

PHYSICAL FITNESS TRAINING

Introduction

1. Progression in physical training should be maintained throughout all stages of the syllabus.
2. The emphasis in a lesson is to be on vigorous exercise—to stimulate an active interest in some aspect of physical recreation for leisure time, to give an opportunity to learn or practise skills or activities and to give satisfaction and enjoyment to the class.
3. Example lessons are given later in this chapter followed by a variety of exercises and activities from which a choice can be made when preparing physical training lessons.

THE PHYSICAL TRAINING LESSON

4. A framework for the construction of the lesson is given below for guidance:
 - a. *Part One—Warm-up—2-4 Minutes.*
 - (1) Introductory activity.
 - (2) Arm and shoulder exercises.
 - (3) Trunk exercises.
 - b. *Part Two—Strength and Endurance—8-10 Minutes.*
 - (1) Arm and shoulder exercises.
 - (2) Dorsal exercises.
 - (3) Abdominal exercises.
 - (4) Leg exercises.
 - c. *Part Three—Activities—16-20 Minutes.* A variety of purposeful activities, related to work or sport, performed in small groups to ensure continuous exercise for all and ample opportunity for practice.

THE PARTS OF THE LESSON

Part One—Warm-Up

5. The primary object of this part of the lesson is to obtain the warming and loosening effects which prepare the body for the more strenuous work of the later parts of the lesson. Introductory activities should provide a brisk and enjoyable start for the period, develop a state of mental alertness in the class and stimulate the respiratory and circulatory systems.

Part Two—Strength and Endurance

6. In the early stages, strengthening exercises may be performed without external assistance, but to achieve greater benefit, the use of equipment or human resistance is recommended. The following types of strengthening exercises are some which may be used:
 - a. Without apparatus.
 - b. Game form, partner or team.
 - c. With wall bars.
 - d. With medicine balls.
 - e. With sticks.

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Trunk Throwing the hammer (Astride, arms low crossed) Trunk bending downwards and circling upwards Allow slight knee bending

Part Two—Strength and Endurance

Arm and Shoulder (1) Rope climbing with and without use of legs Climb first in long sitting position with hands alone

(2) Beam stretch height, overgrasp, arm bending and stretching

Dorsal (1) (Prone lying, ball held behind neck) Trunk raising backwards (2) (Astride, trunk forward lean, grasp barbell or improvised weight) Trunk raising and lowering with weight held Weight about 80 lb

Abdominal (1) (Back lying, knees raised to 90° at the hips and knee, rest the feet against the wall bars, hands locked behind the head, shoulders off the floor) Trunk raising and lowering to try to touch wall bars

(2) (Back hanging from top wall bar) Knee raising and lowering

Leg (1) Skipping Alternate leg without rebound

(2) (Stand side towards wall bars, rest the nearest hand lightly on the nearest bar, raise forward the leg furthest from the bar) Bend and stretch the nearest leg with light support from the hand

Part Three—Activities

(1) Basket ball practices in passing, the lay in, dribbling. Game of basket-ball

(2) Vaulting—broad box with spring-board. Overswing Teach supporting

(3) High jump. Western roll practice

(4) Parallel bars. Practice according to ability: swinging, cycle travelling, balances, overswings

(5) Punch bag or ball Have mits or old elastic gloves available

Additional Notes

1. The class works in pairs at each exercise in the strengthening section and does as many repetitions of each exercise as it can.

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Leg	(1) Skip jumps from crouch. 4 skip jumps to land in crouch position on 5th	Variations such as turning and leg parting can be introduced.
	(2) Tug of war (partner) First hopping with one hand grasp. Then crouching with two hands grasp	If time, have tug of war competition. Leading men in each team grasp the stick, team members hold waist of man in front

Part Three—Activities

Volley-ball games

According to size of class and number of courts available

Additional Notes

1. Arrange the division of the class into teams and explain the lesson procedure before the class warm-up.
2. In the strengthening section the class should do all the free standing type of exercises first and the partner exercises next.
3. If time is available after all have finished the strengthening exercises, the winning teams may play each other and the losers play mat-ball for a short time.

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15. Shacking, striding, bounding, shaking Loose running, striding and bounding, generally warming the body and "loosening-up" the joints. Shaking the arms, wrists and fingers as if to remove sticky toffee papers from the fingers
16. Duck fighting (Partners) Crouch position, hands in front of the body, palms outwards. Knee springs and hops to push partner away or off balance
17. Knee boxing (Partners) Spar to slap each other's knee
18. Fox and geese (Small teams) The leader holds his arms sideways while the rest of the team forms a line behind grasping the waist of man in front. The "fox" tries to catch the end man. The leader and team move to prevent him.
19. Chinese wall Two parallel lines 10 feet apart. Two players defend the wall. Remainder try to break through. Those caught help to defend until one is left.

Arm and Shoulder Exercises

1. Arm circling (Astride) Loosely swing the arms forward, upwards and circle backwards. May be combined with heel raising
2. Arm circling in opposite directions (Astride) Both arms loosely circling, one arm coming up as the other goes down
3. Shoulder shrugging .. (Astride) Arms loosely bent across the body. Roll the shoulders freely upwards, backwards, downwards and forwards.
4. Informal lunge, one arm circling (Left leg forward and slightly bent. Left hand on left knee.) Right arm loosely circling forward and then backwards. Change arms and legs.
5. Arm swinging forward and parting (Astride) Arms swinging forward and parting sideways. Rhythmically and not violently
6. Soccer throw-in (Partners) Using a soccer or medicine ball. Soccer throw taking the ball well back behind the head for each throw
7. Arm swinging midway upwards (Astride, arms low crossed in front of the body) Both arms swinging midway upwards and backwards. Lift the chest and rise on to the toes
8. Sawing wood (Partners. Face the partner, right foot to right foot, right arms extended shoulder height. Left arms bent, butchers' grasp both hands.) Arms stretching and bending with trunk twisting. Change the feet at intervals
9. Combination of arm and trunk exercises Trunk rotations with arm swinging. Lateral bending with arms upward or punching. Trunk flexion with arms swinging forward and upwards
10. Reverse hanging (wall bars) (Astride, facing wall bars) Trunk flexion with arms backward raising to grasp wall bars. (Walk the feet forward to obtain good grip.) Pull the body straight into reverse hanging position

PART TWO—EXERCISES FOR STRENGTH AND ENDURANCE
WITHOUT APPARATUS

Arm and Shoulder Exercises

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|---|---|--|
| 1. Press-up | (Front support position) Arm bending and stretching | Progress to combine arm bending with alternate leg raising |
| 2. Side support, arm bending and stretching | (Side support position) Single arm bending and stretching | |
| 3. Small arm circling backwards | (Astride, arms sideways) Arm circling backwards quickly, describing a small circle with hands | Press the arms back as far as possible |
| 4. Hand standing and walking | Hand standing, or hand standing against a wall with arms bending and stretching, hand walking | Partners can assist |

Dorsal Exercises

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|--|---|--|
| 1. Prone lying, trunk bending backwards | (Prone lying using one of the following arm positions according to the progression required:
Arms by the side
Arms upward bend
Forehead rest
Arms sideways
Arms upward)
Trunk raising backwards | To progress, start the exercise from a position with the chest and head just clear of the floor |
| 2. Back lying, spanning | (Back lying, arms sideways, side of fist on floor) Head and chest raising | |
| 3. Trunk bending sideways | (Astride, using one of the following arm positions according to the progression required:
Arms by the side
Arms upward bend
Hands head rest
Arms upward stretch)
Trunk bending sideways with three presses to left then three to the right | To progress, bend the trunk alternately to the left and right |
| 4. Side support | (Side support) Leg raising sideways | This can be a combined arm and leg raising sideways movement. |
| 5. Long sitting, trunk turning to half prone lying | (Long sitting astride) Trunk turning and lowering backwards, so that the hands are below the shoulders and the upper body is almost prone | This should be a continuous movement, turning to the left and then to the right. Keep legs on the ground |

GAME FORM, PARTNER AND TEAM

Arm and Shoulder Exercises

1. Two handed pulling and pushing (partner) (Facing partner, one foot forward, two handed wrist grasp) Pull. (Change hand grasp to palm to palm) Push
2. Elbow lock, side-ways pull (partner) (Stand facing partner, astride, with one foot between and one astride partner's legs, hook the inside elbows, outwards lean) Pull
3. Line pulling (facing inwards) (teams) (Two teams spaced in line facing opposite directions, two handed wrist grasp, outward lean) Pull
4. Separating partners (partner) (No 1 stands with arms bent and hands behind the neck. No 2 grasps the wrist) No 2 pushes upwards to push the hands apart while No 1 tries to keep the hands together Do not allow fingers to be locked behind the head
5. Poison (team) (Four men join hands to form a circle round medicine ball or skittle) Pull outwards to force other team members to fall over or touch skittle
6. Sawing against resistance (partner) (One foot forward, butcher's grip, hands at waist height) Sawing, but each partner trying to saw in the opposite direction

Dorsal Exercises

1. Obstinate calf (No 1 kneels, sitting on heels, with arms straight and placed firmly on the ground, head braced back. No 2 locks his hands behind No 1's neck and leans backwards) Pull to move partner forward, partner resists
2. Kangaroos (partners) (No 1 adopts front support position with legs astride. No 2 stands between the legs and by grasping them high under the thighs lifts them up above his waist and holds them there to his side. The ankles are hooked behind his back.) The supporters walk forward and the kangaroos push both hands off the floor and arch the body back high. The supporter assists by leaning backwards slightly. Continue walking and raising
3. Sitting pull (partners) (Long sitting astride, soles of the feet touching partner's, two handed wrist grasp) Pull to raise the partners off the floor Legs are to be kept straight

USING WALL BARS

Arm and Shoulder Exercises

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|---------------------------------------|---|--|
| 1. Monkey jumps sideways | (Crouch with hands grasping top wall bar, knees bent, feet on appropriate wall bar) Jump sideways freely to land on next set of wall bars. Travel down the wall bars in successive " monkey jumps " | When first man reaches the end he jumps off, runs to other end and continues |
| 2. Hanging, arm walking sideways | (Hanging over grasp) Arm walking sideways, in free form short steps | See note above |
| 3. Press-ups | (Low front support, feet fixed in fourth wall bar) Arm bending and stretching | To progress in strengthening effect, raise the feet higher |
| 4. Front hanging, arm bending | (Hanging facing top wall bar, over grasp, arms wide, eyes level with the hands) Body lowering and raising | |
| 5. Back hanging, arm bending | (Hanging, back to wall bars, over grasp, arms wide, eyes level with the hands) Body lowering and raising | |
| 6. Support hand standing, arm bending | (Hand stand against wall bars) Arm bending and stretching | |

Dorsal Exercises

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|--|---|---|
| 1. Prone, lying, trunk raising backwards | (Prone lying, feet fixed, arms in one of the following positions according to the progression required:
By the side
Upwards bend
Head rest
Arms sideways
Arms upward)
Trunk raising | Variations of arms bending and stretching may be introduced |
| 2. Prone lying, trunk raising backwards and bending sideways | (Prone lying, feet fixed, arms by the side) Trunk raising backwards and bending rhythmically from side to side | |
| 3. Lying span | (Back lying, arms midway upward. Over grasp on about fourth wall bar, hands slightly wider than shoulder width apart) Span from this position | The exercise is made harder by grasping a lower wall bar |
| 4. Side support or side hanging | (Stand with side towards wall bars, left arm grasps wall bar opposite to hip, right arm grasps wall bar at least two shoulder widths higher) Swing to hold side hanging position | Begin with supporter assisting performer to the position and in holding it. Add leg raising from supported position |

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4. One hand throw (Partners facing each other) Throw ball under arm or round arm fashion to partner
5. Arm bending and stretching with ball (Astride, ball held on chest, both hands) Arm bending and stretching forwards and upwards. Many repetitions done quickly
6. Arms swinging forward and upward with ball (Astride, hold ball between both hands at arm's length in front of body) Arms swinging forward and upward

Dorsal Exercises

1. Trunk bending downwards and throw forward (Partners astride, facing, several yards apart, ball held in front of body) Relaxed trunk bending downwards and stretching forwards, throwing ball across to partner Straighten the back as throw is made
2. Long sitting trunk flexion and overhead pass (Partner long sitting astride, back to back, hold ball at arm's length forward) Relaxed trunk bending downwards, followed by trunk stretching upwards and arms swinging upwards to pass ball overhead to partner
3. Between legs and over the head pass (Partners astride, one yard apart, back to back) Trunk bending downwards to pass ball through the legs to partner who then passes ball overhead again to partner Change sequence from overhead to between legs. Keep arms straight
4. Prone lying, trunk raising with ball (Prone lying, ball held behind neck) Trunk raising backwards
5. Relay races (Team in line, astride) Pass ball over the head, then through the legs, until ball reaches the end man who runs to front of line and passes ball over his head Variations can include "tunnel ball" leap frog, back carrying the ball, etc
6. Figure of 8 throw (Partners astride, back to back, 3 yards apart) Trunk turning to throw ball to partner who turns to opposite side and throws it back
7. Trunk bending sideways (Astride, ball under arm) Trunk bending sideways alternately left and right, two or three times to each side To progress, hold ball on top of the head
8. Circle relay race (Circle formation facing outwards) Pass ball sideways round the circle from man to man

Abdominal Exercises

1. Back lying, feet and knees raised, medicine ball touch (Back lying, legs raised to 90° with knees bent at right angles, ball about 12 inches away from seat) Trunk raising and bending forward to touch ball To progress, place ball further away

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5. Upward and downward circling (3 men) (Two supporters face and hold stick on shoulder away from performer, arms upward bend alternate over grasp. Performer under grasp facing stick) Performer upward circle to balance support. Supporter's knee bending and stretching with performer in balance support

Dorsal Exercises

1. Trunk raising backwards holding stick (Prone lying, arms upwards stretched holding stick) Trunk raising backwards
2. Lunge rowing with back hang heave (3 men) (Two supporters in forward lunge hold stick level with forward knee. No 3 in backward hanging) Supporters rowing action to bring stick up level with chin. No 3 arm bending and stretching
3. Spanning, with supporter stick raising from back lying (2 men) (Two lie head to head, arms upward stretched, No 1 holds stick wide grasp; No 2 rests thumb side of wrists on stick widely placed) No 2 spans as No 1 raises the stick
4. Spanning, with supporter trunk raising backwards (No 1 prone lying holding stick across elbows, forehead rest on stick between hands. No 2 in spanning position, arms outside No 1's) No 1 trunk raising backwards. No 2 spanning

Abdominal Exercises

1. Sit-ups (2 men) (Two partners long sitting, facing, feet interspaced with stick lying along in-steps of all four feet, head rest) Trunk lowering and raising Vary the arm positions
2. Trunk circling from sitting (2 men) (Starting position as above) Trunk circling
3. Leg raising and placing sideways (2 men) (Two partners back lying, head to head, arms upward stretched, grasping sticks wide) Leg raising and placing to opposite side
4. Trunk bending to raise partner from long sitting (2 men) (Two partners long sitting back to back, arms midway upwards, grasping stick wide) Trunk bending forward to raise partner's hips from the ground
5. Trunk bending to lift partner from standing (2 men) (Two partners, back to back, arms upward, grasping stick) Trunk bending downwards to lift partner on to back Later pull partner right over to feet

PART THREE—ACTIVITIES

Gymnastic Activities

1. Vaulting.

a. Box Crossways.

- (1) Through vault.
- (2) Astride vault.
- (3) Face vault.
- (4) Side vault.
- (5) Neck spring.
- (6) Head spring.
- (7) Overswing (bent or short arm).
- (8) Thief vault.

b. Box Lengthways.

- (1) Cat vault.
- (2) Astride vault.
- (3) Forward roll.
- (4) Through vault.
- (5) Neck spring.
- (6) Head spring.
- (7) Overswing—short arm.
- (8) Overswing—long arm.

2. Agility.

- a. Forward roll.
- b. Backward roll.
- c. Cart wheel.
- d. Head stand.
- e. Hand stand.
- f. Head spring.
- g. Hand spring.
- h. Fly spring.
- j. Flip flap.
- k. Combined agilities, *eg* handstand forward roll or handspring headspring, *etc.*

l. Partner Agilities.

- (1) Knee and shoulder balance.
- (2) Knee and shoulder overswing.
- (3) Back to back pullover to stand.
- (4) Backward roll down partner's back. (Astride, partner's head through legs, lift for partner to backward roll.)
- (5) Tanks (partners grasp each other's ankles, forward rolls.)
- (6) Porpoises (threes, forward roll through partner's astride jump.)
- (7) Topsyturvey walk (hand on partner's feet, walk).

Lifting and Carrying

3. Relay Races.

- a. Passing a heavy object down a line of men employing various methods of handling.
- b. Running whilst carrying a heavy object in the following positions:
 - (1) Low in front of the body.

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- (2) Chest height.
- (3) On the shoulder.
- (4) In the crook of the arms.

c. Running whilst carrying a partner or third man by the following methods:

- (1) Firemen's lift.
- (2) Pick-a-back.
- (3) Two hand carry.
- (4) Fore and aft lift.
- (5) Shoulder lift.
- (6) Human stretcher.
- (7) Leopard crawl, carrying man on back.

4. Skill Practices.

- a. Lifting and carrying heavy objects by selected methods whilst stepping over and round improvised obstacles.
- b. Balance walking along reversed benches and beams and up inclined ramps whilst carrying heavy objects and human loads.

Pushing and Pulling

5. Competitions.

- a. Tug-of-war using legs, change to pushing.
- b. Tug-of-war using a rope.
- c. Pushing and pulling competitions without apparatus, such as line pushing forward and backward, rugby scrums, *etc.*

6. Practice in Moving Heavy Objects.

- a. Raising loads by improvised derricks and methods of pulling.
- b. Tasks requiring the employment of pushing and pulling techniques to be completed in a set time, *eg* hauling logs or heavily weighted objects over a prescribed course, or pushing logs up and over a ramp.

Sports and Games Activities

7. As the range of sports and games is so great, the total of separate activities which go to make them up is almost unlimited and it is considered impracticable to list them.
8. The individual instructor is advised to select his own sports and games activities for inclusion in the periods of physical exercise. His choice will depend largely on his own sporting abilities and interests, on the interests of those whom he is instructing, and on local conditions.
9. He should try to strike a nice balance between the various sports and particularly between team games and individual games. He should constantly strive to widen the sporting interests of his classes and should seek new material and ideas from textbooks dealing with the coaching of sports and games.

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Leg Exercises

1. Crouch pulling and pushing (Two partners face in crouch, arms forward, grasping stick) Pull or push opponent across a mark
2. Heaving with knee bending and stretching (See starting position Exercise 3 of Arm and Shoulder section) Supporter's knee bending and stretching with performer in heaving position
3. Feet pushing (Two partners sit facing with knees bent, feet together and soles of feet pressed against partner's, grasp stick) Push with legs to move partner's feet

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2. Sit-up throw (Partners facing, back lying, knees bent, feet on ground, arms upward stretched, ball held between both hands on ground) Trunk bending forward with knees stretching and arms swinging forward to throw ball to partner
3. Back lying, passing ball with the feet (Partners, back lying, head to head, arms upward stretch, wrists grasped, ball held between feet) Leg raising and trunk rolling backwards to pass ball to partner who places one foot under and one on top of ball
4. Back lying, leg raising with ball (Back lying, ball held between the feet) Leg raising and lowering

Leg Exercises

1. Ski jumping (Hold ball in front of body) Upward jumping on the spot using mainly the ankles to give upward lift
2. Knee springing and jumping (Knees half bend, ball held on top of head) Knee bending and half stretching to spring the body into the air
3. Lunging with ball Deep lunges forward, obliquely and sideways with ball held at chest height or upward stretch **Also a strong dorsal exercise**
4. Crouch jumps relay race (Crouch position, ball held against chest) Crouch jumps forward to a given mark and return to give ball to next member of team

USING STICKS

Arm and Shoulder Exercises

1. Stick twisting (2 men) (Two partners face grasping stick. Alternate hands under and over grasp) Stick twisting against partner's effort to twist in opposite direction.
2. Pushing and pulling (2 men) (Two partners back to back grasp sticks at ends and hold under each armpit) Pull, stop, change feet positions and push backwards
3. High support arm bending and stretching (Two supporters hold stick with arms upward stretched. Performer hangs over grasp or under grasp) Performer arm bending and stretching **Performer and supporter change**
4. High front support, press-up (3 men) (Two supporters back lying, arms forward holding stick, knees raised. Performer in high front support position) Performer and supporters arm bending and stretching **To progress, supporters and performers single leg raising with arm bending**

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Abdominal Exercises

1. Back hanging cycling (Stand back against wall bars, arms upwards, over grasp) Cycle
2. Back hanging, alternate knee raising (Starting position as above) Knees raise to 90° bend. Alternate knee raising quickly to chest and lowering to 90° bent position Allow the head to bend towards the knee in this vigorous movement
3. Back hanging, legs swinging upwards (Back hanging, over grasp, top wall bar) Swing the legs freely upwards to hook the toes under top wall bar. Lower slowly again
4. Sit-ups (straight leg) (Back lying with feet fixed in wall bars, hands locked behind head) Sit-up to pull head towards the knees Allow a slight knee bending. Progress to lying on a sloping bench with feet fixed above the head

Leg Exercises

1. Monkey jumps sideways (See Exercise No 1 in arm and shoulder strengthening using wall bars) Travel also downwards and sideways
2. Heel raising, knee bending within inner range (Standing, side towards wall bars, knees slightly bent, heels raised, arm sideways, finger tip support) By keeping knees slightly bent the whole time, the muscles are not allowed to rest the weight of the body
3. Single knee bending with support (Standing, side towards wall bars, rest the nearest hand lightly on the wall bar, raise forward the leg furthest from the bar) Bend and stretch the near leg Turn about to exercise the other leg

USING MEDICINE BALLS

Arm and Shoulder Exercises

1. Soccer throw (Partners, one foot forward, ball held by both hands behind head) Throw ball to partner Distances to be increased
2. Shot putt (Partners astride or sitting astride, ball held with both hands in front of one shoulder) Push ball to partner
3. Overhead throw (Partners astride facing the same direction, ball held in front of chest with arms bent) Swing the ball down to arm's length and then forwards and upwards to throw backwards over the head Partners turn about after each throw

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4. Neck pull (partners) (Stand facing partner, clasp one hand behind each other's neck) Pull Brace the head back
5. Through the legs pull (partner) (Stand back to back, trunk bent forward, one hand on knee, one hand grasping partner's wrist through the legs) Pull The knees may be bent
6. Scrummage (small teams) (Rugby scrum) Push
7. Trunk turning against partner (Stand back to back, elbows interlocked) Trunk turning, pulling in opposite direction to partner Exercise can also be done in astride long sitting position
8. Wrestling for a lift (partner) (Stand facing partner, trunk forward lean, arms locked round partner's waist) Wrestle to lift partner

Abdominal Exercises

1. Lifting the sack (partner) (Stand back to back, arms upward, the lifter grasps the partner's wrist) Slight knee bend and lift the partner on to the back keeping the arms straight Progress to partner raising and lowering straight legs
2. Crab walk (back rest position) (Crook sitting, hands on floor behind seat, lift seat to support body on hands and feet) Crab walking or racing "Crab football" can be played from this position
3. Trunk turning against resistance (partner) (Back to back, arms sideways, hands clasped) Trunk turning with partner providing resistance
4. Pushing wrestle (Face partner, arms midway upward, palms of hands against partner's) Push

Leg Exercises

1. Hopping tug-of-war (partner) (Grasp partner's hand, hold foot with other hand) Hop and pull Change hands and feet
2. Hopping charges (partner) (Stand on one foot, arms folded) Hop to charge partner off balance
3. Russian dance step (partner) (Sit on heel of one foot with other leg extended forward, face partner, arms forward and grasp hands) Hop to change feet Move the extended leg obliquely forward to avoid kicking partner
4. Boat race (teams) (Teams crouch and hold the waist of the man in front. Team leader faces the team and grasps the extended arms of the first man) Crouch jumps forward, co-ordinating under command of team leader Mainly used as a relay race. Teams who break formation must start again

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Abdominal Exercises

1. Trunk curls (Back lying, head and shoulders clear of the ground so that ankles can just be seen) Trunk raising and bending forward to touch knee caps with hands and lower to starting position The head and shoulders must be clear of the ground the whole time
2. Sitting tucks (V sitting, finger tip support, legs raised to 45°). Knee bending to chest and straightening back again to the 45° position with trunk bending forward to meet the knees Slide the finger tips forward along the ground as the knees bend to the chest
3. Single leg lifting and crossing over (Back lying, arms sideways) Leg raising and crossing over to touch the opposite hand and return
4. Head and knee raising (Back lying, neck grasp) Trunk raising and bending forward with knee raising and bending, touch knees with elbows and lower Pull the knees well back and clear of floor. Body should be in V balance when elbows touch knees
5. Press-up (Front support position) Arm bending and stretching

Leg Exercises

1. Skip jumps from crouch (Crouch position) Four skip jumps to land in crouch position on the fifth Variations such as turning and leg parting can be introduced
2. Single knee bending (Crouch on one leg, hold the opposite leg in front and clear of the ground, use finger tips of one hand against a wall to balance) Leg stretching and bending
3. Crouch jumps upwards (Crouch position, finger tip support) Upward jumping keeping knees bent, but feet clearing the floor This can be done as a relay race between teams
4. Lunging Deep lunges forward, obliquely and sideways
5. Running and walking over various types of ground Walking and running up hill. Walking along rocky pebbly beaches, walking over rough moor land All these activities develop leg strength as well as balance, co-ordination, agility and basic stamina. Boots should be worn

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Trunk Exercises

1. Relaxed trunk pulling downwards (Astride. Knees half bent. Hands between legs, palms outwards ankle grasp) Arm bending and stretching to pull the head between the legs.
2. Ski swings (Stand knees slightly bent, arms loosely forward) Relaxed arm swinging downwards and backwards with knee full bending and stretching.
3. Knee hugging (Back or side lying) Curl up to hug knees to chest and pull head between the knees
4. Backward roll, toe and knee touching floor .. (Crook back lying) Roll back to place the knees alongside the head and the toes on the floor
5. Backward roll with partner (Partners. Back lying head to head, arms extended upwards to grasp the partner's hands) Backward roll to push each other's feet
6. Shoulder support cycling (Neck and shoulder support, hips supported by hands. Knees raised to chest) Cycling movements
7. Pulling from lying to sitting (Partners. One sitting, one crook back lying, toes to toes, hands clasped) Pull from sitting to lying, rocking on the feet
8. Sitting astride, trunk bending forwards .. (Long sitting astride head rest) Trunk pressing downward
9. Kicking the hand Raise one arm, walk forward and try to kick the hand (Can be done from back lying position)
10. Touch toe jumps Jumping with pike to touch toes, straighten and land
11. Trunk bending sideways with knee bending .. (Wide astride, low hand on hip) Rhythmical trunk bending sideways with opposite knee bending
12. Trunk bending sideways with partner (Partners back to back, arms sideways, fingers interlaced) Trunk bending alternately from side to side
13. Sawing wood See arm exercises No 8.
14. Throwing the hammer (Astride, arms clasped as if holding hammer) Rhythmical circling downwards, sideways, backwards and upwards.
15. Trunk turning with one arm swinging (Astride, arms forward) Trunk turning with the arm swinging shoulder height in the direction of the turn. The other arm remains forward
16. Back lying, hip support, hip turning, knee bending (Back lying with legs and hips raised vertically and supported by the hands) Knee bending towards the chest with hip turning

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SUGGESTED EXERCISES

1. Listed below are a number of exercises and activities which are recommended as suitable for inclusion in a period of physical exercise.
2. It is not suggested that these should be the only ones which may be used, but any variations of them, or any different ones, should be very carefully evaluated before they are used. The individual instructor who is in any doubt regarding the suitability or safety of any exercise, should defer its inclusion in his programme of physical exercise until it has been approved by a more qualified instructor.

PART ONE—WARMING UP EXERCISES

Introductory Activities

1. Dodge and mark .. (Partners) Free running—one partner tries to evade whilst the other “marks”. All stop on whistle. The marker stretches his arm to see if he can touch his partner.
2. One against three .. The players join hands. The fourth player stands facing the player opposite. By dodging and feinting he must try to touch this man. The triangle must not be broken.
3. Small groups Free running or in a single line. On a given signal, form groups of given numbers.
4. Pick-a-back race .. Relay race carrying partner on back. Change positions.
5. Chain tag Two men join hands. Tag others who join on to form a chain.
6. Chase the dodgers .. “Chase him.” The dodger tries to avoid capture by the class.
7. Running maze The leader runs with the class following in a single line behind. A maze or pattern is woven.
8. Hopping race .. Hold one leg. Hopping race. Change legs.
9. Dodge ball (Small teams, each with a ball) One man is the dodger. The remainder try to hit the dodger below the waist with the ball.
10. Sawing wood (Partners) Left foot forward. Butcher's grip. Push and pull with the arms at the same time rotating the trunk. Change feet on the signal.
11. Russian dance step .. (Partners) Crouch on heels with arms outstretched forwards. Hop with alternate feet changing.
12. Fighting cocks .. (Partners) Sit with knees raised and hands clasped under knees. Try to throw partner over by pushing upwards and sideways with the feet.
13. Team passing .. (Small team) One team passes the ball, trying to retain possession. The other tries to intercept.
14. Crows and cranes .. (Two lines facing instructor) One line called “Crows” and one line called “Cranes.” When instructor says “Crr - ane” (or “Crr - ow”) the line tries to run over a given line (*eg*, edge of court). The other line tries to stop them.

PHYSICAL FITNESS TRAINING

2. If the class does not know the exercises in Part Two, let one man in each group demonstrate before each change. All demonstrations should be done together. With a well trained class, individuals or pairs may pass from one exercise to the next after completing their maximum on each.

3. The "core" activity of Part Three is basketball. The lesson is directed so that all the class has the opportunity of playing and those not playing are allowed a certain amount of freedom to choose their own activity from the alternatives presented.

EXAMPLE LESSON No 2

(For use when there is no gymnastic equipment,
but when courts for volley-ball are available outdoors)

<i>Kind of Exercise</i>	<i>Exercise</i>	<i>Notes</i>
Part One—Warm-Up		
Introductory Activity	Chain tag	
Arm and Shoulder	Crawl stroke and back stroke running on the spot	Circle the arms forwards and then change to backwards
Trunk	Ski-swings (Stand, knees slightly bent, arms held loosely forward) Relaxed arm swinging, downwards and backwards with knee bending and stretching.	
Part Two—Strength and Endurance		
Here the class may be divided into two halves. One half may start to play volley-ball on courts marked outside on the adjacent playing fields whilst the other half is given strengthening exercises by the instructor. The two halves then change and those who have been playing volley-ball are taken through the strengthening exercises. This division allows the instructor to utilize his facilities more fully and to give closer attention to individuals in the strengthening section. Umpires should be appointed for the volley-ball game.		
Arm and Shoulder	(1) (Front support) Arm bending and stretching with alternate leg raising (2) (Face partner, one foot forward, two-handed wrist grasp) Pull (Change grasp to palm to palm) Push	Change partners for repeat
Dorsal	(Side support) Hip lowering and raising followed by leg raising sideways and lowering	Change supporting hands
Abdominal	(1) Trunk curls (Back lying, head and shoulders clear of the ground so that ankles can just be seen) Trunk raising and bending forward to touch knee caps with hands and lower to starting position (2) Lifting the sack followed by partner leg raising and lowering	The head and shoulders must be clear of the ground the whole time

PHYSICAL FITNESS TRAINING

7. Exercises for developing endurance must be systematic and progressive. The types of exercises used should involve massive movements which make the large muscle groups of the body work rhythmically in a good range of movement. Medium paced running, long distance swimming, cycling and rowing are good examples of suitable exercises.

Part Three—Activities

8. The activities selected should be interesting and related to work or to some physical activity such as a sport (*eg*, soccer, passing and dribbling) or an outdoor activity (*eg*, climbing). But the practice of skills connected with sport or recreation should be such as to promote all-round basic fitness and demand vigorous effort and exercise on the part of the whole class.

SAFETY PRECAUTIONS

9. Injuries sustained in physical training and games are more often due to lack of adequate supervision than to any other cause. Activities on certain items of equipment are more likely to cause accidents than others (*eg*, vaults on the high box)—and for this reason they should not be attempted, except under the direct supervision of a qualified instructor.

10. Equipment should be inspected regularly for serviceability and, when in use, should be positioned well clear of walls and radiators and so arranged that it does not impede performers using other apparatus.

11. A code of conduct should be maintained which excludes “horse play”, pushing or running dangerously in dressing rooms or on slippery surfaces such as floors in ablutions or swimming baths.

12. All members of the class should be taught how to give support and stand-by for gymnastics.

EXAMPLE LESSONS

Example Lesson No 1

13. Example Lesson No 1 is an orthodox lesson designed to provide the class with vigorous exercise for general fitness and to stimulate an active interest in basketball to attract more players for leisure time play. The activities listed in Part Three give an instructor a wide choice in selecting activities which suit the class.

Example Lesson No 2

14. The framework of Example Lesson No 2 is modified to suit the limited facilities available. To make the fullest use of these, the class is divided after Part One so that half starts playing a game whilst the other half performs strengthening exercises. This allows the courts to be used for 10 to 12 minutes longer than would have been possible had all the class taken Part Two at the same time. The two halves change later.

EXAMPLE LESSON No 1

(For use with normal scale of gymnastic equipment)

<i>Kind of Exercise</i>	<i>Exercise</i>	<i>Notes</i>
Part One—Warm-Up		
Introductory Activity	One against three.	
Arm and Shoulder	(Astride, arms across bend) Elbow circling, forwards and backwards	Free spacing

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