

NEW BHARATH MATRICULATION HIGHER SECONDARY SCHOOL
THIRUVARUR

STANDARD - 4

PHYSICAL EDUCATION

YOGA AND

HEALTH EDUCATION

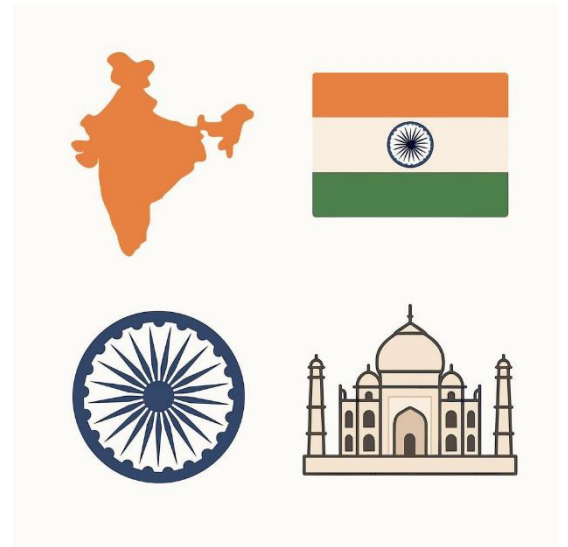


THE NATIONAL ANTHEM

Jana-Gana-Mana-Adhinayaka Jaya he
Bharata - Bhagya - Vidhata
Punjaba - Sindhu - Gujarata - Maratha
Dravida - Utkala - Banga
Vindhaya - Himachala - Yamuna - Ganga
Uchchhala - Jaladhi - Taranga

Tava Subha Name Jage,
Tava Subha Asisha Mage,
Gahe Tava Jaya Gatha.

Jana - Gana - Mangala - Dayaka, Jaya he
Bharata Bhagya Vidhata
Jaya he, Jaya he, Jaya he,
Jaya JayaJaya, Jaya he.



Mahakavi - Rabindranath Tagore

OLYMPIC OATH

"In the name of all competitors, I promise that we shall take part in the Olympic Games, respecting and abiding by the rules that govern them, committing ourselves to a sport, without doping and without drugs, in the true spirit of sportsmanship, for the glory of the sport and the honour of our teams."



"An honest man is the noblest work of God."

- Alexander Pope

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1. BODY PARTS AND THEIR FUNCTION



We have
brain to think



We have
two eyes to see



We have
two ears to hear



We have
One nose to breathe



We have
Teeth to chew



We have
Tongue to taste



We have
Hands to work



We have
skin to feel



We have
legs to walk and run

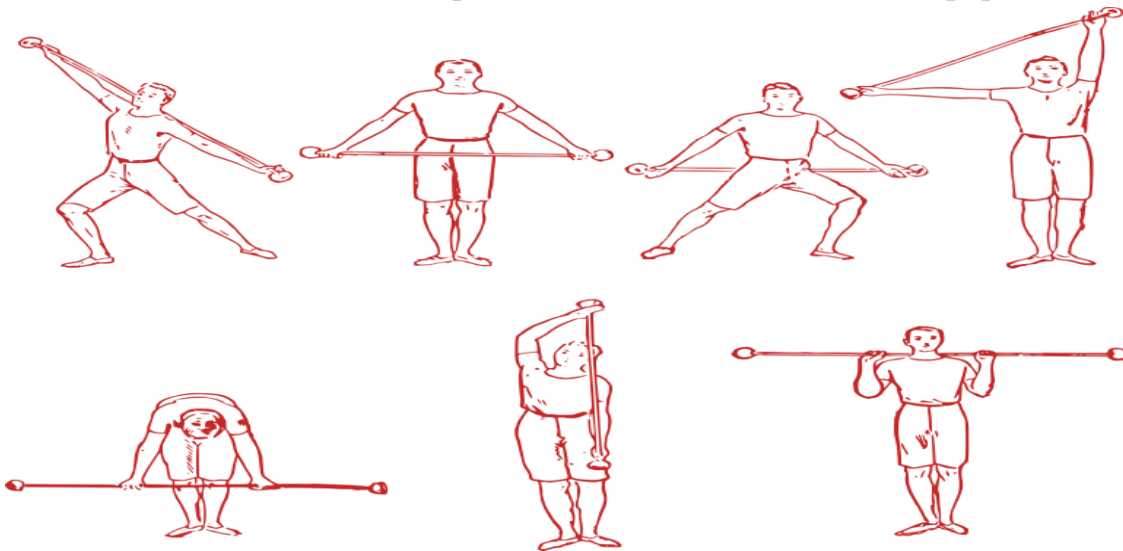
2. MASS DRILLS

The mass drills is a group activity. It includes body building exercises of free arm type, exercises with light apparatus like Dumb-bells, Wands, Flags etc.

Mass drills may be divided into formal and non-formal. Formal exercises are done to counts and commands. Non formal exercises are done by way of imitation, dramatization etc.,

2.1 WAND DRILLS

Performing four count exercises with wands, of about, 1 meter is called wand drills. The wands can either be painted or decorated with colour papers.



Exercise-1

- 1.1 Raise the hands forward upto the shoulder level. Take the left leg on step forward.
- 1.2 Wands upward – look straight
- 1.3 same as number one
- 1.4 Back to position.

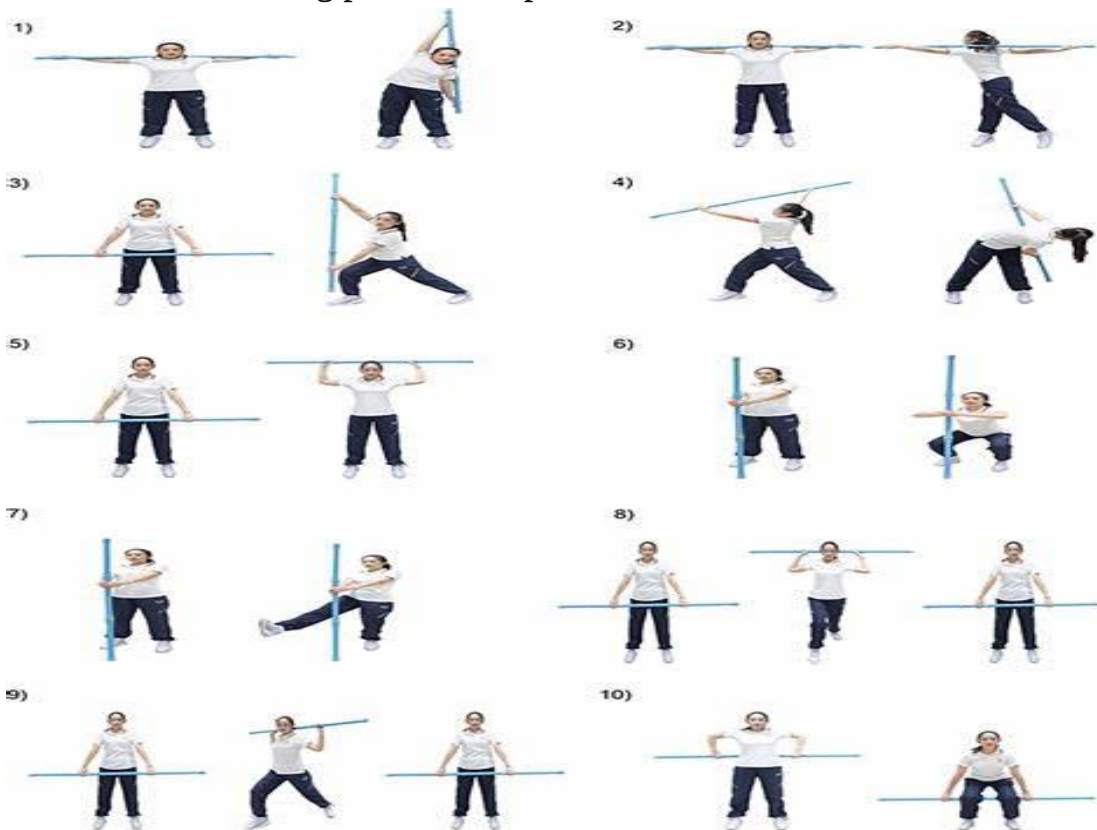


Exercise-2

- 2.1 Raise the hands forward upto the shouilde level. Take the left right one step forward.
- 2.2 Return to count-one position.
- 2.3 Back to starting position.

Exercise-3

- 3.1 Raise the hands upwards above the head.
- 3.2 Bend forward and bring the wands close to the ground.
- 3.3 Return to count-1 position.
- 3.4 Back to the starting position. Repeat the same for 16 counts.



Exercise-4

- 4.1 Bring the wands to the shoulder by flexing the elbows
- 4.2 Raise the arms upward above the head and raise the heels.
- 4.3 Return to count-1 position
- 4.4 Back to the starting position. Repeat the same for 16 counts.

2.2 HOOP DRILLS

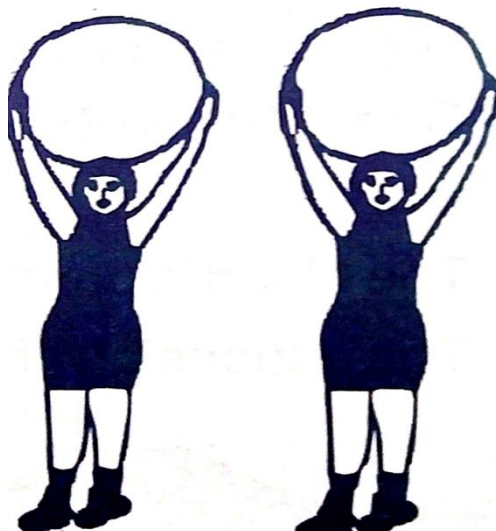
Hoop drill form is used widely in major public functions. It is an exercise performed by holding hoops made of bamboo. It has now become very popular all over the world. If bits of white or color papers are pasted on the ring, the entire performance will draw much attention.



Preparatory position: Stand with both legs closed to each other. Hold the ring in two hands and bring it near the knees.

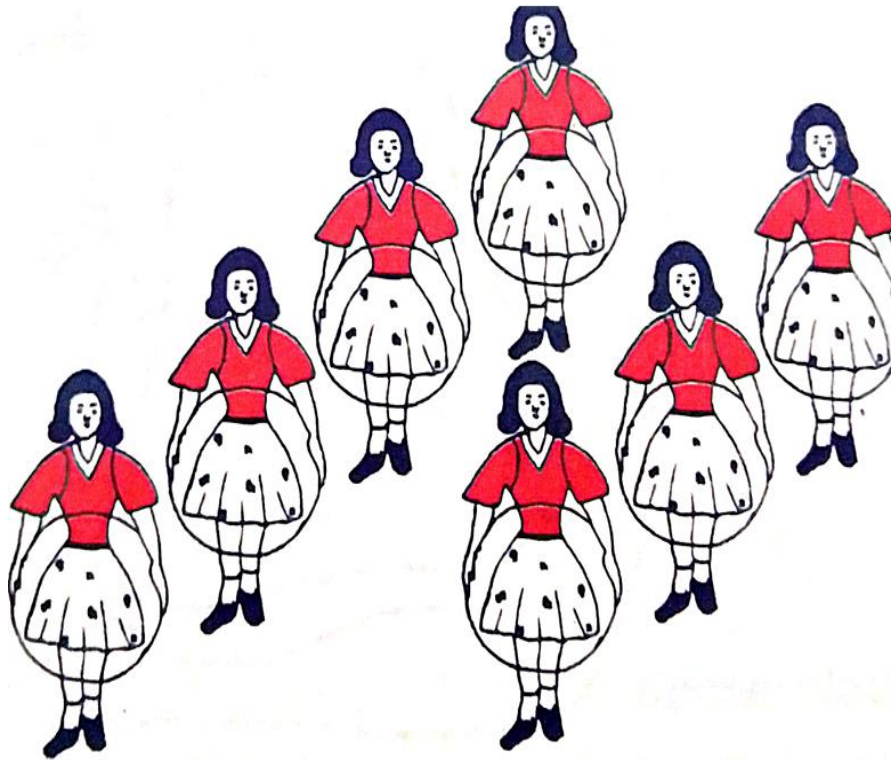
Exercise-1

- 1.1 The hoop has to be brought before the face.
- 1.2 Raise the hands over the head.
- 1.3 Repeat as number one.
- 1.4 Back to the preparatory position.



Exercise-2

- 2.1 Bring the hoop before the face.
- 2.2 Stretch the left hand to its full length.
- 2.3 Return to the first stage.
- 2.4 Back to the preparatory position.



3. YOGASANAS

Yoga as a system of Physical exercise has been existing in India since Ancient time. The word Yoga is derived from “yog” Which means union between Jivatma and paramatma.



**Half Lotus pose
Aradha Padmasana**

WHY YOGASANA?

1. Asanas give sufficient exercises to the internal organs of the body.
2. Yogasanas have a greater impact on the mind and the senses.
3. One who performs yogasanas looks younger in age and lives longer.
4. The blood is purified.
5. The expansion of lungs increased.



Ushtrasana

3.1 HALASANA



Instruction:

- Lie flat on the back with arms stretched by the side of the body palms facing the ground.
- Place the legs together and keep them straight. Raise the legs up slowly.
- Do not bend the knees and do not raise the arms.
- Begin lowering the legs over the head and the toes touch the ground.

Benefits:

- This asana nourishes the blood vessels of the spinal column.
- It makes the spine flexible and elastic.
- It eliminates muscular rheumatism, lumbar pain etc.

3.2 PARVATASANA



Instruction:

- Sit erect on carpet, keeping the right foot over the left thigh.
- Keep the left foot over the right thigh.
- Raise the arms upward close the palms as given in the picture.
- Body erect, look straight.
- Keep this position for a few seconds and come back to position.

Benefits:

- Parvatasana gives a full body stretch which improves the blood circulation around the body. It reduces mental fatigue. It also improves the blood circulation in the brain.

3.3 EKA PADASANA



Instruction:

- Stand on the carpet in attention position, arms upward palms close facing each other.
- Bend the body forward parallel to the ground, as given in the picture.
- Extend the left leg backward, Knee straight.
- Keep this position for a few seconds and come back to position.

Benefits:

- This asana gives pressure to the small intestine.
- It cures the diseases of the throat such as tonsillitis.
- It makes the voice sweet and melodious.

3.4 VIPARITA KARANI MUDRASANA



Instruction:

- Lie flat on the back
- Raise the legs and hip with the help of the arms.
- Hold the help with the hands. So that the body is supported on the elbows are shown in the picture.
- Remain in this position form 5 seconds.

Benefits:

- This asana prevents the formation of wrinkles on the face.
- It makes the eyes brighter.
- It makes the voice sweet and melodious.

4. A FEW ACTIVITIES TO MAINTAIN HEALTH

4.1 Cycling:



Cycling is an interesting activity. It gives exercise especially for lower limb. It is necessary to go for cycling every day.

Cycling is an enjoyable way to stay healthy, including helping you lose weight, lower your cholesterol and strengthen your legs.

Cycling is a low impact aerobic exercise that offers a wealth of benefits. It also varies in intensity, so it's suitable for all levels. You can cycle as a mode of transportation, for casual activity, or as an intense, competitive endeavor.

Cycling is a wonderful workout that keeps you active. It can help shape a healthy lifestyle, both physically and mentally.

Continue reading to take a look at some of the ways cycling can enhance your fitness level and well-being.

4.2 Swimming:



Today almost all apartments and colonies have a swimming pool and children love swimming especially in summer days. Make this a part of life and this is the life and this is the best exercise to keep in shape.

One of the biggest benefits of swimming is that it truly works your entire body, head to toe. Swimming:

- increases your heart rate without stressing your body
- tones muscles
- builds strength
- builds endurance

There are various strokes you can use to add variety to your swimming workout, **including:**

- breaststroke
- backstroke
- sidestroke
- butterfly

Each focuses on different muscle groups, and the water provides a gentle resistance. No matter what stroke you swim, you're using most of your muscle groups to move your body through the water.

Using stairs:

Instead of using a lift better you can use stairs. Climbing stairs can give a good workout to hip, legs etc., It is every helpful for strengthening the heart.

1. **Good for your heart:** Stair climbing gets your heart pumping.
2. **Improves muscle strength, bone density, and joint flexibility:** It engages muscles in your legs, abs, back, and arms.
3. **Burns more calories than jogging:** You can burn 5-11 calories a minute climbing stairs.
4. **Great stress reliever:** Stair climbing can help reduce stress.
5. **Convenient and readily accessible form of exercise:** It enhances heart and lung function, reduces the risk of diseases, and strengthens muscles.

5. TRACK AND FIELD EVENTS

Track and field Athletics consist of the natural activities of running, Jumping, and throwing. Even through these activities are natural, efficiency in performance and better results can be obtained only by hard training and proper adoption of the techniques of the concerned events.

Kinds of Running Races:

1. Sprints
2. Middle distance race.
3. Long distance race
4. Hurdle race
5. Relay race
6. Cross country race
7. Marathon race etc.

5.1 Sprint Events:



100 meter, 200m and 400m races are called sprint events.

The skills involved in sprint events:

1. Starting
2. Strides in running
3. Finishing

Types of Starting methods:

1. The Bunch Start
2. The medium
3. The Elongated start

The Bunch Start:

The runner places the front foot about 19 inches from the starting line and the rear foot about 29 inches from it. This type of start provides a high elevation, a favorable body lean and a faster foot action.

The Medium start:

The runner places the front foot about 15 inches from the starting line and the about 15 inches from the starting line and the rear foot about 34 inches from it.

The Elongated Start:

The runner places the front foot about 13 inches from this starting line and the rear foot about 41 inches from it.

Starting of the Sprint Events:

There are three commands that a starter gives while starting the race.

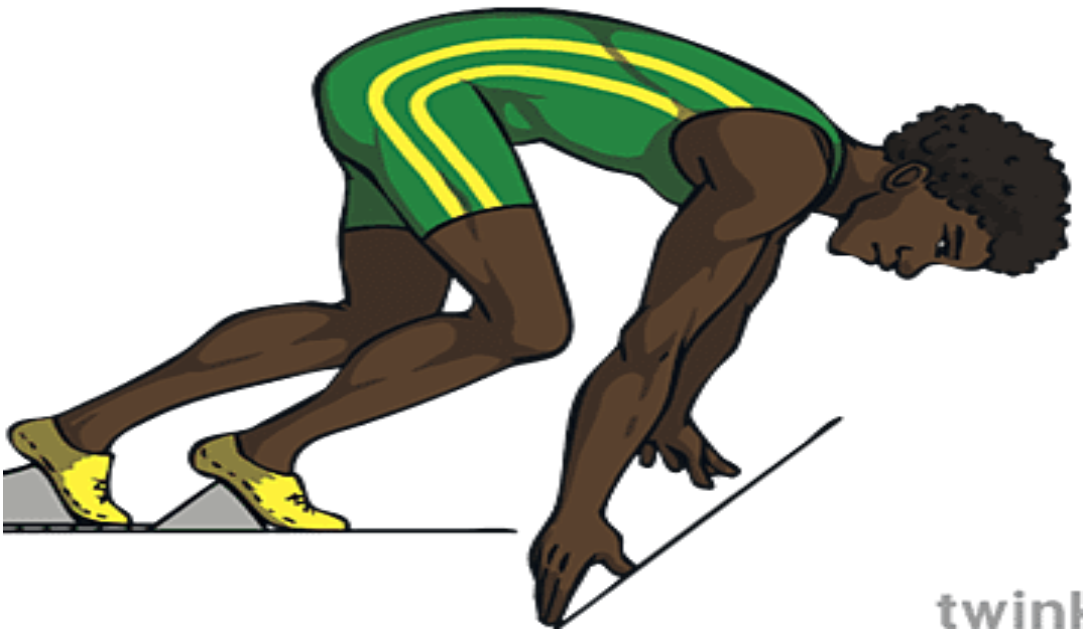
- On your marks
- Set
- Go

On your Marks:



When the starter says “On your Marks” the runners should take up their position, behind the starting line as shown in the picture.

Set:



When the starter commands “SET” the sprinter racks further forward over his hands raising his hip without any Jerkey movements.

The help will be slightly, higher than the shoulder. Push the upper limb forward to have an unstable position of the body as shown in the picture.

Go/Gun Fire:

When the starter commands “Go” or fires the Gun, the sprinter runs out of the starting block and keeps the first two or three strides of the feet close the ground. The body angle will get more upright until about eight strides.



The Finishing Techniques In Sprint Events

A runner having approaches a few strides from the tape can employ any of the following finishing techniques.

- Run through Technique.
- Drop finish Technique.
- Shoulder shrugging Technique.

Finishing the Race:



When a runner's "Torso" crosses the tape at the finishing line, he is said to have completed the race.

The Important point that the Sprinters should follow:

1. In all sprint events, the runners should run in their own lanes only.
2. Athletes should not touch the starting line.
3. The runner should not take a foul start twice
4. The runner should obey the commands of the starter, recall starter and other officials concerned.

5.2 POLE VAULT:



Pole vault is similar to high jump. But the pole vaulter should clear a cross bar placed between the vertical stands with the help of a pole, as given in the picture.

The distance between the vertical stands shall be 4.30m to 4.37meters.

The measurements of the landing area:



The landing area shall not be less than 5x5 meters with foam mats sufficiently provided to avoid injuries.

The basic skills involved in pole vault:

1. Proper holding of the pole.
2. Run with the pole.
3. Planting the pole in the vaulting box
4. Getting up
5. Perfect parabola at the top of the pole.
6. Turning the body towards the running direction.
7. Leaving the pole and proper landing.

Planting and jump up:



When the jumper reaches the vaulting box, he should plant the pole into the box. Push the right shoulder and both hands forward and upward. Take off with the left leg. The body should be straight at the elbow flexed.

Crossing the bar:



Lift the body up. When the left leg is swung, turn the body upside down as shown in the picture. Then throw the legs over the cross bar and push away the pole by the hands. After a successful jump relax the body and land on the landing foam gracefully.

To perform the event of the pole vault successfully, all the parts of the body should co-ordinate effectively. The Participant must undergo regular practice under the supervision of a coach. He or she must practice pole vaulting only on foam mats.

This event should be performed only on foam/ soft mats to avoid injuries. It is better to practice, under the supervision and guidance of the coach.

Fouls in pole vault:



1. Touching the landing area before vaulting
 2. Knocking the cross bar.
 3. Shifting the hand grip after take off
 4. Delaying more than one minute after the cell.
-

6. SPORTS RHYMES

6.1 FOOT BALL

Tell me Tell me !

How many players will play

In a football team ?

Field players Eleven

and Substitutes seven



6.2 BASKET BALL

Tell me Tell me !

How many players will play

in a basketball team ?

Field players Five

and Substitutes Seven



6.3 KHO – KHO

Tell me Tell me
How many players will play
in a Kho - Kho team?
Field players nine
And substitutes Three



6.4 HOCKEY



Tell me Tell me
How many players will play
in ah Hockey team?
Field players Eleven
and substitutes Five

6.5 ATHLETES

Tell me Tell me !
How many Athletes will run
in a relay team ?
Relay runners four
Record breakers rare.



6.6 SUBSTITUTES

Tell me Tell me !
Who are called substitutes ?
They are also players
Put in the place of another.
When he is unable to play.



6.7 GET UP EARLY



Morning is to read and write

Evening is to play with a bat

Night is to sleep: it is very nice

Forget not to wake up, before sun rise

7. CONVERSATION



Varun : Where are you going Kanishk?

Kanishk : I am going to the club

Varun : What do you do there?

Kanishk : I play tennis there with my friend, Khan

Varun : Do you play tennis every day ?

Kanishk : Yes, It keeps my body and mind fit. Do you play any game-
Varun.

Varun : Yes, Kanishk

Kanishk : Which games do you play?

Varun : I play Cricket and football to keep my body healthy and fit.

Kanishk : I think games are essential for good health.

- Varun : You are right Kanishk games are essential for everybody.
- Kanishk : But some people do not play any game. Also they do not realize the importance of games and sports.
- Varun : No doubt such people always suffer from one or other ailment.
- Kanishk : You are absolutely right.
- Varun : I think Kanishk, games and sports should be made compulsory for the students.
- Kanishk : I agree, games and sports will keep the students, healthy and fit. We also study well.
-

8. MINOR GAMES

Minor games are games of low organization which involve simple skills and a few rules. They require a few or no equipment. A little area and a short duration of time. They can be adapted to any situation and can be played by different age groups.

8.1 All- up and All-down relay



Opposite to each team on the turning line. Mark a circle one meter in diameter and in each circle keep four Indian Clubs standing.

At the signal the first player runs forward, knocks the clubs down returns and touches off the second players, who runs forward and sets the clubs up again.

The third player knocks them down, and so on. Thus the relay continues knocking and setting the clubs up until all have run. The team finishing first wins.

8.2 Double Hobble relay



Arrange the teams in file behind the starting line in pairs. The players place the inside arm around each other's shoulders and grasp the ankle of the outside foot raise backward with the hand. At a given signal, the pair hop to the turning line and back and sets off the next pair.

While the first pair hops to the turning line and back, the second pair gets into position to start. If players lose their starting position while hopping, they must stop and resume this position before continuing the race. The team finishing first wins.

8.3 HUMAN WHEEL BARROW RELAY



Arrange the teams in file behind the starting line in pairs. At signal, the first places his hands on the floor, the second player grasps his ankles and list his legs as shown in the picture.

In this position they travel to the turning line. The front player. Travelling on his hands. On reaching the turning line they reverse their positions and return, touching off the second pair who repeat.

8.4 OSTRICH TAG

The players are scattered in the marked area and 'it' attempts to tag them. A player is safe when he stands on one foot with the arm under the knee of the leg raised in the air and grasping the nose.

When 'it' is not near, they run. Each player may use this method of escape three times. And then they may escape. Only by running. Anyone who tagged becomes 'it' and the game continues.

8.5 CIRCLE ZIG – ZIG RELAY



The players are divided into equal number and each team forms a circle by holding hands and looking inside the circle. They drop down their hands after the circle is formed the captions of each team is given a ball.

At the signal the captain of each team with the ball starts running of his right weaving in and out between the orders in his circle. On reaching his original place he gives the ball to the next player to his right who starts weaving in similar manner, thus every one in the circle takes his chance. The team that gets all its players around first is the winner.

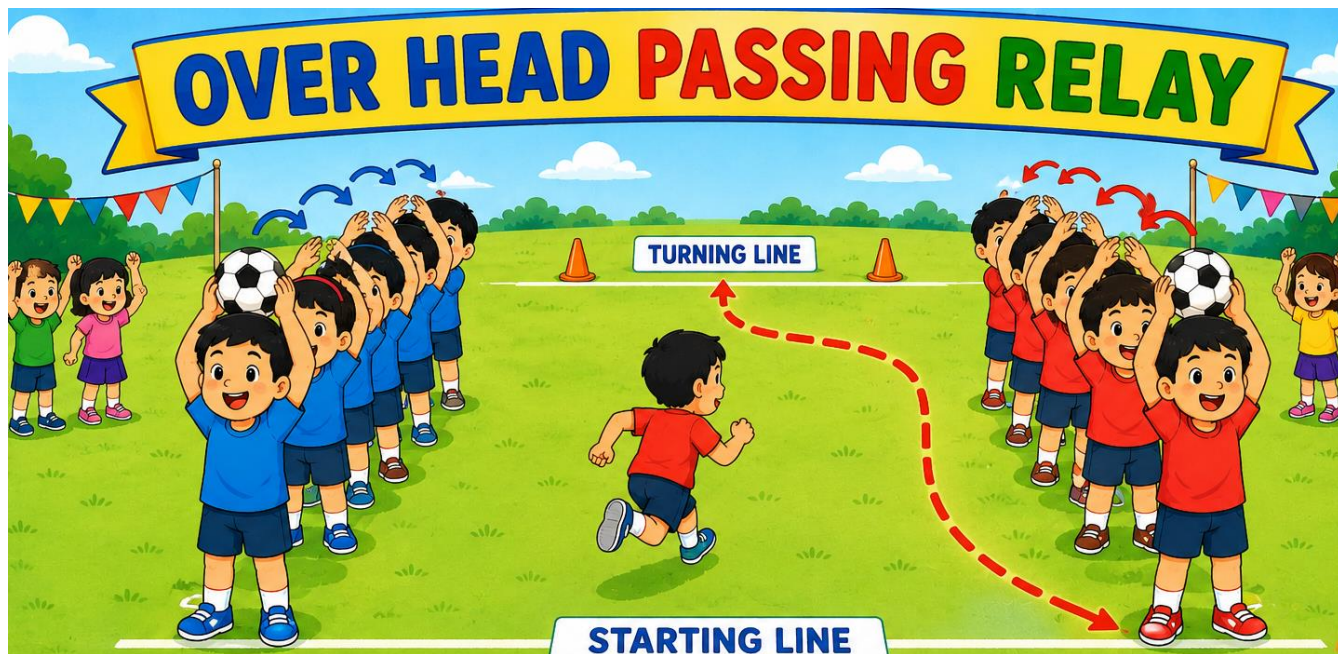
8.6 OBSTACLE RELAY



Between the starting line and the turning line, place a series of obstacles in the path of each team.

At a given signal, the first player of each team runs through the obstacles in his path, and returning through the obstacles again, and touching the next player in line. Who then repeats.

8.7 OVER HEAD PASSING RELAY



Divide the players into teams and arrange them in files behind the starting line, facing front. A turning line is marked five meter in front of the starting line, Give the front player of each team a ball.

At a signal the ball is passed back over the heads of the players, the rear player on getting the ball runs forward to the turning line, then returns and takes his pace at the front of the Line, and passes the ball back again.

This continues until the player who was in front at first comes to the same places again and holds the ball up. The team doing this first wins.

9. HEALTH EDUCATION

Health education is the basis of preventive medicine. It provides us knowledge about various diseases and also the methods by which they can be prevented. Health education aims at building a healthy individual, healthy environment and a healthy society.

Health: Health is defined as a state of complete physical mental and social well-being. The mere absence of a disease alone cannot be considered as health.



Physical health: Denotes the normal functioning and growth of all parts of the body and also the body as whole.

Mental health: Denotes self-satisfactions, self-control and self-adjustment of an individual.

Social health: Denote the ability an individual to adjust with the society.

The factors which determine the health of an individual are:

1. Nature of ones genes,
2. Environment in which one lives
3. Economic status
4. Lifestyle
5. Health care



Disease: The word disease in the literal sense means uneasiness to the body. Diseases can be caused by a number of factors like.

1. Infections
2. Malnutrition
3. Congenital defects
4. Endocrine disorders,
5. Development of tumors
6. Allergic conditions etc.

Health and Nutrition:

A good nutrition is essential for normal growth, development and maintenance of health. The process by which food is utilized for growth and development.

Food contains a variety of substances like carbohydrates, proteins, fats, vitamins, minerals and water.

These constituents of food are necessary for:

1. Providing energy
2. Body building and repair
3. Maintaining and regulating the functions of tissues.

Balanced Diet: A balanced diet is defined as a food which contains adequate amount of carbohydrates, proteins, fats, vitamins, minerals and water provide enough energy and maintain good health.

Composition of balanced diet: The composition of balanced diet for an average Indian male is as follows.

Cereals	-	400 grams
Pulses	-	55 to 70 grams
Leafy vegetables	-	100 grams
Other vegetables	-	75grams
Roots and tubers	-	75 grams
Milk	-	200 grams
Fats and oils	-	35 grams
Meat and fish	-	30 grams
Egg	-	30 grams
Fruits	-	30 grams
Sugar and Jiggery	-	30 grams

Cereals:

Include rice, maize, barley, oats and millets. They provide about 30 to 80 percent of calories.

Pulses:

Include peas, beans, lentils and gram. Pulses contain high amount of protein and also vitamin B and minerals.

Leafy vegetables:

Include spinach, Amaranthus and cabbage. They contain high amount of starch similar to cereals.

Roots and tubers: Include potatoes, tapioca, carrot, iron and radish. They contain a high amount of starch similar to cereals.

Milk: is a complete and perfect food. It contains carbohydrates, proteins, fat, vitamins, water and minerals. The constituents of milk are

Carbohydrates :	lactose
Proteins :	Casein, lactalbumin, lactoglobulin
Fat :	Milk fat is a good source of vitamin A and D
Minerals :	Calcium, Phosphate, Magnesium, Iodine
Vitamins :	Vitamin A, D, Thiamine, riboflavin

10. SAFETY EDUCATION

The safety of children is potentially at risk from accidents and injuries, as well as crime. Providing a safe environment, putting preventive measures into practice, and teaching children methods of self-protection are all ways and means to reduce the potential harm to children.

Do not fly kite standing on the terrace wall.



Use the Zebra line to cross the road.

Do not play in-side the House



Do not board on a running bus

Do not play on a Road





Do not poke finger into a moving table fan

Do not accept any thing from strangers.



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