and post test and analyze the data

Project/ Activity 17: Resources for Classroom Use and School Use

Specific Activities

- Identification of the concept/topic/lesson for which teaching aids are to be prepared.
- Identification of the teaching aids to be prepared-flashcards, chart, model, scrapbook, flannel board,
- improvised apparatus, etc.
- Making a plan/working drawing of the teaching aid as also a list of tools and materials required.
- Collecting materials needed for making it.
- Preparing the teaching aid under the guidance of the teacher.
- Using the teaching aid on a sample of students to find out its effectiveness and defects.
- Submitting it to the school authorities for use.

Procedure

- Brainstorm with the concerned subject teacher and develop a mind map
- Identify resources to be developed according to the subject
- Work in groups of 3-5 to develop resources, aids for a particular subject
- Pilot them in class in age-appropriate ways, modify if required

Assessment

- In groups, write a report based on the template developed
- As peer educator/ mentor / buddy, teach a lower class level using the resources developed
- Video film a lesson you are teaching using the resources developed and share it with other groups

CHAPTER 6

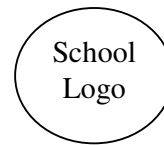
STRAND 4: HEALTH AND ACTIVITY RECORD

Note:

- The schools will maintain record of children in the formats given in next pages. This is only for the purpose of maintaining record and communication with parents, or if any information is required to be shared. It is for encouraging the child to attain health and wellness.
- No weightage of Health Record is to be given in result.
- This information of the students written in Health Record should not be shared with any third party/ agency in any case. Privacy must be ensured.



HEALTH AND ACTIVITY RECORD



GENERAL INFORMATION

Aadhar Card no. of Student (optional) _____

NAME: _____.

ADMISSION NO.: _____ DATE OF BIRTH: _____.

M F T _____ BLOOD GROUP: _____.

MOTHER'S NAME: _____.

YOB _____ WEIGHT _____ HEIGHT _____ BLOOD GROUP _____

AADHAR CARD NO. (optional) _____

FATHER'S NAME: _____.

YOB _____ WEIGHT _____ HEIGHT _____ BLOOD GROUP _____

AADHAR CARD NO. (optional) _____

FAMILY MONTHLY INCOME _____.

ADDRESS _____

_____.

PHONE NO. _____ (M): _____.

CWSN, SPECIFY _____.

SIGNATURE OF PARENTS/ GUARDIAN

DATE:

Fitness Components	Fitness Parameters		Test Name	What does it measure	Age 15+ Yrs
Health Components	Body Composition		BMI	Body Mass Index for specific Age and Gender	Height, Weight
	Muscular Strength	Core	Partial Curl Up	Abdominal Muscular Endurance	60 seconds
		Upper Body	Flexed/ Bent Arm Hang	Muscular endurance/functional strength	Yes
	Flexibility		Sit and Reach	Measures the flexibility of the lower back and hamstring muscles	Yes
	Endurance		600 Mt Run	Cardiovascular Fitness/ Cardiovascular Endurance	Yes
	Balance	Static Balance	Flamingo Balance Test	Ability to balance successfully on a single leg	Yes
Skill Components	Agility		Shuttle Run	Test of speed and agility	6 x 10 Meters Shuttle Run
	Speed		Sprint/ Dash	Determines acceleration and speed	50 Meter Dash
	Power		Standing Vertical Jump	Measures the Leg Muscle Power	Yes
	Co-ordination		Plate Tapping	Tests speed and co-ordination of limb movement	-
			Alternative Hand Wall Toss Test	Measures hand-eye coordination	Yes

Test Details are:

Test Name	What does it measure	How to Perform	Equipment Required	Scoring
BMI	Body Mass Index for specific Age and Gender	BMI is calculated from body mass (M) and height(H). $BMI = M / (H \times H)$, where M = body mass in kilograms and H = height in meters. The higher the score usually indicating higher levels of body fat.	Scales and stadiometer as for weight and height.	Height and Weight as per the WHO for each Age and Gender
Partial Curl Up	The curl up test measures abdominal muscular strength and endurance of the abdominals and hip-flexors, important in back support and core stability.	The subject lies on a cushioned, flat, clean surface with knees flexed, usually at 90 degrees, with hands straight on the sides (palms facing downwards) closer to the ground, parallel to the body. The subject raises the trunk in a smooth motion, keeping the arms in position, curling up the desired amount (at least 6 inches above ground). The trunk is lowered back to the floor so that the shoulder blades or upper back touch the floor.	Flat, clean, cushioned surface, stopwatch, recording sheets, pen	Record the maximum number of sit ups in a certain time period, such as 30 seconds (Age 9-14 years) or 1 Minute (Age 15+)
Flexed/ Bent Arm Hang	Upper body functional strength and muscular endurance	The subject is assisted into position, the body lifted to a height so that the chin is level with the horizontal bar. The bar is grasped using an overhand grip (palms are facing away from body), with the hands shoulder width apart. The timing starts when the subject is released. They should attempt to hold this position for as long as possible. Timing stops when the person's chin falls below the level of the bar or the head is tilted backward to enable the chin to stay level with the bar.	Stopwatch, an elevated horizontal bar	The total time in seconds is recorded.
Sit and Reach	Common measure of flexibility, and specifically measures the flexibility of the lower back and hamstring muscles. This test is important as because tightness in this area is implicated in lumbar lordosis, forward pelvic tilt and lower back pain	This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet are placed flat against the Sit and Reach box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down. With the palms facing downwards, and the hands on top of each other or side by side, the subject reaches forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for at one-two seconds while the distance is recorded. Make sure there are no jerky movements.	Sit and Reach box with the following dimensions: 12" x 12" (sides) 12" x 10" (front and back) 12" x 21" (top) Inscribe the top panel with centimeter/mm gradations. It is crucial that the vertical plane against which the subject's feet will be placed is exactly at the 23 cm mark.	The score is recorded to the nearest centimeter as the distance reached by the hand
600 Mt Run	Cardiovascular Fitness/ Cardiovascular Endurance	Participants are instructed to run 600 mts. in the fastest possible pace. The participants begin on signal, "ready, start" as they cross	Stopwatch, whistle, marker cone, lime powder,	Time taken for completion (Run or Walk)

		the finish line elapsed time should be announced to the participants. Walking is permitted but the objective is to cover the distance in the shortest possible time.	measuring tape	
Flamingo Balance Test	Ability to balance successfully on a single leg. This single leg balance test assesses the strength of the leg, pelvic, and trunk muscle as well as dynamic balance.	Stand on the beam/line with shoes removed. Keep balance by holding the instructor's hand. While balancing on the preferred leg, the free leg is flexed at the knee and the foot of this leg held close to the buttocks. Start the watch as the instructor lets go. Stop the stopwatch each time the person loses balance (either by falling off the beam or letting go of the foot being held).	Stopwatch, can be done on just standing on one leg on a thin line (Age Group: 5-8 years) or a beam locally procured (Age Groups: 9-14, 15+ years)	Total time till the subject loses balance.
Shuttle Run	Test of speed and agility	Marker cones and/or lines are placed 10 meters apart. Start with a foot at one marker. When instructed by the timer, the subject runs to the opposite marker, turns and returns to the starting line. This is repeated four times without stopping (covering 40 meters total) for Age 9-14 years <u>OR</u> repeated five times without stopping (covering 50 meters total) for Age 15+ years. At each marker both feet must fully cross the line.	stopwatch, measuring tape, marker cones, a flat non-slip surface	Record the total time taken to complete the 40 mt/50 m course.
Sprint/Dash	Determines acceleration and speed	The test involves running a single maximum sprint over 20 meters (Age 5-8 years)/30 mts (Age 9-14 years)/50 Mts (Age 15+), with the time recorded. A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary position, with one foot in front of the other. The front foot must be on or behind the starting line. This starting position should be static (dead start). The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and encouraged to continue running hard through the finish line.	Measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 60 meters.	Time taken for completion
Standing Vertical Jump (Sargent Jump)	Measures the Leg Muscle Power	The subject stands side on to a wall and reaches up with the hand closest to the wall. Keeping the feet flat on the ground, the point of the fingertips is marked or recorded. This is called the standing reach height. The athlete then stands away from the wall, and leaps vertically as high as possible using both arms and legs to assist in projecting the body upwards. Attempt to touch the wall at the highest	measuring tape or marked wall, chalk powder for marking wall	The jump height is usually recorded as a distance score.

		point of the jump. The difference in distance between the standing reach height and the jump height is the score.		
Plate Tapping Test	Tests speed and co-ordination of limb movement	If possible, the table height should be adjusted so that the subject is standing comfortably in front of the discs. The two yellow discs are placed with their centers 60 cm apart on the table. The rectangle is placed equidistant between both discs. The non-preferred hand is placed on the rectangle. The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible. This action is repeated for 25 full cycles (50 taps).	Table (adjustable height), yellow discs (20cm diameter), rectangle (30 x 20 cm), stopwatch.	The time taken to complete 25 cycles is recorded
Alternative Hand Wall Toss Test	Measures hand-eye coordination	A mark is placed a certain distance from the wall (e.g. 2 meters, 3 feet). The person stands behind the line and facing the wall. The ball is thrown from one hand in an underarm action against the wall, and attempted to be caught with the opposite hand. The ball is then thrown back against the wall and caught with the initial hand. The test can continue for a nominated number of attempts or for a set time period (e.g. 30 seconds). By adding the constraint of a set time period, you also add the factor of working under pressure.	tennis ball or baseball, smooth and solid wall, marking tape, stopwatch	Score of the number of successful catches in a 30 second period

Chapter 7

Transactional Strategies for the Strands of HPE

(Except Health and Activity Record)

The cross-cutting themes of the transactional strategy are as follows:

- Transacting it through cross curricular linkages cutting across subjects, thus creating interest and motivation, enhancing physical fitness levels thus leading to overall health.
- Enhancing Life Skills such as creative and critical thinking, problem solving and decision making, inter personal and Intra personal skills, empathy and self awareness, effective communication and collaboration and team-work.
- Focus on inclusion

The ways of transaction across the curriculum would include:

- Recognition of HPE as a compulsory component across stages beginning with pre-primary, primary, upper primary, secondary and senior.
- The CBSE in its previous circulars and advisories has already mandated at least forty-five to sixty minutes of compulsory transaction on a daily basis.
- PE has been an integral theme of the **Comprehensive School Health Manuals** (brought out in four volumes by the Board in 2005, revised in 2010). (Available under Resources)
- Resources for transacting PE by providing linkages across subjects at the Pre-primary, and Primary level are already available in **Physical Education Cards** brought out for teachers and students. (Available under Resources)
- PE Cards are also available for differently-abled children as PEC ability cards and also for secondary level (SPEC). (Available under Resources)
- **Life Skills Manuals** for Primary, Middle and Secondary have activities and themes for transaction of PE across classes in age appropriate ways. (Available under Resources)

Specific transactional methodology for Class IX – XII

- Students should select the activities they want to pursue further whether as specialists or for personal enjoyment.
- If students are to prepare themselves for using their leisure time effectively, they will need to acquire the knowledge and skills of a broad range of activities, sports and games so that they are able to make truly informed choices about the activities they want to get involved in as part of their own healthy lifestyle management. Therefore, facilitate sports/games/health and fitness/SEWA activities by discussing with students about the knowledge, attributes, skills, strategies and / or compositional knowledge required to meet the outcomes of the activity and involve students as performers and officials, judges and/or referees.
- Inter-class/ school games, competitions and performances must be encouraged and used as opportunities for assessing students using the continuous and comprehensive assessment framework.

- All schools cannot include every physical activity within its time table.
- The list of physical activities available to young people these days is vast and ranges from the very traditional, indigenous games of our country to the increasingly popular games and pastimes of the west. Combinations of activities chosen must take the choices of the students into account.
- **Schools may add their own games, sports and activities to the relevant category**
- Schools may choose the activities they wish to include depending on the infrastructure and expertise available as well as interest of their students.
- In classes IX and X, whereas all students are expected to involve themselves in games, activities and sports, it is possible that some of them may choose to excel in areas of their interest. It is therefore, recommended that such students be permitted to pursue **one activity out of the strands over each year**. This will allow for specialization whilst still providing breadth to their learning.
- As far as PE is concerned, there is a need to create a skilled class of PE educators or trainers through the TOT, cascade model, a beginning of which was made by CBSE in the PEC program. (Physical Education Cards) PE cards are age appropriate tools for implementing the PE curriculum using a cross-curricular approach.

Chapter 8

Assessment for the Strands

- The strands conceptualized will be assessed internally through a blended approach of self-assessment and teacher assessment.
- **There will be no separate theory part as was the trend earlier.**
- Students will be assessed in each of the strands on the basis of evidence such as - direct observation, checklists, and/or use of video. In case of SEWA Projects Students plan and conduct projects and communicate their findings. Evidence in this case can include journals, diaries, essays, laboratory reports, oral presentations and/or the use of video, etc.

Maximum marks allotted for each strand are given in table 1.1. SEWA can be assessed on the basis of the rubric developed by the class teacher for the project chosen by the class for that year. Each game/ sports/ activity should broadly be assessed on the basis of following criteria and marks should be given accordingly:

- Participation in game/ sports/ SEWA/ activity
- Basic Knowledge & understanding of the game/ sports/ SEWA/ activity
- Skills learnt/ development or enhancement of skills of game/ sports/ SEWA/ activity
- Motivation to excel
- Improvement in performance (competing with self)
- Team spirit
- Development/ enhancement of
 - Organizational skills for game/ sports/ SEWA/ activity
 - Leadership skills/ qualities
- Sensitivity towards
 - CWSN (children with special needs) / inclusion in team
 - Sensitivity towards gender in team