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ABSTRACT

A revision of the document of the same title published in 1971, this publication contains the description of each physical education test event designated by the California State Board of Education annually. Also included are directions for administering, conditioning, reporting, and using the results of the test events. The new norm tables represent the renorming project of 1979-80. The publication is geared towards assisting governing boards of school districts in establishing policies for conducting physical performance tests; in their districts: to administrators in implementing the policies established; to supervisory personnel in evaluating the testing procedure; and to teachers in administering the California Physical Performance Test. Educators are urged to use this test to accomplish the following: (1) identify physically underdeveloped youth; (2) appraise pupil progress; (3) adapt instruction to individual needs; (4) adapt the physical education program to students' needs; and (5) use valid tests to determine students' physical abilities. (Author/GK)

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The
**Physical Performance
Test for California**
(Revised)

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Other publications pertaining to physical education instruction and available from the Department are the following.

Circuit Training: A Physical Conditioning Program (1971)	\$.85
Instruction of Physically Handicapped Pupils in Remedial Physical Education (1973)	.85
Physical Conditioning Through Water Exercises (1972)	.85
Physical Education for Children Ages Four Through Nine (1978)	2.50
Physical Education Framework for California Public Schools (1973)	.85
State Guidelines for School Athletic Programs (1978)	2.20
Teachers Guide for Physical Education, High School (1957)	1.00

A complete list of publications of the California State Department of Education may be obtained by writing to the address listed above.

FOREWORD

The children and youth of today who will shape the world of the future are faced with an ever increasing need for the development of interests and skills in a variety of physical activities. A constantly changing environment requires their acquisition of physical stamina and their understanding and application of the many aspects of physical activity. The necessity of vigorous physical activity for children and youth is evidenced by the demonstrated relationship of physical performance to total achievement, inactivity to obesity, and fundamental skills to the worthy use of leisure.

Teachers of physical education must provide daily vigorous activity which stimulates imagination and creativity as well as physiological development and behavior. Thus, a well-planned physical education program which provides a balance of activities helps prepare pupils to adjust successfully to changing conditions whenever they may occur.

Educators, especially those involved with physical education in California, have approved physical performance testing as one means of identifying pupils' physical needs. The results of such tests must be used to modify and improve the physical education program if optimum individual growth and development are to be achieved.

The achievement of that growth and development will make a major contribution toward preparing the children and youth of California to live adequately in this complicated world.



Superintendent of Public Instruction

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PREFACE

This revision of *The Physical Performance Test for California* is based on the document of the same title that the Department of Education published in 1971.

The new norm tables represent the renorming project of 1979-80, which included the flexed-arm hang as a test for students unable to perform one pull-up. While there has been some overall improvement in the scores of our youth in the last decade, the results may also reflect the increased numbers of students, which provided a greater range of scores.

California children and youth of today are faced with life in a highly mechanized, ever changing society which creates stress on their emotions, their mental capacities, and their physical stamina. The resulting increased tension can be partially offset by a thoroughly developed instructional program involving vigorous physical activity.

Educational leaders are called upon to recognize the effect that complex social factors have on the total school curriculum. In order to keep a school program up to date, those who plan the curriculum must identify and define the problems, formulate and apply solutions, measure and evaluate their effectiveness, and replan continuously.

It is important that physical educators dedicate themselves to a reemphasis of the physical fitness component as an integral part of the physical education program. This publication contains the description of each test event designated by the California State Board of Education annually. Also included are directions for administering, conditioning, reporting, and using the results of the test events. This publication should be of assistance to governing boards of school districts in establishing policies for conducting physical performance tests in their districts, to administrators in implementing the policies established, to supervisory personnel in evaluating the testing procedure, and to teachers in administering the Physical Performance Test.

Physical educators are urged to utilize the 1980 revision of the California Physical Performance Test to accomplish the purposes set forth in this manual. The purposes are to:

- Identify physically underdeveloped youth.
- Appraise pupil progress.

- Adapt instruction to individual needs.
- Adapt the physical education program to student needs.
- Use valid tests to determine students' physical abilities

All California pupils who reach the 85th percentile in all tests qualify for the Presidential Physical Fitness award.

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ACKNOWLEDGMENTS

A designated single battery of six physical performance test events was adopted by the California State Board of Education in January, 1966, for use by school districts in California beginning in the school year 1966-67 to test pupils on certain aspects of their physical performance. Previously, school districts chose a physical performance test from a list of three approved tests. The members of the committee that prepared the 1966 publication were Donald G. Bornell, Consultant, Physical Education, Los Angeles County; Ted H. Hucklebridge, Consultant, Physical Education, Recreation, and Safety, Sonoma County; James W. Leathy, Jr., Coordinator, Physical Education, Health Education, and Safety, San Bernardino County; and Evelyn M. Taix, Coordinator, Elementary Programs, Santa Cruz County. Arthur E. Hawkes, formerly Director of Health, Physical Education and Youth Services, Los Angeles County, was chairman of the committee in 1965-66 and in 1966-67.

During the 1969-70 school year, funds available under the Elementary and Secondary Education Act, Title V, were approved for the purposes of studying the test events which had been designated each year since 1966, recommending new test events, and developing norms for them. Six specialists in testing and research reviewed the criteria for the selection of the test events for the study. The specialists were: Herbert deVries, Professor of Physical Education, University of Southern California, Los Angeles; Anna S. Espenschade, Professor Emeritus, University of California, Berkeley; Fred Kasch, Professor of Physical Education, San Diego State College; Carl Klafs, Professor of Physical Education, Long Beach State College; Ernest Michael, Associate Professor, Physical Education, University of California, Santa Barbara; and Dorothy Mohr, Professor of Physical Education, Sacramento State College.

Ten coordinators were appointed to work with the specialists in developing common procedures for test administration and in providing in-service education for personnel who administered the test events to a sampling of boys and girls. The coordinators were Marian Anderson, Professor Emeritus, University of California, Santa Barbara; Donald Bornell, Consultant in Physical Education, Los Angeles County; Paul Hillar, Assistant Superintendent, Auxiliary Services, Office of the Stanislaus County Superintendent of Schools;

Ted H. Hucklebridge, Consultant in Physical Education, Recreation, and Safety, Sonoma County; James W. Leathy, Jr., Coordinator, Physical Education, Health Education, and Safety, San Bernardino County; Evelyn Logan, Coordinator, Health, Physical Education, and Outdoor Education, Monterey County; Roy Mangini, formerly Consultant in Education, El Dorado County; Louis Mozzini, Coordinator of Physical Education and Health Education, Alameda County; Jack Murtha, Consultant in Physical Education and Outdoor Education, Sutter County; and Jack Price, Curriculum Coordinator, San Diego County, assisted by Asahel E. Hayes, Consultant in Physical Education, San Diego Unified School District.

Special thanks are due to physical education consultants Genevieve Dexter, who was instrumental in the preparation of the 1966 and 1971 editions of *The Physical Performance Test for California*; Jeanne Bartelt, whose efforts are reflected in this 1981 edition; and to the students, teachers, and administrators who assisted and participated in the tests to make this revision possible.

Introducing the Physical Performance Test

Testing for physical performance has been developed to assist personnel in the public schools in determining the extent to which the physical education program is successful in meeting one of its major objectives – “to develop and maintain the best possible level of performance, understanding, and appreciation for physical fitness to meet the demands of wholesome living and emergency situations.”¹ The Physical Performance Test, comprising seven test events, was adopted in 1980 by the California State Board of Education and designated for use in the public schools.

The primary elements of physical performance which are necessary for the progressive physical development of boys and girls, ages ten through eighteen, are embodied in the seven test events. The primary elements of physical performance which are measured by the test events follow: leg strength and power; abdominal strength and endurance; agility, balance, and coordination; upper body and arm strength and endurance; and cardiorespiratory endurance.

The selection of the designated Physical Performance Test was based upon the criteria which follow:

- Involvement of some of the natural skills of human beings (running, jumping, and climbing)
- Inclusion of some measure of cardiorespiratory endurance
- Involvement of a minimum amount of equipment
- Administration geared to teachers with a minimum of experience
- Administration which requires a minimum amount of time

If the designated Physical Performance Test is to be used effectively to bring about an improved physical education program beneficial to each boy and girl, ages ten through eighteen, the teacher and the pupil must understand certain concepts as presented in this publication. This publication was designed to help the teacher do the following things:

- Understand that physical performance is only one of the objectives of physical education.
- Recognize that the designated Physical Performance Test should not be given to children who are younger than ten years old.

¹Physical Education Framework for California Public Schools, Kindergarten Through Grade Twelve, Sacramento: California State Department of Education, 1973, p. 38.

- Understand the purposes of physical performance testing as they apply to the individual pupil and to the physical education program.
- Realize that identification of physically underdeveloped pupils is the first reason for administering the Physical Performance Test.
- Agree that changes in methods of instruction or units of instruction or both must be offered to remove conditions that permit a pupil to be physically underdeveloped. See page 3.
- Understand that the progress of a pupil as shown by the raw scores of the second testing period, when compared with the raw scores of the first testing period of the school year, is the most important information gathered concerning a pupil's achievement in physical performance. See page 3.
- Know exactly how to organize pupils to administer each test event efficiently and effectively. See Chapter II.
- Know exactly how each test event is performed in accordance with the rules and teaching suggestions in order to bring about valid and reliable test results. See Chapter II.
- Know how to use the test results for improvement of pupils' physical performance and of the total physical education program in order to bring about desired change. See Chapter IV.
- Know the legal basis for testing in the Education Code and the California Administrative Code, Title 5, Education, in order to administer the designated Physical Performance Test at the proper time.

Purposes of the Physical Performance Test

The Physical Performance Test is used to secure *some* of the information needed to accomplish the following purposes:

- Identify physically underdeveloped pupils.
- Adapt instruction to individual needs.
- Adapt the physical education program to pupils' needs.
- Appraise pupils' progress.

Each purpose is involved in and related to the total learning situation and to the availability in the school of certain services. To identify physically underdeveloped pupils, the teacher must do or be assisted in doing the following:

- Analyze the results of physical examinations given by physicians.
- Evaluate the pupils' growth patterns, comparing height and weight of the individual with those listed in standardized growth charts or grids.
- Appraise the pupils' body balance and movements or stationary and moving postures.
- Determine pupils' performance levels according to the percentiles on page 50 through 63.

To adapt instruction to meet individual needs, the teacher must do or be assisted in doing the following:

- Change the emphasis in instruction from some activities to others which will remove certain deficiencies; for example, spending more time on arm strength activities if a female cannot perform ten chair push-ups.
- Teach to develop understanding of how the body moves.
- Change length of units of instruction and amount of time spent on conditioning activities.
- Revise expectancy of the performance of pupils to a realistic level.

To adapt the physical education program to pupils' needs, the teacher must do or be assisted in doing the following:

- Determine whether the courses offered make it possible for pupils to develop a desirable level of physical performance.
- Determine whether the methods and emphases in the courses offered make it possible for pupils to maintain a desirable level of physical performance.
- Appraise the courses offered with respect to opportunity for *each* objective of physical education to be realized by *each* pupil.
- Understand the objectives sought and the methods for measuring the achievement of each objective by each pupil.

To appraise pupils' progress, the teacher must do or be assisted in doing the following:

- Utilize test results as only *one* means of measuring pupils' progress, as shown by improvement between the two testing periods in one school year.
- Measure progress and achievement in appropriate and specific skills by administering appropriate skill tests, such as in kicking, throwing, and swimming.
- Utilize rating scales for team play, rhythm patterns, and perfection of form.
- Obtain evidence of acceptable behavior in group activity.
- Obtain evidence of participation in worthwhile recreational activity.
- Utilize measuring devices for each specific goal stated for each unit of instruction.

Administration of the Physical Performance Test

Physical performance testing is an integral part of both the testing and the instructional aspects of the physical education program. To ensure an effective administration of the designated Physical Performance Test, leadership roles must be recognized and utilized by all concerned.

Roles of Leadership

The State Department of Education provides guidance and leadership at the state level by establishing policies regarding physical performance testing and by providing consultant services upon request.

The county superintendent of schools has certain responsibilities in helping school districts establish testing procedures to ensure validity and reliability. The consultant or supervisor in the county superintendent of schools office who has responsibility for physical education should serve as a resource person or provide coordination to school districts needing assistance.

The governing board in each school district establishes procedures regulating certain aspects of physical performance testing. The school district administrative and supervisory personnel provide leadership in administering the test events, interpreting the results, and providing in-service education.

The personnel in each school make provisions, through an adequate health program, for conducting essential health services and for developing health practices. School personnel should be informed about the capacity of each pupil to engage in strenuous physical activity through the use of the physician's report of pupils' physical examinations, daily observations, and health histories.

School personnel must provide a program of measurement and evaluation which makes possible the appraisal of the progress and achievement of each pupil in all aspects of learning. Testing for performance is one type of measurement which is used to appraise pupil progress, to identify those pupils needing special help, and to modify methods of instruction and courses offered.

School personnel must provide each pupil with the assistance needed to understand why these test events are important, what the results mean individually, and what can be done to remove the weaknesses discovered. Each pupil participating in these test events should benefit from an improved physical education program as units of instruction for an individual or group are developed or revised and facilities are acquired.

Procedures for Administration

Optimum results from physical performance testing are most likely to be achieved when informed school district personnel are assigned the responsibility of coordinating the administration of the tests.

In a small elementary school or high school district, the coordination may be assumed by an administrator or assigned to a teacher who has had some background in testing or in physical education.

In a large school district, the role of coordinator may be assumed by a consultant in physical education, a curriculum director, a research assistant, or a principal.

In a unified school district, the physical education consultant or head of a physical education department may be the coordinator.

The extent of the improvement in the physical education program resulting from the administration of the Physical Performance Test is closely related to the understanding of its coordinator and the effective measures he or she applies toward such improvements.

Roles of Coordinator and Committee

Coordinators of physical performance testing should familiarize themselves with the laws and regulations governing the designated tests. They should assume a leadership role in organizing school personnel to help them conduct this testing program, and they should establish a committee to assist in developing procedures for the administration of the Physical Performance Test. In addition coordinators should provide leadership to the committee in its responsibility for utilizing the results of the test events in order that methods of instruction and units or courses are changed to assist in removing certain conditions identified by the results.

The committee should have the following responsibilities:

- Designation of the times during the year when the test should be administered. Fall and spring are recommended times.
- Determination of the grades in which the test should be given. Grades five through twelve are recommended.
- Development of procedures and forms for recording results in order to be able to utilize results as soon as possible.
- Development of forms and procedures for reporting test results and recommendations to the governing board of the school district for its approval.
- Proposal of the budget necessary to administer the test so that reliable results may be obtained.
- Suggestions for program revision based on the results of the test.
- Proposal of a plan of in-service education for teachers and administrators.
- Suggestions regarding procurement and use of necessary supplies and equipment and the designation and marking of testing stations.

The report to the governing board of the school district should be considered a part of the role of the coordinator and the committee responsible for physical performance testing.

Legal Provisions

Legal provisions have been drawn from two sources, condensed, and classified:

California Education Code¹

Definition • A physical performance test is one which measures or attempts to measure the physical fitness of pupils. (Sections 60602(b) and 60603(d))

State Board of Education • Shall require a testing program in all school districts and shall adopt rules and regulations regarding the frequency and methods of their administration. (Section 60603)

• Shall certify and approve list of physical performance tests. (Section 60601)

Local Boards of Education • Shall institute a physical performance testing program in districts in accordance with rules and regulations adopted by State Board. (Section 60602)

• May give tests not on the approved list.

County Boards of Education • Shall cooperate and give assistance to school districts in carrying out the testing program.

Scoring. Reporting of Results • Districtwide results shall be reported to the local governing board at least once each year at a regularly scheduled meeting. (Section 60607)

California Administrative Code, Title 5, Education²

Required Program • During the Period of March–May . . . shall administer to each pupil in grades five, seven, ten, or any one or more such grades the Physical Performance Test. (Section 1041)

• Each physically handicapped pupil and each pupil who is physically unable to take all of the Physical Performance Test shall be given as much of the test as the pupil's condition will permit. (Section 1041)

Recommended Program • When adequate facilities are available, tests pursuant to this article may be given more often than once yearly. (Section 1042)

Methods of Administration • The tests shall be scored by employees of the district or the employees of the county superintendent of schools. The scoring thereof shall be in compliance with the instructions of the publisher or developer for scoring, and the scores shall be submitted to the governing board of the school district on the dates required by, and on forms prescribed or approved by, such governing board. (Section 1043)

¹Condensed from California Education Code

²California Administrative Code, Title 5, Education, Chapter 4, Article 2, sections 1040 through 1046

Recording Test Scores • The district superintendent or the county superintendent of schools, as the case may be, shall require that the pupil's scores on each of the tests given in the physical performance testing program be included in the pupil's cumulative record. This requirement may be met by maintaining the regular physical performance testing program card with the cumulative record form.

County Superintendents • As soon as possible after the State Board of Education, pursuant to subdivision (d) of Education Code Section 60603, has designated the physical performance test to be used during the ensuing school year in any grade, the county superintendent of schools shall secure and, until the close of the school year for which the test was designated, shall keep on file for reference purposes, a specimen set of that test.

The county superintendent of schools shall provide assistance to school districts in administering, recording, and reporting results of the test. (Section 1045)

Use of Reports Local District • The governing board of each school district shall use the reports of test scores submitted as required in this article for identifying physically underdeveloped pupils, adapting instruction to individual needs, appraising pupil progress, adapting the physical education program to meet pupil needs, and for such other purposes as may be permitted or required by law. (Section 1046)

Administering the Physical Performance Test

Reliable results of the Physical Performance Test depend upon close adherence to the instructions for conducting each test event. A complete description for administering each test event, pertinent teaching suggestions, common faults, and organization for administration are presented in this chapter for all who have responsibility for the testing.

Preparation for Conducting Each Test Event

The essential procedures in preparing to conduct each event in the Physical Performance Test are: grouping pupils, arranging supplies and equipment, establishing leadership roles, and conditioning pupils. The following questions frequently are asked about these procedures, and answers to the questions are provided:

Why should teachers group the pupils?

Grouping facilitates the administration of each test event and provides a desirable learning and testing environment.

How should teachers group pupils?

Groups should be small enough to allow for the efficient administration of each test, with a minimum of waiting time for each pupil.

Should the pupils remain in the same groups for all test activities?

It is not necessary. Some test events can be administered to pupils in groups of twos; others, in groups of threes; and still others, in larger groups. For example, pupils can work together in groups of two as in the standing long jump; in groups of threes, in the knee bent sit-up for time; and in a group of ten, in the jog-walk. During practice and testing in such an arrangement, the teachers are free to supervise several groups.

What equipment and supplies are needed for giving the test events?

The chart which follows contains a list of the equipment needed at each testing station - an area appropriately marked and equipped for the designated test event.

Supplies and Equipment Needed at Testing Stations for Each Test Event

Test event	Supplies and equipment	Testing station
Standing long jump	10-foot (3 m) measuring tape marker to designate distance jumped	Landing surface consisting of mats, turf, or outdoor rubber matting and a take-off line on floor or black-top or a takeoff board
Knee bent sit-up for time	Stopwatch	Clean floor, mat, or dry turf
Chair push-up	Chair, the seat of which measures 14 to 18 inches (35.6 to 45.7 cm) above floor <i>or</i> a secure bench	A wall against which feet may be braced
Side step	Stopwatch	Clean floor or clean asphalt surface with appropriately marked line
Pull-up or Flexed-arm hang	Metal chinning bar, which is 1½ inches (3.8 cm) in diameter, does not rotate, and is high enough to allow pupils' feet to clear the surface when the arms are fully extended Stopwatch	Either indoors or outdoors wherever chinning bars are available
Jog-walk	Stopwatch	An accurately measured running track (See page 29.)

What is the role of the PRINCIPAL in the testing program?

The principal provides leadership, encouragement, in-service education, supplies and equipment, testing stations, and overall coordination of the testing program and requests assistance with the testing program from the school district or county superintendent of schools office, if needed.

What is the role of the TEACHER in the testing program?

The teacher instructs the pupils, provides suitable conditioning activities, and organizes the class in such a way that each test event can be administered accurately and without causing pupils to become exhausted or to waste time.

What OTHER PERSONS may assist in administering the test?

Pupils with adequate preparation, teachers whose classes are scheduled at the same hour, and other persons with adequate orientation such as teacher aides and student teachers, may assist in the administration of the test events.

Why must the teacher provide activities to condition each pupil before testing?

Because the Physical Performance Test involves the natural skills of running, jumping, and climbing—skills basic to human movement—activities which help children develop such skills are fundamental to the physical education program. Consequently, instruction and practice involving these skills are a necessary part of the daily physical education instructional program.

In order that growing and developing children and youth may perform physical skills with no harm to themselves, it is essential that each pupil know exactly how to perform and be able to demonstrate the ability to perform each test event.

Elements of physical performance are interrelated and involve the whole person; therefore, in order to perform the test events in a correct and reliable manner, each pupil must have performed the test event previous to the day of testing.

How should the teacher prepare the pupils for the test?

In the weeks prior to the test, the major emphasis of the physical education program should be on the activities which develop those parts of the body used in the performance of each test event.

By gradually increasing the amount of effort exerted in performing such activities, the pupil's physical condition should be improved.

What preparations should the teacher make before giving the designated Physical Performance Test?

The same general procedures should be followed in preparing for the Physical Performance Test as in preparing for any other tests. Such procedures follow

- Become familiar with the details and objectives of each test event.
- Explain to the class the purpose of the test and each test event.
- Organize the class in groups of appropriate size.
- Instruct the class in the correct procedure for each test event.
- Supervise the development of the correct procedure for each test event with each individual, and provide the opportunity for each pupil to perform the test correctly.
- Ascertain that the testing stations are prepared and that the necessary supplies and equipment are available.

Why should physical performance testing be preceded by warm-up activities?

In general, participation in warm-up activities increases circulation throughout the body and causes an increased respiratory rate. In such activities the joints must be moved easily at first and then gradually into a full range of movement. The possibilities of injury to muscles are reduced as the muscles are required gradually to act with increased effort. Relaxation -- both physiological and psychological -- makes coordinated muscle action possible in the performance of a specific skill or test event. For a period of several weeks prior to testing, pupils should have participated in warm-up and conditioning activities, which cause each pupil to feel comfortable and ready to perform to optimum capacity.

How should the physical performance testing be organized to make the best use of available time?

Test events involving the same parts of the body or same sets of muscles should be given on different days. For example, the pull-up and the chair push-up should *not* be given on the same day.

In a minimum 20-minute physical education period in an elementary school, it is recommended that only one test event a day be given. In such instances one group should be tested while other groups under pupil leadership participate in activities that have been taught previously. Rotation of groups from testing areas to activity areas is continued until all pupils have been tested. Plans for the day's testing should be developed to avoid time being lost by pupils waiting their turn to be tested.

In a 35- or 40-minute period, two test events may be given in one day. In such instances qualified persons (see page 10) should be available to supervise the administration of each test event. With suitable organization and facilities, two groups can be formed with members of the class. A sample schedule for such an arrangement follows.

Sample Schedule for Administering Test Events to Class Divided into Two Groups

Day of testing	Group	Test event
First day	I	Knee bent sit-up for time
	II	Standing long jump
	I	Standing long jump
	II	Knee bent sit-up for time

Day of testing	Group	Test event
Second day	I	Chair push-up
	II	Side step
Second half of period	I	Side step
	II	Chair push-up
Third day	I	Pull-up or Flexed-arm hang
	II	Jog-walk
Second half of period	I	Jog-walk
	II	Pull-up or Flexed-arm hang

Descriptions and Instructions for Conducting Each Test Event

The recommended procedure for giving each test event is included in the pages that follow. The format used includes: (1) name of test event; (2) age of pupils; (3) primary elements of physical performance; (4) conditioning activities; (5) warm-up activities; (6) facilities and equipment; (7) description of test event; (8) rules; (9) scoring; (10) suggestions for teachers; and (11) common faults.

STANDING LONG JUMP

Ages ten through eighteen
Primary element of physical performance—
Leg strength and power

Conditioning Activities

Conditioning activities consist of running in place with knees high; jogging, alternating with running at full speed for 10 to 20 yards (9 to 18 m); jumping rope for three or four minutes; rebounding on trampoline; performing squat thrusts; performing vertical jump, coordinating arm and leg movement by saying in unison, "down, down, down, up" (arms move down and back on "down" and are thrust forward and upward on "up"); and performing several standing long jumps prior to the day of testing.

Warm-up Activities for Day of Test

Warm-up activities for the day of testing consist of stretching exercises, such as shoulder stretching by reaching high overhead with both arms from a standing position, stretching backs of legs by grasping soles of feet while sitting with legs straight, and concluding by running in place for short periods of time with exaggerated hip and knee action.

Facilities and Equipment

The landing surface consists of mats, turf, or outdoor rubber matting; the takeoff line is marked on floor or on firm surface adjacent to turf, or a takeoff board may be used. A 10-foot (3 m) metal tape measure and a marker to designate distance jumped are needed. Takeoff board must be level with landing surface.

Standing Long Jump Test Event

The pupil stands with feet several inches (centimetres) apart and with toes just back of the takeoff line or mark or front edge of the takeoff board. The takeoff is made from both feet, and the pupil jumps forward as far as possible, landing on both feet. Free swinging of the arms and bending of the knees is permissible; but during this action of arms and legs, the feet must not leave the takeoff surface or board until the jump is made.



Rules for Standing Long Jump

1. Three successive fair trials (not including fouls) shall be allowed within one testing period, and the best of the three scores is recorded.
2. The pupil's performance is recorded in inches (centimetres) to the nearest inch (centimetre).
3. The measurement is made from the takeoff line to the heel or any part of the body that touches the surface nearest the takeoff line.
4. Violation of any points under "Standing Long Jump Test Event" constitutes a foul.
5. Shoes with soles that provide firm traction (non-slippery surface) shall be worn.

Scoring the Standing Long Jump

The distance of the best jump shall be recorded in inches (centimetres) to the nearest inch (centimetre).

Suggestions for Teachers

To ensure reliability of test results, the pupils in the class shall jump on the same type of surface at each testing period. Each pupil shall take three jumps in succession before another pupil begins the test event. In this method the distance of each jump which is longer than the previous jump can be marked on the surface; and at the completion of the three jumps, only the greatest distance needs to be measured. In the diagram which follows, a procedure is shown in which eight pupils may be tested at one time. The scorers may be a group of pupils who cannot participate or another group of pupils prepared to score for each jumping event.

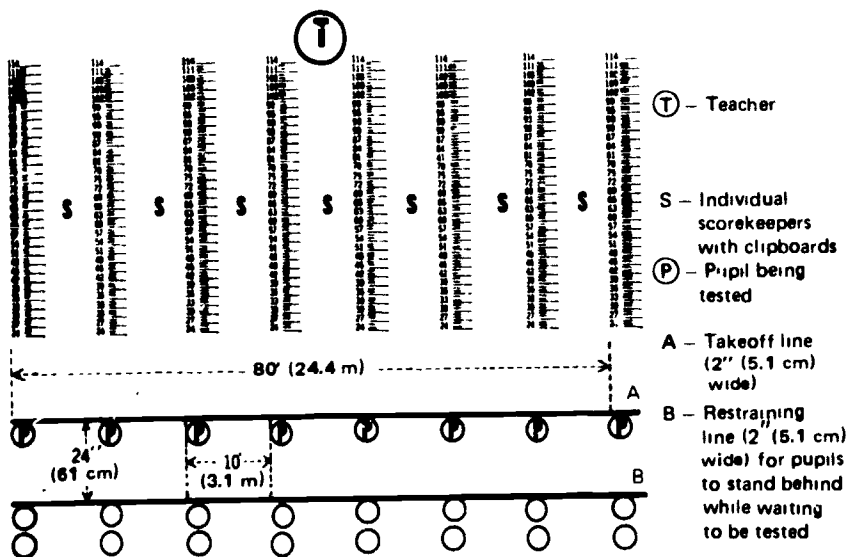
Another procedure is to use the "partner" system in which one pupil jumps and the partner measures. After the pupil performing has taken three consecutive jumps, the partner measures the longest jump. Then the pupils exchange roles.

Common Faults in the Standing Long Jump

1. Both feet are not on the takeoff board when beginning the jump. This is a hop, not a jump.
2. Measurement is not taken from the nearest point of body contact to the takeoff line.
3. Pupil does not keep feet behind the front edge of the takeoff line or board when beginning the jump.
4. Pupil jumps in stocking feet or barefooted on hard surface.
5. Pupil makes a bouncing takeoff.
6. Pupil jumps with heavy boots, coat, or other clothing that is restricting.

Description of Diagram

1. Mark two parallel white lines, each 2 inches (5.1 cm) wide, on rubber matting, floor, or if nothing else is available, on smooth blacktop. The lines should be 24 inches (61 cm) apart and 80 feet (24.4 m) long.
2. Designate eight individual jumping stations 10 feet (3.1 m) apart.
3. Mark each individual station with one-half-inch (1.3 cm) white lines spaced 1 inch (2.5 cm) apart, with numbers on every third line beginning at 24 inches (61 cm). Extend the numbers and lines to the maximum jumping distance for the ages being tested. (See percentile tables for the standing long jump.) The lines and numbers may be painted on strips of wood or measuring stick held securely to the turf with long nails.



Utilization of the Testing Station

Eight pupils may be tested simultaneously, with eight pupils respectively marking each jump the instant it is made. Each jump is marked at the painted inch (centimetre) nearest to the takeoff line or board. Each jumper takes three turns, one after the other, and the best jump is recorded as the score. The teacher is in position to supervise the entire activity, and if desirable, act as scorer.

KNEE BENT SIT-UP FOR TIME

Ages ten through eighteen

*Primary elements of physical performance -
Abdominal strength and endurance*

Conditioning Activities

Conditioning activities for the knee bent sit-up consist of running with knees raised high followed by easy jogging for 300 yards (274.3 m) or more; performing curl-ups or sit-ups in own rhythm and gradually increasing number performed; performing stunts on horizontal bar; and performing the exercises which follow:

First exercise. Starting position: lie on back with knees bent and feet parallel and flat on the floor. Contract (tighten) the abdominal muscles and press the back against the floor, but continue to breathe normally; then relax. Repeat several times.

Second exercise. Starting position: lie on back with legs together and straight out and arms extended over head and resting on the

floor. Raise trunk by swinging both arms up and forward so that the hands slap the floor on the outside of the legs somewhere between the knees and ankles. Return slowly to original lying position by tightening the abdominal muscles. Repeat several times.

Third exercise Starting position: sit with knees bent. Perform a V-sit by straightening legs, raising arms shoulder high, and balancing body on buttocks. Repeat several times.

Fourth exercise. Starting position: lie on the floor with knees bent and drawn up to chest. Extend the legs by straightening them. Slowly lower legs and hold them off the floor for two seconds, and return to the starting position. Repeat several times.

Several sit-ups should be performed before the day on which the pupil is timed.

Warm-up Activities for Day of Test

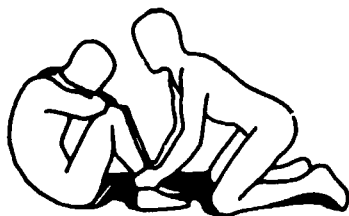
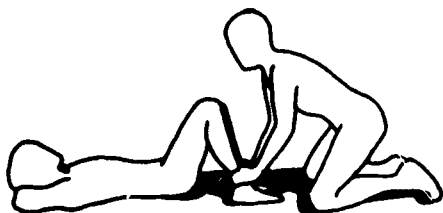
Warm-up activities for the day of the test event consist of stretching the abdominal muscles from a prone position by raising arms and upper body simultaneously as legs and hips are raised; stretching back from a kneeling position with arms reaching ahead and on the floor; raising alternate knees high while running for one to two minutes; bending body from a standing position; and performing a sit-up two or three times. The pupils should rest but keep warm before the test event is administered.

Facilities and Equipment

A clean floor, a mat, or dry turf and a stopwatch are needed.

Knee Bent Sit-up for Time Test Event

The pupil lies on the back on a clean floor, mat, or turf, with knees bent and feet on the floor. The heels should be not more than 12 inches (30.5 cm) from the buttocks. The angle at the knees should be less than 90 degrees. The pupil puts hands on the back of the neck with fingers clasped and places elbows squarely on the mat, floor, or turf. Feet are held by the partner in order to keep them in touch with the surface at all times. To perform the sit-up, the pupil tightens the abdominal muscles and brings the head and elbows forward to curl up, finally touching elbows to knees. This action constitutes one sit-up. The pupil returns to the starting position, with the elbows on the surface before repeating the action. The timer gives the signal "ready-go," and the sit-up performance is started on the word "go." Performance is stopped on the word "stop." For all pupils the number of correctly executed sit-ups performed in 60 seconds shall be the score.



Rules for Knee Bent Sit-up for Time

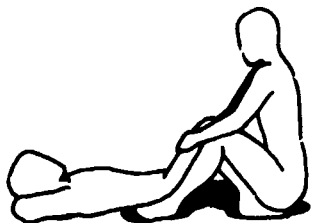
1. Only one trial shall be allowed unless the teacher believes the pupil has not had a fair opportunity to perform.
2. No resting between sit-ups is permitted.
3. No sit-ups shall be counted in which the pupil *does not* (a) keep the fingers clasped behind the neck; (b) bring both elbows forward in starting to sit up without pushing off the floor with an elbow; or (c) return to starting position, *with elbows flat on the surface*, before sitting up again.

Scoring the Knee Bent Sit-up for Time

The pupil's performance shall be recorded as the number of correctly executed sit-ups in 60 seconds. A foul nullifies the count for that sit-up. The watch is started on the word "go" and stopped on the word "stop."

Suggestions for Teachers

The person holding the feet should be sure to hold them securely. Pupils should not be permitted to "bounce" off the floor but should be taught to uncurl when returning to the starting position. A heavy, strong pupil may be held securely with a partner sitting on the feet and holding the thighs.



When pupils are performing the sit-up, very careful instructions should be given concerning the position and action of the elbows, both in touching the knees at the height of the sit-up and returning flat to the floor, mat, or turf. Instructions should be given on curling and uncurling so that the hips are not lifted or so that the body does not bounce off the floor. The timer should be given instructions and practice in correctly starting and stopping the watch. Errors in timing result in inaccurate scores.

A group of six or eight pupils may be given instructions to hold the feet of the participants and count the correctly executed sit-ups.

Common Faults in the Knee Bent Sit-up for Time

1. Fingers are not laced and kept behind the neck.
2. Elbows are not brought forward at the start of the sit-ups, nor do they touch the knees at the height of the sit-ups.
3. Elbows are not flattened against the floor, mat, or turf before sitting up.
4. Hips are lifted at the start of the sit-up.
5. Pupils bounce off the floor when executing the sit-up.
6. Pupils are requested to perform on an unclean surface.

SIDE STEP

Ages ten through eighteen

*Primary elements of physical performance –
Agility, balance, and coordination*

Conditioning Activities

Conditioning activities for the side step consist of running in place; responding to signals to change directions to the right and to the left, using a slide or a sliding step; increasing speed in changing of directions; performing side straddle hop by jumping to a straddle position while swinging arms overhead vigorously; changing directions while jumping rope; and performing the side step test event without timing.

Warm-up Activities for Day of Test

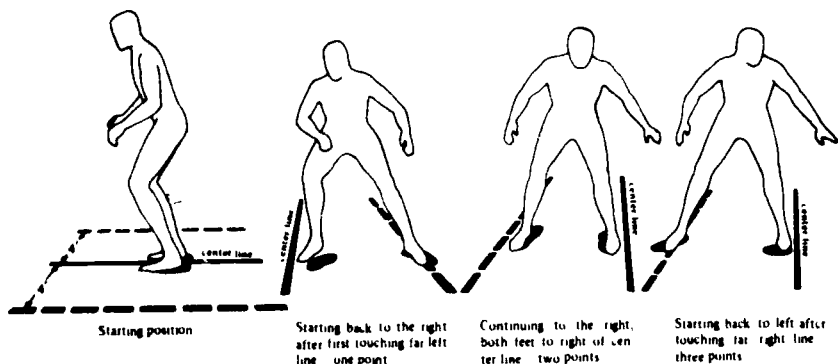
Warm-up activities for the day of the test consist of running in place; jogging; sliding for three steps to the left and then to the right, first in slow motion and then as rapidly as possible; and swinging left leg in front of body from the side for five counts and then repeating with the right leg.

Facilities and Equipment

A clean floor or asphalt and a stopwatch are needed. Three lines, each 1 inch (2.5 cm) wide, are painted or marked with tape to make a set of three lines 5 feet (1.5 m) long with 4 feet (1.2 m) between each line. The two outside lines are then 8 feet (2.4 m) apart. A 16 foot x 16 foot (4.9 m x 4.9 m) 4-square court may be used to advantage.

Side Step Test Event

After a warm-up the pupil takes a standing position astride the center line, with feet parallel to the center line. At the signal



“ready-go,” the pupil, by moving both feet, sidesteps or slides to the left of the center line until the *left foot* touches or crosses the line on the left. This action scores one point. The pupil then sidesteps or slides to the right across the center line by moving both feet, and when the *left foot* touches in the area to the right of the center line, the pupil has two points. The pupil continues side steps to the right until the right foot touches or crosses the line on the right. This action to the right scores one point for the total of three points. The pupil next sidesteps back to the left across the center line, leading with the left foot, and continues to the left until the right foot touches in the area to the left of the center line, which scores the fourth point. The pupil repeats, as rapidly as possible the side steps to the left, back to the right past the center line to the far right, and back left past the center line to the far left as many times as possible in ten seconds. The signal “stop” is given at the end of ten seconds.

Rules for Side Step

1. Only one complete trial shall be given. If a pupil executes the steps incorrectly within the first few seconds, the pupil may be allowed to start again.
2. A reasonable warm-up should precede the test.
3. The score is the total number of times the pupil crosses the center line with both feet and touches or crosses the left and right lines, as described, during ten seconds.
4. The sidestepping or slide may be done in any manner as long as the feet do not cross one over another and as long as the front of the body (chest and abdomen) faces forward. The pupil should turn head to look toward left line or right line when moving in either of those directions, but should keep the body facing forward.
5. When touching an outside line, both feet must be on that side of the center line.

Scoring the Side Step

The score is the total number of designated lines crossed or touched in ten seconds. If a pupil does not touch or cross a side line, the action does not count. If the center line is not crossed with both feet, the action does not count. If one foot crosses over the other, one point is subtracted for each such action.

Suggestions for Teachers

The timer should have practice prior to the administration of the test event to become familiar with the correct operation of the stopwatch so that accurate timekeeping results. Ten seconds is so short a time that great inaccuracy results in the score if any error is made in keeping time. The starting and stopping of the watch can best be performed with the index finger. The watch is started at the word "go" and stopped at the word "stop." One timer can be used for several pupils performing the test event if several sets of lines are marked and each performer has one person counting the score. The person who is timing should stand in front of the pupil performing, and the one who is counting should stand in back of the pupil performing. The surface should be kept clean to prevent slipping. The pupils should be encouraged to move in a balanced, semicrouched position while sliding, with eyes looking ahead and not down.

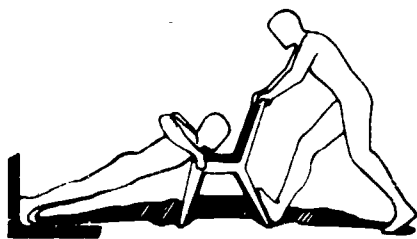
Common Faults in the Side Step

1. Pupil crosses feet as side step is taken.
2. Pupil twists body to face in the direction of sidestepping instead of keeping chest and abdomen facing forward.
3. Pupil tries to increase score by taking a wide stride position.

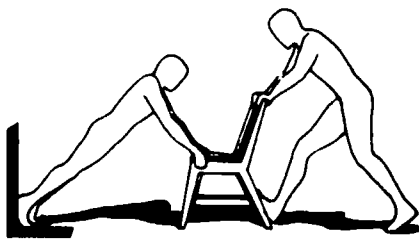
CHAIR PUSH-UP

Ages ten through eighteen

Primary elements of physical performance – Upper body and arm strength and endurance



Ready position



Counting position

Conditioning Activities

The conditioning activities for the chair push-up consist of jogging and running for three to four minutes followed by performing such exercises as jumping jack, arm circling, measuring worm, and crab walk; climbing a vertical pole or rope; walking on all fours, performing the horizontal bar swing and other gymnastic activities; doing the knee push-up; and performing a chair push-up several times prior to the day of being tested.

Warm-up Activities for Day of Test

Warm-up activities for the day of the test event consist of running and jogging or performing the side straddle hop for three or four minutes followed by shoulder stretching from a standing position and anterior arm stretching by pulling arms, kept at shoulder height, toward each other in the back.

Facilities and Equipment

A sturdy, nonfolding chair, the seat of which measures 14 to 18 inches (35.5 to 45.7 cm) above the floor, and a wall against which the feet may be braced are required. A sturdy bench, which can be securely held, may be used. Attention should be called to the fact that the hand grip on a bench is different from that used on the chair. A towel to keep the gripping places on chair or bench dry and clean, as well as chalk for the hands, should be available.

Chair Push-up Event

The pupil places hands on the chair, as shown in the ready position. Hands are on the corner of the chair, elbows bent. The pupil should kneel in front of the chair and extend the right leg until the foot touches the wall. Place chest on edge of chair at a point even with the armpits.

The chair should be adjusted until the pupil's right leg is straight and the chest is in line with the front edge of the chair.

The assisting pupil anchors the chair by placing one foot against the back leg of the chair and holding on to the back of the chair.

Pupil being tested now assumes the ready position by keeping chest in contact with the chair and extending left leg until foot is against the wall. The pupil then straightens arms; the body position is a straight line at right angles to the arms. This movement begins the push-up.

Rules for Chair Push-up

1. No resting is permitted between push-ups.
2. No push-up shall be counted in which the pupil fails (a) to keep the body straight from head to heels; (b) to touch the chest to

the edge of the chair; or (c) to push up to a full extension of the arms.

Scoring the Chair Push-up

The score is the number of push-ups performed during which no foul has been committed. The pupil is stopped at the end of the fiftieth push-up.

Suggestions for Teachers

The teacher instructs the partner of the pupil performing the push-up to hold the chair securely from behind the chair. A third pupil places one hand on the edge of the chair to make certain the chest touches on the downward movement and calls "foul" if the chest does not touch the hand on the edge of the chair. A fourth pupil should see that the body is maintained in a straight line and count the number of correct push-ups made in accordance with the number of fouls called out by pupil number three.

In another procedure the third pupil may be the scorer, placing the hand on the edge of the chair to make certain the chest touches on the downward movement. The count is called out loud each time the performer touches the hand of the scorer. A fourth pupil could see that the body is maintained in a straight line and call out "foul" if the body arches or sags.

Common Faults in the Chair Push-up

1. Body is not kept in a straight line from heels to head.
2. Arms are not fully extended.
3. Chest does not touch at the edge of the chair on each downward movement.
4. Arms are not kept at right angles to the body.

PULL-UP

Ages ten through eighteen

*Primary elements of physical performance -- Upper body
and arm strength and endurance*

Pupils who cannot perform one pull-up shall be tested on the flexed-arm hang.

Conditioning Activities

Conditioning activities consist of doing a fast walk, which increases to a run for 300 yards (274.3 m), followed by performing exercises for five minutes, such as jumping jack, side

straddle hop, and arm fling; climbing ropes or poles; performing gymnastic and tumbling stunts, using arms to hold and move the body; doing chair push-ups; doing chin-ups, with palms of hand toward face; and performing a pull-up with back of hands toward the face.

Warm-up Activities for Day of Test

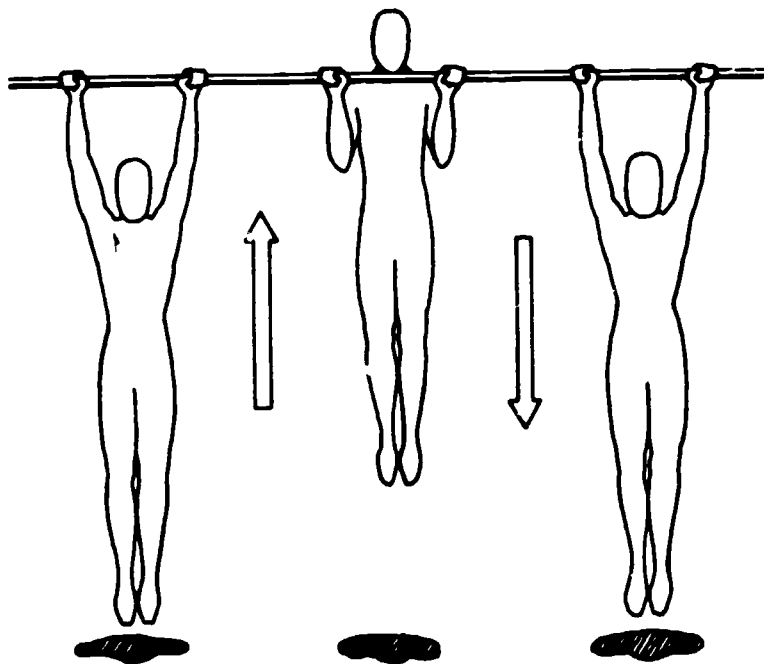
Warm-up activities for the day of testing consist of running and jogging for three or four minutes, doing stunts on a horizontal bar, such as front lean and skin-the-cat; and then performing side straddle hops and side arm flings for one or two minutes. This test event should be administered after two or three minutes of rest.

Facilities and Equipment

A metal chinning bar that is $1\frac{1}{4}$ inches (3.1 cm) in diameter and is clean and stationary is needed.

Pull-up Test Event

Bar should be at a height that will permit the pupil to hang so that the arms and legs are fully extended and the feet are a few inches (centimetres) above the ground. The pupil should grasp the bar with a forward grip (back of hands toward face and thumb under and around bar). The pupil then raises the body by the arms until the chin is above and not over the bar, and, without stopping, lowers the body to a full hang as in the starting position.



Rules for the Pull-up

1. Only one trial shall be allowed, unless for some reason the teacher believes that the pupil has not had a fair opportunity to perform.
2. The body must not swing during the execution of the movement (a partner may assist in preventing swinging).
3. The knees must not be raised, and kicking of the legs is not permitted.
4. Pupils who cannot perform one pull-up should perform the flexed-arm hang (see below).

Scoring the Pull-up

The pupil's performance shall be recorded as the number of correctly executed pull-ups. One complete pull-up is counted each time the pupil places the chin above the bar.

Suggestions for Teachers

The bar used for this test should not be dirty, sweaty, or rusty, as such conditions often injure the pupil's hands. Pupils should be given assistance in reaching the bar for this test event if the bar is out of easy reach by jumping.

Common Faults in the Pull-up

1. Body swings during pull-up.
2. Knees are raised.
3. Legs are kicked.
4. Resting takes place between pull-ups.
5. Arms are not fully extended between pull-ups.
6. Pupil places chin over bar at top of pull-up by stretching the neck instead of pulling the body to a sufficient height.
7. Pupil uses reverse hand grip instead of front hand grip.

FLEXED-ARM HANG¹

Ages ten through eighteen

*The primary elements of physical performance --
Upper body and arm strength and endurance*

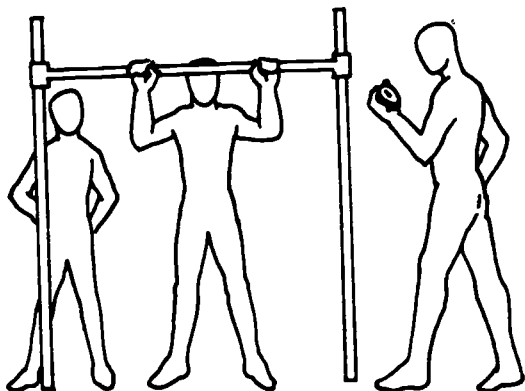
Equipment

A clean and stationary horizontal bar that is approximately 1¼ inches (3.1 cm) in diameter and a stopwatch are needed.

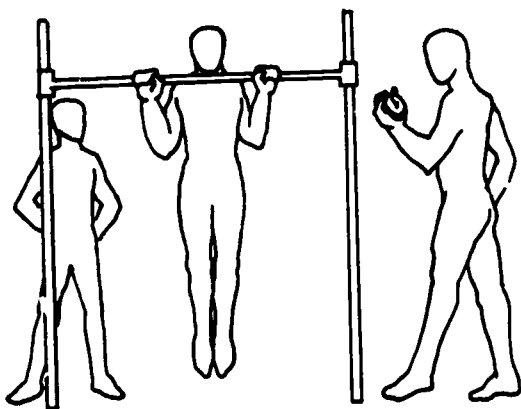
¹The flexed-arm hang is from the AAHPERD *Youth Fitness Test Manual*. Washington, D.C.: American Association for Health, Physical Education, Recreation, and Dance, 1976.

Description

The pupil should use an overhand grasp (see below) Two spotters, one in front and one in back of pupil, assist the pupil to raise his or her body off the floor to a position in which the chin is above and not over the bar, the elbows are flexed, and the chest is close to the bar, as shown. The pupil holds this position as the time is recorded.



Starting position
for flexed-arm hang



Flexed-arm hang

Rules

1. The stopwatch is started as soon as the pupil takes the hanging position.
2. The watch is stopped when (a) the pupil's chin touches the bar; (b) the pupil's head tilts backwards to keep chin above the bar; or (c) the pupil's chin falls below the level of the bar.

Scoring

Record to the nearest second the length of time the pupil holds the correct hanging position.

JOG-WALK

Ages ten through eighteen

*Primary element of physical performance –
Cardiorespiratory endurance*

Conditioning Activities

The conditioning activities for the jog-walk follow: for a minimum period of four weeks prior to administering the jog-walk test event, much of the physical education period should be spent in walking, jogging, running, and performing other endurance-type activities. During the preparation period, the amount of time spent in jogging and running should increase, and the amount of time spent in walking should decrease. The speed at which pupils jog should gradually increase.

A pupil who has not become accustomed to jogging long distances may experience discomfort, even to the extent of an upset stomach on occasion. Therefore, when this occurs, it is an indication that more cardiorespiratory endurance activities, such as jogging and running for extended periods, should be included in the program before the test event is administered. Pupils should be aware that this is a jog-walk event and that they may walk to recover prior to jogging or running again. Each pupil should jog and walk for six minutes or more prior to the time of being tested.

Warm-up Activities for Day of Test

Warm-up activities for the day of testing consist of stretching calf muscles (gastrocnemius) by leaning against a wall and keeping knees straight; and jogging and walking for a minute or so.

Facilities and Equipment

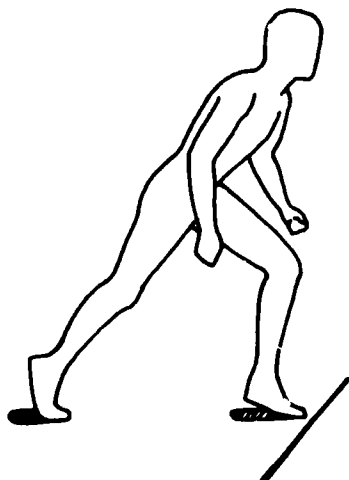
An accurately measured running area (see diagrams on page 29) and a stopwatch are needed.

Jog-walk Test Event

The pupil takes the position for a standing start behind the starting line. (See illustration.) The starter takes a position at the starting line and uses the command, "Get on your marks," as a preparatory signal to alert all runners. "Set" is given when all runners indicate they are ready by being motionless and looking directly down the track. "Go" is spoken by the starter approximately two seconds after the "set" command.

Ten pupils, five at the starting line and five directly behind, may jog-walk at one time if the track is sufficiently wide and enough recorders are available. A recorder is assigned to each runner to count the number of 110-yard (100.5 m) segments he or she

covers. The timer signals the completion of six minutes by a whistle blast or other suitable means. The recorder announces the total number of 110-yard (100.6 m) segments the pupil has completed, plus the one the pupil is in at the time the signal to stop is given. A 440-yard (402.3 m) track or course is marked in fourths, each of which is 110 yards (100.6 m), or a course may be laid out with a radius of 70 yards (64 m) around the periphery of the playground, which gives a 440-yard (402.3 m) circle. Each quarter of the circle is 110 yards (100.6 m), and the distance is recorded in quarters or fractions thereof. Note: If the playground is limited in size, a 35-yard (32 m) radius will produce a 220-yard (201.2 m) course, and the jogger will be required to run half a circle for each 110 yards (100.6 m). (See diagram for possible courses.) In some extremely small schools, pupils may have to run around the school site.



Rules for Jog-walk

1. Only one trial is given.
2. Walking is permitted, but the object is to cover the greatest distance in the designated time.

Scoring the Jog-walk

The score is the number of 110-yard (100.6 m) segments completed, plus the one the pupil is in at the time the signal to stop is given.

Suggestions for Teachers

The teachers should consult with the school nurse and study each pupil's health record to determine the physical limitations of any pupil before the pupil jogs or runs for distance. Teachers should watch for symptoms of poor reaction to vigorous exercise as pupils participate in any running activities, especially as the distance and duration are increased. The teachers should be alert

to the following conditions, which may or may not indicate a health problem for a pupil:

Excessive breathlessness. Some breathlessness is normal with exercise, but breathlessness that persists long after exercise is cause for medical referral.

Bluing of the lips. Except in a cold wet environment, bluing of the lips or nailbeds is an unnatural reaction to exercise. Its occurrence in the ordinary exercise setting is cause for medical referral.

Pale or clammy skin. Pale or clammy skin or cold sweating following or during exercise is not a normal reaction to physical activity within the usual temperature ranges of the gymnasium or playing field. Again, medical referral is recommended.

Unusual fatigue Excessive fatigue, as evidenced by unusual lack of endurance or early failure to maintain moderate activity, also suggests the need for medical referral. It is dangerous to attribute such reactions to the pupil's attitude until possible organic causes have been ruled out.

Persistent shakiness Unusual weakness or shakiness that continues for more than ten minutes following vigorous exercise is cause for medical referral. Normally recovery will be reasonably prompt.

Muscle twitching or tetany. Muscular contractions, such as twitching or tetany, whether localized or generalized, sometimes occur as an unusual reaction to exercise. They may be abnormal and warrant medical investigation.

An occasional reaction to exercise may not be cause necessarily for medical referral, but recurring or persisting of any of the following conditions in conjunction with physical performance indicates the need for medical referral and avoidance of exercise until the pupil has been approved medically for vigorous activity: (1) headache; (2) dizziness; (3) fainting; (4) broken night's sleep; (5) digestive upset; (6) pain not associated with injury; (7) undue pounding or uneven heartbeat; and (8) disorientation or personality changes.

Teachers should consider the condition of the pupil, such as obesity and convalescence, and the weather, such as high temperature and high humidity, before the decision to administer the jog-walk is made for a particular pupil and on a particular day. Some pupils will not be in condition to take this test in any one year and should be given special help.

The jog-walk should never be run in a shuttle formation, because time is lost in changing directions.

Common Faults in the Jog-walk

1. The jogger cuts in front of another jogger and forces loss of stride.
2. The jogger may begin too fast instead of pacing properly to cover the farthest distance possible.
3. The jogger is not in condition to take the jog-walk test event, and undue physical-emotional distress results.

The testing stations designated by the school or school district should remain the same each time the test is administered, thus keeping the results of the pupils' performances consistent for each school.

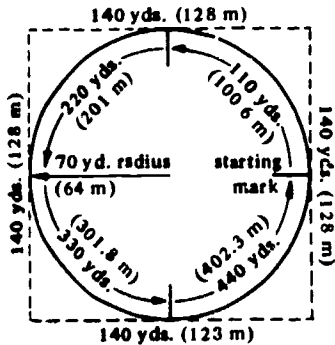


Fig. II-1. 440-yard (402.3 m) round track.

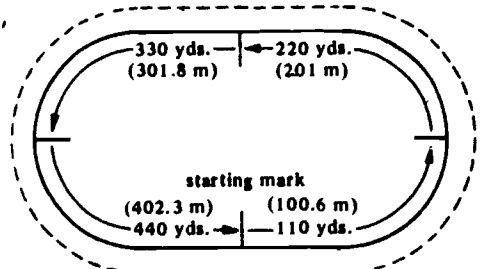


Fig. II-2. 440-yard (402.3 m) oval track.

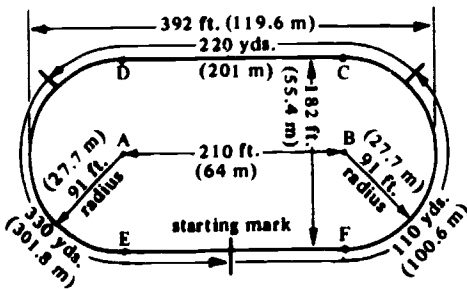


Fig. II-3. 330-yard (301.8 m) oval track. Determine points A and B, which are 210 feet (64 m) apart. Mark two arcs each 91 feet (27.7 m) long with a rope or string which is 91 feet (27.7 m) long from point A and from point B to establish the curves of the oval. Connect C and D and E and F to complete the oval.

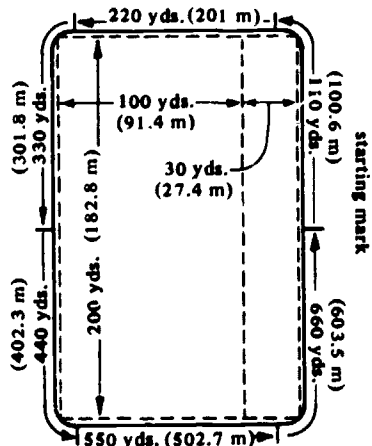


Fig. II-4. 660-yard (603.5 m) track. Adapt the 660-yard (603.5 m) track from a 600-yard (548.6 m) track. Extend the 600 yards (548.6 m) for 30 yards (27.4 m), and draw an oval touching each corner, thus making 660 yards (603.5 m).

To score the jog-walk test event on any of the above tracks, count the number of 110-yard (100.6 m) segments the pupil jog-walks from the starting mark, plus the segment the pupil is in when the event is ended.

Recording and Reporting Test Results

Questions most frequently asked about what to do with the test results and the answers to those questions follow. The questions are grouped under three headings according to recording, reporting, and processing the test results.

Recording Test Scores

What recording of test results is necessary?

The raw score made by each pupil on each test event shall be recorded in the pupil's cumulative record. These scores also may be recorded on a class record form and individual pupil reports.

How should raw scores be made meaningful?

Raw scores are made meaningful when compared with scores made within a year, and the amount of improvement, lack of improvement, or loss of performance is noted. The cause of such scores should be investigated with the pupil in terms of health, growth, emotional upset, and performance expectancy by both pupil and teacher.

Raw scores interpreted as percentiles or stanines can be used to compare performances with other pupils of the same age and sex.

What are percentiles?

The percentiles indicate the proportion of subjects in a comparable age-sex category that the pupil has equaled or exceeded in that test event. Percentiles often are more informative than raw scores. For instance, if a ten-year-old male jog-walks nine 110-yard (100.6 m) segments in six minutes, he is at the 15th percentile and as high as 15 percent of the California sample; if he can jog-walk 15 segments, he is as good or better than 90 percent of the ten-year-old males in the sampling for California.

What are stanines?

Stanines are artificially scaled scores which are derived from a normal distribution curve. There are nine possible stanines — one through nine — with a mean of five. Each interval represents one-half of a "standard deviation" of the normal distribution. Thus, a stanine of six would be about one-half a standard deviation above the mean. Stanines are cruder indicators than percentiles and may not be

applicable if the raw score distributions are irregular, as they are in the pull-up events.

How are percentiles used?

Use of percentiles makes it possible for a teacher to determine quickly each pupil's position on a scale established by a sampling of score of boys and girls in California. For example, if a pupil scores at the 70th percentile in the pull-up, it means that the score is exceeded by only 30 percent of all scores of the pupils tested. From this initial test result, the level of the pupil's performance at that date is known. A pupil who scores at the 70th percentile is performing at a better than average level.

Pupil progress may be determined only by comparing the results of a second test with the initial test results. Cumulation of test scores shows the achievement gained or lost by the pupil during the elementary and high school years. This information should be reported to the pupil, the parents, and appropriate school personnel. The test record of an individual pupil, a class, a school, or a district can be compared to the California state norms contained in this publication. (See Chapter V, tables 1 through 14.) In the comparisons it is important to consider such factors as previous practice or exposure to the events, selective procedures in testing, equipment needs, and other local factors.

The number or percent of the pupils who score at or below the 25th percentile in one or more of the events in the test should be reported, and the pupils should be provided with special help in physical education. The number or percent who score between the 25th and 75th percentiles have scores comparable to those of half of the pupils in the state. Those pupils who score above the 75th percentile have scores comparable to the highest 25 percent of the pupils in the state.

Teachers should be aware that as instruction improves and opportunity for practice increases, the physical performance of pupils of each age will improve. Performance in the pull-up will improve especially as instruction and practice increase in activities which strengthen the arms and upper body.

Reporting Test Results

What scores should be reported to the governing board of the school district?

The number or percent of pupils scoring at designated percentiles, by sex and age, for each test event should be reported. The percentiles selected should demonstrate both strengths and weaknesses and present a fair picture of the type of instruction which has been possible with the existing personnel, facilities, and supplies. The relationship of the pupils' health to physical performance should be analyzed and reported. (Refer to Chapter IV, "Using Test Results.")

Who reports test scores to the governing board of the school district?

The superintendent or designated representative submits test scores to the governing board of the school district (California Administrative Code, Title 5, Education). In a large school district, a random sampling of test scores may be reported to the governing board of the school district instead of presenting the board with a compilation of each raw score.

When are test scores reported?

Dates are established by the governing board (California Administrative Code, Title 5, Education), and the reporting is accomplished before the end of the school year.

How are test scores reported?

Forms prescribed or approved by the governing board are used. Forms should make it possible to present information which includes the number and percent of pupils improving in performance and scoring in the low percentiles and in the high percentiles. Suggestions for improving the test results, such as acquiring necessary equipment, should accompany the report to the board.

What scores are recorded in the pupil's cumulative record?

The pupil's raw score for each test event should be recorded on an appropriate form. It is recommended that percentiles and stanines also be included. Progress or lack of achievement can be best shown by reporting the scores on a cumulative form on which is provided *raw scores from two testing periods annually for ages ten through eighteen*. Districts may decide to include additional information in the pupil's cumulative record, such as a program developed for the pupil or circumstances which assist in clarifying the scores recorded.

Processing Test Scores

What methods of processing scores may be utilized?

Machine processing, hand processing, or a combination of machine and hand processing may be utilized. Machine processing should be considered for large schools.

What method of data processing should be selected?

Each school district or county superintendent of schools office should consider cost and teacher time in processing test results.

Some machines are not designed to produce output forms with the necessary analysis of Physical Performance Test results. Regional educational data processing centers are available throughout the state and have the necessary computers for scoring and reporting the results of the Physical Performance Test at a nominal cost. (A list

giving the names and addresses of the centers appears at the end of the chapter.)

When funds are not available for machine processing, teacher and clerical time may be utilized for hand processing the test items. The per pupil cost of machine processing varies for the seven-item test. Cost figures for hand processing are highly variable.

What are machine processed reports?

Machine processed reports are reports in which data are automatically processed by electronic machines.

What forms of reports are necessary for recording and reporting through machine processing?

Various forms have been developed for use in recording and reporting test results that are processed by machine.

- Individual mark sense cards or scoring forms are used for recording pupils' raw scores.
- Class record sheets are used by the teacher to assist in identifying weaknesses in individual pupils or in the physical education program.
- District summary sheets are used for reporting scores to the governing board of the school district.
- Gummed labels are applied in pupils' cumulative records for the appropriate year.
- Individual report forms are used by the teacher, counselor, or administrator for individual consultation and reporting to parents. A carbon of the individual report form may be placed in the cumulative record in lieu of a gummed label.

The illustrations presented in this chapter are samples of recording and reporting forms. Some of the forms require machine processing, others simplify the recording by hand, and one can be completed by hand or the information may be supplied on a gummed label processed by a machine.

Figure 1 is a sample of a mark sense card which may be used to record the raw scores of each test event in the Physical Performance Test. The area on the left of the card is supplied as a help to the scorer to record scores in pencil. The final scores must be recorded by filling in the bubbles with an electrographic pencil (mark sense).

Figure 2 is an example of a scoring form or answer sheet that is processed directly by optical scanning in a machine.

What are hand-processed reports?

Hand-processed reports, as the name implies, are reports which are prepared by hand. Raw scores are manually recorded by the recorder, and any additional information is converted by hand to make the scores more meaningful.

PHYSICAL PERFORMANCE TEST

STUDENT'S AGE IN YEARS MUST BE FILLED IN →

FINAL SCORES MUST BE MARKED IN THE BUBBLES TO THE RIGHT

USE THIS AREA FOR PRELIMINARY RECORDING

STANDING LONG JUMP	_____
KNEE BENT SIT-UP	_____
CHAIR PUSH-UP	_____
SIDESTEP	_____
PULL-UP	_____
FLEXED ARM HANG	_____
JOG-WALK	_____

FILL BUBBLES WITH HEAVY BLACK MARKS - USE ONLY AN ELECTROGRAPHIC (MARK SENSE) PENCIL

YEARS OLD	STANDING LONG JUMP	KNEE BENT SIT-UP	CHAIR PUSH-UP	SIDE STEP	PULL-UP	FLEXED ARM HANG	JOG-WALK
TENS UNITS	HUNDRED TENS UNITS	TENS UNITS	TENS UNITS	TENS UNITS	TENS UNITS	TENS UNITS	TENS UNITS
C0	C0C0C0	C0C0	C0C0	C0C0	C0C0	C0C0	C0C0
C1	C1C1C1	C1C1	C1C1	C1C1	C1C1	C1C1	C1C1
C2	C2C2C2	C2C2	C2C2	C2C2	C2C2	C2C2	C2C2
C3	C3C3C3	C3C3	C3C3	C3C3	C3C3	C3C3	C3C3
C4	C4C4C4	C4C4	C4C4	C4C4	C4C4	C4C4	C4C4
C5	C5C5C5	C5C5	C5C5	C5C5	C5C5	C5C5	C5C5
C6	C6C6C6	C6C6	C6C6	C6C6	C6C6	C6C6	C6C6
C7	C7C7C7	C7C7	C7C7	C7C7	C7C7	C7C7	C7C7
C8	C8C8C8	C8C8	C8C8	C8C8	C8C8	C8C8	C8C8
C9	C9C9C9	C9C9	C9C9	C9C9	C9C9	C9C9	C9C9

ONE AND ONLY ONE BUBBLE MUST BE FILLED IN EVERY COLUMN FOR EACH TEST ADMINISTERED IF AN UNSUCCESSFUL ATTEMPT IS MADE, FILL IN ALL ZEROS FOR THAT EVENT

Fig. III-1. Mark sense card.

SURVEY OF PHYSICAL PERFORMANCE

1947-ODF 5432

DO NOT MARK IN THIS AREA

GENERAL INFORMATION

START

STOP

RESULTS

SAMPLES

1. Start of 1st. event
2. End of 1st. event
3. Start of 2nd. event
4. End of 2nd. event
5. Start of 3rd. event
6. End of 3rd. event
7. Start of 4th. event
8. End of 4th. event
9. Start of 5th. event
10. End of 5th. event
11. Start of 6th. event
12. End of 6th. event
13. Start of 7th. event
14. End of 7th. event
15. Start of 8th. event
16. End of 8th. event

Print LAST NAME SPACE FIRST NAME SPACE MIDDLE NAME

100-6138

1. Start of 1st. event
2. End of 1st. event
3. Start of 2nd. event
4. End of 2nd. event
5. Start of 3rd. event
6. End of 3rd. event
7. Start of 4th. event
8. End of 4th. event
9. Start of 5th. event
10. End of 5th. event
11. Start of 6th. event
12. End of 6th. event
13. Start of 7th. event
14. End of 7th. event
15. Start of 8th. event
16. End of 8th. event

If a student cannot see pull up administrative information area, they are having an ink problem.

Fig. III-2. Score form for machine processing by optical scanning.

What information is necessary for reporting and recording data by hand?

The pupil's name, age, sex, school, and each event in the test should be included on the report form.

What forms are necessary for reporting and recording data by hand?

Hand processing test data requires the use of several forms:

- A class record sheet for recording raw scores.

- An individual pupil record card for interpreting scores to parents, pupils, and other interested personnel, and for use in the cumulative record.
- A composite report to the governing board of the school district, which should illustrate strengths and weaknesses of the physical education program.
- Charts or graphs may make the interpretation of test results more meaningful to pupils, administrators, governing boards, and other interested groups but are not required.

Figure III-3 is a sample of one type of hand-processed form which can be used by the teacher at the testing site and kept as a cumulative class record.

Physical Performance Test for California

School _____ Grade _____ Period _____

Date _____ Teacher _____

Instructions

Before completing this form refer to *The Physical Performance Test for California (Revised) 1980* for directions for administration of test especially Chapter II page 9 for supplies and page 11 for schedule

Names	Sex (M)	Age (years)	Standing long jump (inches)	Knee bent sit up (Number in 60 seconds)	Chow push up (Number max 50)	Side step (Number of lines crossed)	Pull-up (Number)	Flexed arm hang (Seconds)	Jog walk (Number of segments in 6 min.)

Fig. III-3. Score form for hand processing.

What are the advantages and disadvantages of processing data by machine?

Advantages are: (1) machine processing is consistent in performance; (2) chance of errors is lessened; (3) development of statistical data by machine processing is far less time-consuming than it is by hand; and (4) machine processing is relatively inexpensive.

Disadvantages are: (1) many districts do not have machines available for processing; (2) a considerable amount of time may elapse between testing and receiving reports; and (3) some teachers lack experience in marking cards which are to be put into a machine (input cards).

What are the advantages and disadvantages of processing data by hand?

Advantages are: (1) there is no lapse of time between administering the test and processing data if teacher time is available; (2) immediate follow-up by school personnel involved can occur; and (3) there can be opportunity for makeup tests for absentees over a period of time.

Disadvantages are: (1) hand processing is time-consuming; (2) possibility of inaccuracies in treatment of data is greater than machine processing, and (3) hand processing is expensive when the value of teacher time is considered. However, if school funds are not available for machine processing, teacher time may be required for this task.

List of Regional Educational Data Processing Centers

**Alameda County Regional
Educational Data Processing Center**
224 West Winton Ave.
Hayward, CA 94544
(415) 881-6928

**Central Valley Regional Educational
Data Processing Center**
2314 Mariposa St.
Fresno, CA 93721
(209) 488-3337

Independent Data Processing Center
9738 Lincoln Village Drive
Sacramento, CA 95827
(916) 362-0633

**Los Angeles County
Regional Data Processing Center**
9300 Imperial Highway
Downey, CA 90242
(213) 922-6141

**Research and Regional Data Processing
Office of the Sacramento County
Superintendent of Schools**
9738 Lincoln Village Drive
Sacramento, CA 95827
(916) 366-2591

**Riverside County Regional Educational
Data Processing Center**
4015 Lemon Street
Riverside, CA 92502
(714) 787-2604

**San Diego County Regional Educational
Data Processing Center**
6401 Linda Vista Road
San Diego, CA 92111
(714) 292-3539

**Office of the San Mateo County
Superintendent of Schools
333 Main Street
Redwood City, CA 94063
(415) 364-5600**

**Santa Clara County Regional
Data Processing Center
100 Skyport Drive
San Jose, CA 95110
(408) 299-4251**

**Sonoma County Regional Educational
Data Processing Center
2555 Mendocino Avenue
Santa Rosa, CA 95401
(707) 527-2171**

**Ventura County Regional Educational
Data Processing Center
County Office Building
535 E. Main Street
Ventura, CA 93009
(805) 654-2721**

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Using Test Results

The Physical Performance Test is used to secure some of the information needed to accomplish the following purposes:

- Identify physically underdeveloped pupils.
- Adapt instruction to individual needs.
- Adapt the physical education program to pupils' needs.
- Appraise pupils' progress.

Some suggestions for accomplishing these purposes are presented in the answers to the questions which follow.

How are physically underdeveloped pupils identified?

Observation of a pupil's performance in any physical activity is the first step in identifying physically underdeveloped pupils. The symptoms discussed on page 28 identify conditions that merit attention. In addition to observation of a pupil's performance, school personnel should use the following procedures:

- Analyze the results of the pupil's physical examinations.
- Evaluate the pupil's growth pattern to see how the pupil compares with the rate of growth and height and weight for pupils of the same age.
- Appraise the pupil's body balance and movement to determine whether the pupil has postural deviations that may restrict the pupil's achieving best performance.
- Determine the pupil's performance level. The pupil's performance at a given age may be appraised by interpreting the results as percentile scores. If the pupil's score is at or below the 25th percentile, it may indicate physical underdevelopment. Additional information which may explain poor performance should be obtained from the nurse, counselor, or teachers. This information should include records of conditions, such as illnesses, accidents, poor eating habits, irregular growth, emotional problems, and physical handicaps.

How is instruction adapted to the individual needs of pupils?

Instruction is adapted to meet the individual needs of pupils by selecting specific activities which should assist in the removal of weaknesses identified by the results of the Physical Performance Test. Activities which will assist in the removal of identified weaknesses are listed under the specified test events:

- Pupils who do poorly in the standing long jump should be taught to accomplish the following: (1) skip rope at own tempo; (2) jump in place; and (3) perform rhythmical activities involving skipping, leaping, hopping, and jumping.
- Pupils who perform poorly in the knee bent sit-up should be taught to accomplish the following: (1) perform a variety of tumbling stunts on mat or grass; (2) hang from bar with knees raised; (3) perform a skin-the-cat on the horizontal bar; and (4) participate in weight training.
- Pupils who cannot do any type of pull-up or push-up should be taught to accomplish the following: (1) perform the crab walk and other animal walks; (2) assume a pull-up position by stepping on a stool, then slowly lowering self to a hanging position (partner removes stool), and repeat; (3) perform a wheelbarrow on a mat or clean floor; (4) hang on bar, bend knees to chest, circle once to the right and once to the left, and repeat; (5) swing on the horizontal bar or ladder with arms fully extended; (6) swing on the horizontal bar or ladder with arms flexed; (7) climb a vertical pole or rope using both hands and feet; (8) travel hand-over-hand forward and backward on the bar; and (9) hang by one hand and then the other.
- Pupils who perform poorly on the side step should be taught to accomplish the following: (1) gallop freely in open space; (2) slide and change direction; (3) perform hopping and jumping patterns, such as in hopscotch or in designs made by inner tubes or hoops laid on a smooth surface; and (4) perform folk dances with skipping, sliding, or polka as the basic step.
- Pupils who perform poorly in the jog-walk should be taught to do the following: (1) play follow-the-leader over an increasingly long course; (2) perform, throughout a specified period, continuous rhythmical activities, such as vigorous folk dance, creative rhythms, and modern dance; (3) jog and run with increased emphasis on running in activities such as soccer, speed-a-way, and flag football; (4) perform track events emphasizing relays and increased distance running; and (5) perform in a variety of activities in circuit training.

How should the physical education program be adapted to meet needs of most pupils?

When the majority of pupils in a class or school perform at or below the 50th percentile in one or more of the physical performance test events, the physical education program should be critically examined, and activities in the program that contribute to the improvement of physical performance should be increased. If overall results of the class show poor performance in the area of strength, the offerings in stunts, tumbling, self-testing activities, and activities on apparatus should be increased. If overall results of the class show

poor performance in cardiorespiratory endurance. activities that require an increased length of time and distance in running, walking, and moving should be stressed. Such activities include relay races, soccer, speed-a-way, continuous rhythmical activities and rope jumping.

When the majority of pupils in a class or school perform at or above the 75th percentile in one or two of the physical performance test events, the physical education program of activities should be examined for a balance of all instructional units. Care must be taken to provide activities which will maintain the high level of performance. Care also should be taken to increase activities which will improve performance in areas of low achievement:

Often entirely new units of instruction need to be introduced to meet the needs of certain pupils.

How should a pupil's progress be appraised?

If the Physical Performance Test is administered at regular intervals at least twice a year, it may be used as one of the measures of individual progress and achievement. The recording and interpreting of successive scores make it possible to observe the changing performance level of each pupil. Since physical performance is *one* of the objectives of physical education, other measuring devices must be used to determine whether *all* the objectives of the program have been met. Pupils' marks must reflect their overall achievement as measured by all types of devices, such as skill tests, written tests, checklists, and others, as well as improvement as indicated by the raw scores from one administration of the Physical Performance Test to the next within one school year.

What type of progressive activities may be utilized to develop physically conditioned pupils?

After a pupil has been identified as being physically underdeveloped for the pupil's chronological age, growth pattern, health record, and performance on one or more events in the Physical Performance Test, a program of physical education must be developed to meet the pupil's identified needs. Meeting each pupil's identified needs may mean (1) a complete revision of the entire physical education program in a school or district; (2) development of special or new units of instruction; and/or (3) revision of the methods of instruction or emphasis on activities which develop specific groups of muscles.

In order to provide a program meeting specific needs, the teacher may find it necessary to provide an individualized program with a pupil at school and at home, with a small group or squad who have comparable deficiencies, or with the entire class. A list of activities which can be used to meet specific physical development needs follows. The activities are grouped according to the primary elements physical performance that are tested.

Activities for developing arm, shoulder girdle, and upper back muscular strength and endurance. The activities, progressing from a slight to an increased demand on muscles, are listed under headings which indicate the equipment needed for the activities which follow them. (Mats, ropes, and horizontal bars are needed equipment.)

- On floor near mat (Body is supported on the floor.)
 1. Walk on all fours the length of the mat.
 2. Run on all fours the length of the mat.
 3. Perform a seal walk around the mat. Drag legs along the floor as the arms and hands move the body.
 4. Perform a partner pull-up. One person stands astride a person who is lying on the back with the head and shoulders between the legs of the standing partner. Person on the floor raises arms and interlocks hands and wrists with the partner above. Pupil lying on the floor then pulls up until the chest touches the clasped hands or wrists while the body is kept in a straight line with the weight on the heels.
- On mat
 5. Perform a frog-stand or tip-up. Squat so that hands are flat on the floor, somewhat turned in, elbows are inside thighs, pressed hard against knees, and feet are close to hands. Lean forward slowly and transfer the weight of the body onto arms and hands, and at the same time, lift toes from the floor. Hold this position for from 5 to 20 counts. Head should be held up to get good balance. Increase time in which position can be held.
 6. Perform a handstand with support for feet. Stand facing a partner. Place hands on the floor about shoulder width apart. Fully extend arms and legs; raise head well up. Try to throw feet so that they are caught by partner. Hold position by pointing toes as feet balance over raised head. (The handstand may be taught from a position of both hands and one foot on the floor. The free leg then, by a swing, pulls both legs up into the air. Many pupils can do a handstand easily from a standing position.)
- On horizontal bar (Entire body must be held against gravity pull.)
 7. Hang on a bar with back of hands toward face and body hanging with no support for a count of one, and drop to an easy landing by bending ankles, knees, and hips.
 8. Hang on a bar with back of hands toward face and with body extended for increasingly longer counts (10 to 30); rest and relax between attempts.
 9. Hang on a bar with legs extended and back of hands toward face; bring knees up to chest and lower to starting position.

10. Hang with arms bent and with back of hands toward face; hold chin at bar level until arms tire, and then lower body.
11. Perform a sloth-hang, also called ankle pull-up. Grab one end of the horizontal bar with both hands, swing the body up, and cross legs over the other end of the bar. While hanging with legs straight along the bar, pull chin up to bar, lower, and repeat alternating sides of head to bar. Lower legs first when dismounting and do so before tiring.
12. Perform at least two "chins" by pulling up with palms of hands toward face.
13. Perform a pull-up with the elbows slightly bent.

● On ropes

14. Climb rope for 2 to 5 feet (61 to 152.5 cm), using both legs and arms. Attempt to climb 10 feet (3 m).
15. Climb by holding onto two ropes with just the hands.
16. Climb one rope with hands only for at least 10 feet (3 m).

Activities for developing abdominal strength and endurance. The activities, progressing from a slight to an increased demand on muscles, are listed under headings which indicate the equipment needed for the activities which follow them. (Mats and horizontal bars are needed.)

● On floor near mat

1. Perform a shoulder stand. Lie on back. Lead with feet and roll backwards until hips are above shoulders and legs are extended vertically as high as they can reach with toes pointed upward. Maintain inverted body balance by bracing hands against body at the waist or a little below and resting upper arms on the floor parallel with body. Weight of body is carried on shoulders, neck, and elbows. Hold this position for several seconds and then return to original position by bending knees to chest, removing hand support, and slowly rolling from rounded back to pelvis, finally allowing legs to rest in place. Repeat until able to perform with no hand support.
2. Perform an up and reach. Lie on back with arms extended beyond head. In one continuous movement lift arms, reach forward, and sit up. At the same time pull knees close to chest inside outstretched arms. Return to the starting position and continue to sit up and lie down in a rhythmical movement.
3. Perform an abdominal curl. Lie on back with hands on thighs and legs extended flat on floor, toes held upright. Slowly raise head, shoulders, and upper trunk; curl forward to a half sitting position; slowly uncurl; and assume starting position.

4. Perform a V-sit. Lie on back with legs straight and arms out from shoulders. Come to a position where body is balanced on the buttocks with the trunk and legs making a "V." Arms, stretched out from the shoulders, are used to balance. Return slowly to position. Repeat several times, and try to hold the "V" position for a longer period during each performance.

- On horizontal bar

5. Perform a skin-the-cat. Jump upward, grasp the bar with back of hands toward face, and let body hang straight. Pull with arms, and, at the same time, bring both feet between arms and under the bar. Continue to turn body between arms as far as possible. Release bar and land lightly on feet.
6. Perform a skin-the-cat over and back. Perform a skin-the-cat to the point at which the bar is generally released, but instead of releasing the bar, pull body back between arms with knees bent and close to chest. (If the bar is low, a child may push off the ground and then pull with arms to gain the correct position.)
7. Perform a flip pancake forward. Grasp the bar with back of hands toward face and hands spread to a width a little greater than that of body. Jump to a front leaning rest position with thighs resting on the bar and arms and legs extended. Adjust hands so that palms are toward face. Curl over the bar, bend knees, continue to roll over the bar, and land on feet.
8. Perform a pull over or hip swing up. Face and grasp bar with back of hands toward face. Swing legs backward and forward, and on forward swing bend arms and kick with one leg to bring hips to rest on bar with feet together. Hold a front-support position.

- On mat

9. Perform a controlled headstand. Place hands and head on the mat so that they mark the points of an equilateral triangle. Move feet slowly toward face and raise hips to a position over shoulders. Raise one leg after the other or both legs at the same time until hips and knees, ankles and toes can be held straight in vertical position. Return to the surface by bending hips and lowering legs so that the body weight can be taken on feet. (When a student is learning to perform the controlled headstand, another student, called a spotter, stands with the side of the foot placed against the head of the performer on the mat. The side of the spotter's body provides a surface against which the performer's body may rest momentarily if the

- performer loses balance while executing the headstand.)
10. Perform a hand-knee-shoulder stand. Number 1 or bottom person must have strong shoulder muscles and lie on back with knees bent. Number 2 person stands between the knees and as close as possible to the bent hips of number 1. Three spotters should be used while this stunt is being learned - one to stand at each side and one at the head of number 1. Number 2 places hands either on the knees or thighs of number 1, according to the length of arms, leans forward to allow shoulders to be caught by the hands of number 1. The elbows of number 2 must not bend, and number 1 must be careful to get a comfortable grasp on number 2's shoulders. Number 2, by swinging one leg upward, raises both legs over head. If number 2 remembers to point toes and keep head raised, there will be a perfect balance on the hands and knees of number 1.

Activities for developing leg strength, speed, and power The activities, progressing from a slight to an increased demand on muscles, are listed under headings which indicate the equipment needed for the activities which follow them. (Long ropes, individual ropes, and mats are needed.)

- With long rope (Rope is held by two people.)

- 1 Perform a rock the cradle. Lead a group in running through a rope as it is swung back and forth. Run through as the rope reaches the height of its arc or as it reaches the lowest point in its arc. More than one can jump at the same time.
- 2 Perform high water. Take a turn jumping into and out of a fully turned long rope. (After each jumper has had a turn, the rope is raised two or three inches (5.1 or 7.6 cm) for each jump.)

- With individual rope

3. Skip with rope moving forward, moving in a circle, and remaining in a specified area
4. Jump with rope slowly, quickly, and changing directions.
5. Perform rhythms, such as animal walks and locomotor skills, accompanied by recording or drum.

- On mat

6. Perform an ankle pull. Partners take a position on their hands and knees beside each other but facing in opposite directions. Each pupil holds a partner's nearest ankle with one hand and tries to crawl forward, dragging the partner along. The pupil reaching the opposite side of the mat first is the winner. (Pupils should be matched according to size.)

7. Play leap frog. Number 1 player bends forward by supporting hands on knees and ducking the head. Number 2 jumps over number 1 by placing hands on number 1's upper back and jumping. Repeat four times, alternating jumpers.

● On play area

8. Play last one out. By running in a squad of six to eight, pupils can cover long distances by concentrating on what they are doing rather than how long they are running. Jogging in file, one person behind the other, pupils start to a specific destination, and immediately the leader shouts "go." At this command the last person in the line passes the other pupils and then becomes the leader. Immediately upon becoming the leader, this person shouts "go," and the next person passes everyone and becomes the leader. This person shouts "go," and the next person runs ahead to become leader. This process is continued until the squad has reached its destination and has returned to the point of origin.

Activities for developing agility, balance, and coordination The activities which follow are given to develop agility, balance, and coordination. (No equipment is needed)

1. Balance body over a wide stationary base -- stand in a side stride position with feet 12 to 14 inches (30.5 to 35.6 cm) apart. Bend knees easily to lower body to floor, thus lowering the center of gravity. Shift weight slowly from one foot to the other. Then balance first on one foot and then the other.
2. Change directions by sliding first four slides to the left, and back four slides to the right, three slides to left and three back to the right, two slides to the left and two back to the right. Perform the action slowly at first and gradually increase in tempo. (An exciting variation is achieved by performing the slide step in a column of three or four people, each of whom has hands on the hips of person in front.)
3. Skip in own floor pattern and change directions frequently.
4. Play games involving changing directions.

Activities for developing cardiorespiratory endurance The activities which follow are given to develop cardiorespiratory endurance. The length of time for the activity should be increased gradually, and the periods of rest between each activity should be decreased gradually. (No equipment is needed for the first four activities; a mat is needed for the last activity listed.)

1. Run in place for a count of 20 and then walk for 20 steps. Gradually increase the running steps to 40 as the walking steps are decreased. Rest and repeat.

2. Run in place by lifting knees as high as waist on each step. Carry body weight on front foot and toes. Each arm should swing rhythmically at the side of the body. Perform the exercise first for a half minute and gradually increase the time until three or four minutes duration has been reached.
3. Play follow-the-leader. Lead a group through the following: run around the gym or play area, jump across each mat, jog around the horizontal bar and to the far end of the area, and jump (long) rope twice before returning to starting place.
4. Jump rope with individual rope for one minute, two minutes, three minutes, four minutes.
5. Perform a monkey roll or three-person weave. Take position on the mat for monkey roll. Three performers take prone positions on the mat, backs straight and weight on hands and toes with about three feet (91.4 cm) between performers. Number 2 (in the center) drops down and rolls toward number 1. As number 2 rolls, number 1 gets to knees and springs from the mat with hands and feet and dives sideways over number 2. The fall should be broken with the hands and feet (still in prone position), number 1 immediately drops down and rolls toward number 3. As number 1 rolls toward number 3, number 3 springs over number 1, drops to the mat, and rolls toward number 2. Number 2 then dives sideways over number 3. This shuttle process is continued for three or four complete series.

Using Percentiles

Percentiles for the seven test events of the Physical Performance Test, adopted by the California State Board of Education in 1980, are presented in tables 1 through 14 for each event for females and males, listed according to chronological age.

The percentile tables are designed to give the teacher some quick interpretation of relative score values. Thus, for each percentile shown, the raw score which is closest to the percentile is recorded in the tables. The matching of the percentiles with the raw score cumulative percent is often inexact.

Sometimes the same raw score extends over two or more of the five-point intervals on the percentile scale. In such cases the raw score is reported at the percentile which is closest to the cumulative percent. The presence of a dash (—) in a column simply means that a whole number raw score has no sharply defined meaning in terms of five-point percentile intervals.

Percentile interpretations of specific raw scores should be taken as rough indicators, although they are accurate within one or two percentage points. In the actual computation an *exact* percentile was provided each raw score, but the data have been presented in five-point intervals in these tables for ease of use.

The major purpose for administering the Physical Performance Test is to determine the strengths and weaknesses of pupils in order that physical education programs, instructional methods, and emphases may be changed to meet each pupil's needs, as identified by the test results. Improvement of individual performance is very important to both pupil and teacher. Use of the norms is not necessary for individual pupil measurement and evaluation, but teachers and administrators should find them helpful in evaluating the programs of entire school districts or one school in comparison to the performance of males and females, ages ten through eighteen, in April and May, 1979, in California.

Percentile Tables

Percentiles for the seven test events for males and for females according to chronological age and length or number of performances are presented in the tables 1 through 14.

Sampling Plan and Data Gathering Procedure

The purpose of the sampling plan was to define a practical probability sample for establishing Physical Performance Test norms in California public schools. A probability sample is a sample for which the sampling errors can be calculated from probability theory and for which the biases of selection are virtually eliminated, because the members of the sample are selected by an automatic and presumably unbiased procedure. Each element in the sample must have had an assignable probability of coming into the sample, and the automatic sampling process must reflect those probabilities.

The sampling universe in this study was taken to be the complete set of pupils, ages ten through eighteen, enrolled in public schools in the state of California in the spring of 1979. The sampling frame of the study was the complete set of public schools operating in the state during 1979. A primary reason for selecting the school as the sampling frame is that testing can be more conveniently administered on a school class basis rather than on an individual basis. As designed, each pupil enrolled in a California public school had theoretically an equal chance of entering the sample.

Constraints in Formulating the Sampling Scheme

Several important constraints were assumed in formulating the sampling scheme. Among these were the following:

- The number of individuals in each age category was to be approximately 5,000 boys and 5,000 girls; thus, the total number (N) would be about 45,000 boys and 45,000 girls.
- The test events which were administered were as follows: standing long jump, knee bent sit-up for time (60 seconds), chair push-up (limited to 50), side step, pull-up, jog-walk, and flexed-arm hang.
- Administrative considerations dictated that the test events be given by regular personnel in the school districts, not by visiting specialists. Area coordinators had the responsibility for providing detailed, specific instructions for the administration of each test event.
- The sampling scheme had to be simple enough to be easily documented and realized from existing data sources at the California State Department of Education.

TABLE 1
Percentiles for Standing Long Jump for Females
According to the Length of the Jump
as Measured in Inches,
Listed by Chronological Age

Percentile	Length of jump in inches, according to age*								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	73	79	81	84	85	85	86	87	87
95	70	74	77	78	80	80	80	81	79
90	67	71	74	76	77	77	77	78	77
85	65	69	73	74	75	75	76	76	75
80	63	67	71	73	73	74	74	75	73
75	61	66	70	72	72	73	73	73	72
70	60	64	69	70	71	71	72	72	71
65	59	63	67	69	70	70	71	71	69
60	58	62	66	68	69	69	70	69	67
55	57	61	65	67	67	68	68	68	66
50	56	60	64	66	66	67	67	67	65
45	55	59	63	65	65	66	66	66	64
40	54	58	62	63	64	64	65	65	63
35	53	57	61	62	63	63	64	64	62
30	52	55	60	61	62	62	63	62	61
25	51	54	58	60	60	61	61	61	59
20	50	52	57	58	59	60	60	59	57
15	48	50	55	56	57	57	58	57	55
10	46	48	53	54	54	55	56	55	53
5	43	45	49	50	51	51	52	52	50

*See page 69 for table of conversion of inches into metric measurement.

TABLE 2
Percentiles for Standing Long Jump for Males
According to the Length of the Jump
as Measured in Inches,
Listed by Chronological Age

Percentile	Length of jump in inches, according to age *								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	75	80	89	93	98	102	105	107	108
95	72	75	83	88	93	97	100	102	103
90	69	73	80	84	90	94	97	99	101
85	68	72	77	82	88	92	95	97	98
80	66	71	75	81	86	90	93	96	97
75	64	69	74	79	84	89	91	94	96
70	63	68	73	78	83	87	90	93	94
65	62	67	72	76	82	86	89	91	93
60	61	66	71	75	81	85	87	90	91
55	60	65	69	73	79	84	86	89	90
50	59	64	68	72	78	82	85	88	89
45	58	62	67	71	77	81	84	87	88
40	57	61	66	70	75	80	83	85	86
35	56	60	65	69	74	79	81	84	85
30	55	59	64	67	73	77	80	83	84
25	54	58	62	66	71	75	78	81	82
20	53	57	61	64	69	74	77	79	80
15	51	55	59	62	67	72	74	77	78
10	49	52	57	60	64	69	72	74	75
5	46	50	54	56	61	65	67	71	71

*See page 69 for table of conversion of inches into metric measurement.

TABLE 3
Percentiles for Knee Bent Sit-up for Time
for Females According to the Number of Sit-ups
Performed in 60 Seconds,
Listed by Chronological Age

Per- centile	Number of sit-ups, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	50	55	56	62	57	55	54	53	54
95	42	46	49	49	51	50	50	49	47
90	38	42	45	47	48	47	47	45	44
85	36	39	43	45	46	45	45	43	42
80	33	37	41	43	44	43	43	41	41
75	31	36	40	42	42	41	41	—	40
70	30	34	38	41	41	—	40	40	39
65	28	33	37	39	40	40	39	39	37
60	27	31	35	38	39	39	38	37	36
55	25	30	34	37	37	38	37	36	35
50	23	29	32	35	36	36	35	35	34
45	22	27	31	33	35	34	34	33	32
40	21	25	30	32	33	33	33	32	31
35	19	24	28	31	32	31	31	31	30
30	17	22	27	30	31	30	30	30	28
25	16	21	25	28	29	29	29	28	26
20	15	19	22	26	26	26	26	26	23
15	13	16	20	24	25	24	24	24	20
10	11	13	18	21	22	21	21	21	19
5	7	10	12	16	15	16	16	15	12

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TABLE 4
Percentiles for Knee Bent Sit-up for Time
for Males According to the Number of Sit-ups
Performed in 60 Seconds,
Listed by Chronological Age

Per- centile	Number of sit-ups, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	54	56	61	62	64	65	67	69	67
95	47	50	56	56	59	60	61	63	62
90	44	47	52	53	56	57	58	60	60
85	42	44	50	51	54	55	56	58	58
80	40	42	48	50	52	54	54	56	56
75	38	41	46	48	50	52	52	54	54
70	36	39	45	47	49	51	51	52	52
65	35	37	43	45	48	50	50	51	51
60	34	36	42	44	46	48	49	50	50
55	32	34	40	42	45	47	47	48	49
50	30	32	39	41	44	46	46	47	47
45	29	31	37	40	42	45	45	46	46
40	27	29	36	39	41	43	44	45	44
35	25	27	34	37	40	42	42	43	43
30	24	25	33	36	39	41	41	41	42
25	22	23	31	34	37	39	40	40	40
20	20	21	30	32	35	37	38	39	39
15	18	20	27	30	32	35	36	36	36
10	15	16	23	26	30	33	32	33	33
5	10	12	19	21	24	29	28	29	30

TABLE 5
Percentiles for Chair Push-ups for Females
According to the Number of Push-ups Performed,
Listed by Chronological Age

Per- centile	Number of push-ups, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	41	35	32	35	35	33	35	36	40
95	25	29	25	24	27	25	26	25	26
90	20	22	21	21	22	21	21	21	21
85	18	20	20	18	20	19	20	20	20
80	16	18	17	17	18	17	17	17	17
75	14	16	16	15	16	15	16	16	15
70	13	15	15	14	15	14	15	15	14
65	11	13	13	13	14	13	13	14	13
60	10	12	12	12	13	12	12	13	—
55	9	11	11	11	12	11	11	12	12
50	8	10	10	10	10	10	10	11	—
45	7	8	9	8	9	9	9	—	11
40	6	7	7	7	8	8	8	10	10
35	5	6	6	6	7	7	7	9	9
30	—	5	5	5	6	6	6	8	7
25	4	4	4	4	5	5	5	7	6
20	3	3	3	3	4	4	4	6	5
15	2	2	—	2	3	3	3	5	4
10	—	—	2	—	2	2	2	3	3
5	1	1	1	1	1	1	1	2	2

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TABLE 6
Percentiles for Chair Push-ups for Males
According to the Number of Push-ups Performed,
Listed by Chronological Age

Percentile	Number of push-ups, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	50	*	*	*	*	*	*	*	*
95	38	41	44	45	50	*	*	*	*
90	31	34	39	40	45	50	*	*	*
85	29	31	35	37	42	49	50	50	50
80	27	29	32	34	40	45	49	—	—
75	24	26	30	31	36	42	47	—	—
70	22	24	29	30	34	40	44	49	—
65	20	22	26	27	31	39	41	47	—
60	18	20	24	25	31	36	40	44	49
55	16	19	22	23	27	34	37	42	46
50	15	16	21	21	25	31	35	40	43
45	14	15	20	20	24	30	33	38	41
40	13	13	18	19	22	29	31	36	40
35	12	12	16	17	21	26	30	33	37
30	11	10	14	15	20	24	28	31	35
25	10	9	13	14	18	22	25	—	31
20	8	8	11	12	16	20	23	27	30
15	7	7	9	10	13	18	20	24	26
10	5	5	7	8	10	15	18	21	21
5	3	3	4	5	7	11	12	18	15

*In scoring of the chair push-up test, the pupil is stopped at the end of the fiftieth (50th) push-up; see page 20. The asterisk represents scores above 50.

TABLE 7
Percentiles for Side Step for Females
According to the Number of Lines Crossed or Touched,
Listed by Chronological Age

Percentile	Number of lines crossed or touched, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	21	25	24	24	25	26	26	25	26
95	19	21	22	22	23	23	23	23	23
90	18	20	21	21	22	22	22	22	22
85	17	19	—	—	21	21	21	21	21
80	16	18	20	20	—	—	—	—	—
75	—	—	—	—	—	20	20	20	20
70	15	17	19	—	20	—	—	—	—
65	—	—	—	—	—	—	—	—	—
60	14	16	—	19	—	19	19	19	19
55	13	—	18	—	19	—	—	—	—
50	—	15	—	18	—	—	—	—	18
45	12	14	17	—	—	18	18	18	—
40	11	—	—	—	18	—	—	—	—
35	—	13	16	17	—	—	—	—	17
30	10	12	—	—	17	17	17	17	—
25	9	11	15	16	—	—	—	—	16
20	—	10	14	—	16	16	16	16	15
15	8	9	13	15	15	15	15	15	14
10	7	8	12	14	14	14	14	14	13
5	2	1	10	13	13	12	12	13	12

TABLE 8
Percentiles for Side Step for Males
According to the Number of Lines Crossed or Touched,
Listed by Chronological Age

Per- centile	Number of lines crossed or touched, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	22	26	25	23	28	29	31	32	31
95	20	22	23	22	25	27	28	28	29
90	19	20	22	—	24	26	26	27	27
85	18	19	21	21	23	25	25	26	26
80	17	18	20	—	—	24	24	25	25
75	16	—	—	20	22	23	23	24	24
70	—	17	19	—	—	—	—	—	—
65	15	—	—	—	21	22	—	23	—
60	—	16	18	19	—	—	22	—	23
55	14	—	—	—	20	21	—	22	—
50	—	15	17	18	—	—	21	—	22
45	13	—	—	—	—	—	—	21	—
40	—	14	—	—	19	20	20	—	21
35	12	—	16	17	—	—	—	20	—
30	11	13	—	—	18	19	19	—	20
25	10	12	15	16	—	—	—	19	—
20	9	11	—	—	17	18	18	—	19
15	8	9	14	15	16	17	17	18	18
10	—	8	12	14	15	16	16	17	17
5	7	7	10	13	14	15	15	15	14

TABLE 9
Percentiles for Pull-up for Females
According to the Number of Pull-ups Performed,
Listed by Chronological Age

Per- centile	Number of pull-ups, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	10	16	11	11	17	21	21	20	23
95	7	9	10	7	8	11	12	13	13
90	5	7	6	5	6	7	8	9	10
85	4	6	5	4	5	5	5	6	8
80	—	5	4	3	4	4	4	4	6
75	3	4	3	—	3	—	—	—	5
70	—	—	—	—	—	3	3	—	4
65	—	3	—	—	—	—	—	2	3
60	2	—	—	2	2	2	2	—	—
55	—	—	2	—	—	—	—	—	2
50	—	2	—	—	—	—	—	—	—
45	—	—	—	—	—	—	—	—	—
40	—	—	—	—	—	—	—	—	—
35	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—
25	1	1	1	1	1	1	1	1	1
20	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—

TABLE 10
Percentiles for Pull-up for Males
According to the Number of Pull-ups Performed,
Listed by Chronological Age

Percentile	Number of pull-ups, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	11	12	12	13	17	19	20	23	23
95	9	9	10	11	13	15	17	18	19
90	7	7	8	9	11	13	15	16	16
85	6	6	7	8	10	12	13	15	15
80	—	—	6	—	—	11	12	14	14
75	5	5	—	7	9	10	11	13	13
70	—	—	5	6	8	—	—	12	12
65	4	4	—	—	7	9	10	11	11
60	—	—	4	5	—	—	—	—	—
55	—	—	—	—	6	8	—	10	—
50	3	3	—	4	—	7	8	9	10
45	—	—	3	—	5	—	—	—	9
40	—	2	—	—	—	6	7	8	—
35	2	—	—	3	4	—	6	7	8
30	—	—	2	—	—	5	—	—	7
25	—	—	—	2	3	4	5	6	6
20	—	—	—	—	—	—	4	5	5
15	1	1	—	—	2	3	3	4	4
10	—	—	1	1	1	2	2	3	3
5	—	—	—	—	—	1	1	2	2

TABLE 11
Percentiles for Flexed-Arm Hang for Females
According to the Number of Seconds Scored
(Correct Position Held),
Listed by Chronological Age

Per- centile	Number of seconds correct position held, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	40	66	56	47	47	39	38	38	33
95	25	31	35	34	33	30	29	27	26
90	21	25	29	27	27	24	22	22	21
85	18	22	24	24	23	21	21	20	20
80	14	20	21	21	21	19	19	19	18
75	12	16	19	18	19	17	17	17	16
70	11	14	17	15	16	15	15	15	14
65	10	12	15	12	14	13	13	13	12
60	9	11	13	11	12	11	12	11	10
55	8	10	11	9	11	10	10	10	9
50	7	9	9	8	10	8	9	8	8
45	6	8	8	7	8	7	8	7	7
40	5	7	7	6	7	6	7	6	—
35	—	6	6	—	6	5	6	5	6
30	4	5	—	5	5	—	5	—	5
25	—	4	5	4	4	4	4	4	4
20	3	—	4	3	—	3	3	3	3
15	2	3	3	2	3	2	—	2	2
10	—	—	2	—	2	—	2	—	—
5	1	1	1	1	1	1	1	1	1

TABLE 12
Percentiles for Flexed-Arm Hang for Males
According to the Number of Seconds Scored
(Correct Position Held),
Listed by Chronological Age

Per- centile	Number of seconds correct position held, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	55	82	62	73	70	—	108	—	—
95	31	40	36	40	51	50	—	45	—
90	28	34	29	31	31	43	54	—	—
85	24	28	24	28	27	36	41	35	—
80	21	23	21	25	25	31	33	25	—
75	19	20	17	21	21	27	30	—	24
70	16	17	15	18	19	23	29	22	21
65	14	15	13	16	17	17	21	—	19
60	12	14	11	14	15	16	19	19	18
55	10	12	10	12	12	12	17	18	—
50	9	11	9	11	11	11	16	16	11
45	8	10	8	10	10	10	12	11	10
40	7	9	7	9	8	8	11	—	—
35	6	8	6	7	6	6	10	—	6
30	5	6	5	6	5	—	7	8	—
25	—	—	4	5	—	5	6	6	5
20	4	5	—	4	4	—	5	—	—
15	3	4	3	3	3	4	4	5	3
10	—	3	2	2	2	2	3	—	2
5	2	2	1	1	1	1	2	—	—

TABLE 13
Percentiles for Jog-walk for Females
According to the Number of 110-yard (100.6 m) Segments
Completed, Listed by Chronological Age

Per- centile	Number of 100-yard segments completed, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	17	19	15	15	15	15	16	16	16
95	14	14	14	14	14	14	14	14	14
90	—	14	—	—	—	—	—	—	—
85	13	13	13	13	13	13	13	13	13
80	12	—	—	—	—	—	—	—	12
75	—	12	—	—	—	—	—	—	—
70	—	—	12	—	—	12	12	12	—
65	11	—	—	12	12	—	—	—	—
60	—	11	—	—	—	—	—	—	11
55	—	—	—	—	—	—	—	—	—
50	10	—	11	—	11	11	11	11	—
45	—	—	—	11	—	—	—	—	—
40	—	10	—	—	—	—	—	—	10
35	—	—	—	—	—	—	—	10	—
30	9	9	10	—	10	10	10	—	—
25	—	—	—	10	—	—	—	—	9
20	—	—	—	—	—	9	9	9	—
15	8	8	9	9	9	—	—	—	—
10	—	—	8	8	8	8	8	8	8
5	7	6	7	1	1	2	1	1	2

TABLE 14
Percentiles for Jog-walk for Males
According to the Number of 110-yard (100.6 m) Segments
Completed, Listed by Chronological Age

Percentile	Number of 110-yard segments, according to age								
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18
99	17	17	17	17	18	18	19	19	20
95	15	16	16	15	17	17	18	18	18
90	—	15	—	—	—	—	—	—	—
85	14	14	15	15	16	16	17	17	17
80	—	—	—	—	—	—	16	—	—
75	13	—	14	—	15	—	—	16	16
70	—	13	—	—	—	—	—	—	—
65	—	—	—	14	—	15	—	—	—
60	—	—	—	—	—	—	—	—	—
55	12	12	13	—	14	—	15	15	15
50	—	—	—	—	—	—	—	—	—
45	—	—	—	13	—	14	—	—	—
40	11	11	12	—	13	—	14	14	—
35	—	—	—	—	—	—	—	—	14
30	—	—	—	12	—	13	—	—	—
25	10	10	11	—	12	—	13	13	13
20	—	—	—	—	—	—	—	—	—
15	9	9	10	11	11	12	12	12	12
10	8	8	9	10	10	11	11	11	11
5	7	7	8	9	9	9	10	10	10

Appendix A

Films on Physical Fitness

Everyone's a Winner Series

This four-film series presents the President's program for physical fitness to elementary students. After viewing the films, students would be motivated to participate in the fitness program with understanding. They will recognize the need for muscular strength, endurance, balance, agility, flexibility, coordination, speed, and power, and they will relate these needs to exercises in the program.

Everyone's a Winner: Balance, Flexibility, and Power

Order number 11724
13½ min. - color, \$230
Rental, \$28

Everyone's a Winner: Muscular Strength and Endurance

Order number 11629
16 min. - color, \$260
Rental, \$31

Everyone's a Winner: Heart-Lung Endurance

Order number 11631
15 min. - color, \$260
Rental, \$31

Everyone's a Winner: A Program for Physical Fitness

Order number 11630
15½ min. - color, \$260
Rental, \$31

Order from: BFA Educational Media
2211 Michigan Ave.
Post Office Box 1795
Santa Monica, CA 90406

Special series offer

4 films - save 10 percent \$909
If purchased individually, \$1,010

Produced by Educational Communication Services, Office of the San Diego County Superintendent of Schools

Appendix B

Presidential Physical Fitness Award

Students who perform at or above the 85th percentile on the California Physical Performance Test on all seven test items are eligible for the Presidential Physical Fitness Award. It is not necessary to take the AAHPERD tests to qualify for the award.

The Presidential Physical Fitness Award is the highest award given for performance on the AAHPERD Youth Fitness Test. Any boy or girl, age ten-seventeen who scores at or above the 85th percentile on all seven test items is eligible for the Presidential Award. Winners of the award receive a certificate suitable for framing, a decal, and an emblem designed for wear on jackets, sweaters, and blazers.

The award certificate is handsomely printed in gold and black, and bears the President's signature, the Presidential seal, and a congratulatory message.

The award emblem is three inches in diameter and embroidered in gold, red, white, and blue.

The award decal, added to the program in 1974, is the same size and color as the emblem. It is designed for use on textbooks and notebooks, walls, luggage, bulletin boards, and so forth.

All schools and youth groups in the United States that have qualified physical education and/or physical fitness personnel are welcome to participate in the program. This includes all public, private, and parochial schools and school districts; YMCAs; YWCAs; boys' [and girls'] clubs; recreation departments; Jewish Community Centers; and organizations representing churches, schools, PTA units, neighborhoods, and similar youth-serving groups.

STATE CHAMPION AWARD

The State Champion Award was established in 1972 to give recognition for outstanding school achievement in physical fitness.

The award is presented annually to three schools in each state which have the largest percentage of students qualifying for the Presidential Physical Fitness Award. There will be one winner in each of the following classifications:

Schools with under 100 student population

Schools with 101-500 student population

Schools with over 500 student population

The winning schools in each state receive a distinctive award plaque and certificate, plus statewide—even national—recognition. And, every student who helps the school win receives an embroidered State Champion emblem.

Both the Presidential Physical Fitness Award and State Champion Award programs are cosponsored by the President's Council on Physical Fitness and Sports and the American Alliance for Health, Physical Education, Recreation, and Dance.

For further information and application forms, please write AAHPERD, 1500 Association Drive, Reston, VA 22091.

Appendix C

Fitness Materials

The American Alliance for Health, Physical Education, Recreation, and Dance provides information and awards for physical fitness programs. Inquiries regarding materials described on this page may be directed to AAPHERD, 1500 Association Dr., Reston, VA 22091. An order-identification number is enclosed in parentheses at the end of each item description.

TEST MATERIALS

AAHPERD Youth Fitness Test Manual—A revised edition of the 1975 manual, with new norms based on a national survey sponsored by a grant from HEW. In addition to the separate norms for boys and girls, an added feature of this revised manual is the inclusion of a new set of optional norms which combine the test results for boys and girls into a single set of norms. Designed to test basic physical components of fitness through performance, the manual is illustrated with drawings and contains complete instructions for administering the six test items — shuttle run, standing broad jump, 50-yard dash, flexed-knee sit-up, 600-yard run-walk (with options at various grade levels), and pull-ups for boys, flexed-arm hang for girls. Rev. 1976. 96 pp. (242-25826).

Personal Fitness Record Forms for each pupil taking test Rev. 1975. (242-06752)

Class Composite Record Forms for recording test data for the class. Rev. 1975. (242-06754)

Cumulative Fitness Record Forms for recording individual achievement profile for eight years (grades five–twelve). Rev. 1975. (242-06756)

Fitness Kit Number 3 Sample of Fitness Test Manual, Personal Fitness Record, Cumulative Fitness Record, and Class Composite Record. (242-0694)

INTERPRETIVE MATERIALS

Exercise and Fitness Suggestions for maximum enjoyment and benefit from exercise and other components of fitness for effective living. 1964. 12 pp. (242-07138)

Your Child's Health and Fitness—Review of the what and why of physical fitness. Written for parents as well as teachers, it is available in quantity for distribution to parents by the students or at parent-teacher meetings. 16 pp (242-06774)

SPECIAL FITNESS AWARDS FOR THE MENTALLY RETARDED

AAHPERD's newest award program, sponsored jointly with the Joseph P. Kennedy, Jr. Foundation, provides for special fitness awards for mentally retarded children. Eligibility for the awards is based on achievement in tests of physical ability, utilizing a modified version of the AAHPERD Youth Fitness Test.

Application for the awards may be made through a school, institution, community recreation program, camp, association, or by parents. For a brochure describing the awards program, eligibility requirements, and testing procedures, write AAHPERD, 1500 Association Dr., Reston, VA 22091.

Appendix D

Fitness Awards



AWARD EMBLEMS

Senior Emblems For senior high school boys and girls (grades ten through twelve).

Standard Emblem For boys and girls who equal or exceed 50th percentile. Triangular. (242-25514) *

Merit Emblem For boys and girls who equal or exceed 80th percentile. Triangular. (242-25520)

Junior Emblems - For junior high school boys and girls (grades seven through nine)

Standard Emblem For boys and girls who equal or exceed 50th percentile. Square. (242-25512)

Merit Emblem For boys and girls who equal or exceed 80th percentile. Square. (242-25518)

Elementary Emblems For elementary school age boys and girls (grades five and six)

Standard Emblem For boys and girls who equal or exceed 50th percentile. Round (242-25510)

Merit Emblem For boys and girls who equal or exceed 80th percentile. Round. (242-25516)

Instructor's Emblem (242-25522)

Achievement Bar Patches Worn with emblems to denote repeated test achievement.

2-Star (242-06824)

3-Star (242-06826)

4-Star (242-06828)

Fitness Kit Number 1 Sample of each emblem, bar patch, and certificate. (242-26790)

AWARD CERTIFICATES

Achievement Awards Official standard certificate for boys and girls attaining 50th percentile on the AAHPER Youth Fitness Test, 8 x 10 in., suitable for

framing or mounting. Elementary (242-06792); Junior (242-06798); Senior (242-06800)

Progress Award Certificate—(for physically limited) (242-06802)

Gold Merit Seal—(for Achievement Award Certificate only) (242-06806)

Certificate of Recognition—(for administrators, institutions, and so forth) (242-06804)

FOR ORDER INFORMATION AND PRICE LIST WRITE:

**AAHPERD
1900 Association Drive
Reston, VA 22091**

Table of Conversions Inches to Centimetres

40" = 101.6 cm	64" = 162.6 cm	88" = 223.5 cm
41" = 104.1 cm	65" = 165.1 cm	89" = 226.1 cm
42" = 106.7 cm	66" = 167.6 cm	90" = 228.6 cm
43" = 109.2 cm	67" = 170.2 cm	91" = 231.1 cm
44" = 111.8 cm	68" = 172.7 cm	92" = 233.7 cm
45" = 114.3 cm	69" = 175.3 cm	93" = 236.2 cm
46" = 116.8 cm	70" = 177.8 cm	94" = 238.8 cm
47" = 119.4 cm	71" = 180.3 cm	95" = 241.3 cm
48" = 121.9 cm	72" = 182.9 cm	96" = 243.8 cm
49" = 124.5 cm	73" = 185.4 cm	97" = 246.4 cm
50" = 127 cm	74" = 188 cm	98" = 248.9 cm
51" = 129.5 cm	75" = 190.5 cm	99" = 251.5 cm
52" = 132.1 cm	76" = 193 cm	100" = 254 cm
53" = 134.6 cm	77" = 195.6 cm	101" = 256.5 cm
54" = 137.2 cm	78" = 198.1 cm	102" = 259.1 cm
55" = 139.7 cm	79" = 200.7 cm	103" = 261.6 cm
56" = 142.2 cm	80" = 203.2 cm	104" = 264.2 cm
57" = 144.8 cm	81" = 205.7 cm	105" = 266.7 cm
58" = 147.3 cm	82" = 208.3 cm	106" = 269.2 cm
59" = 149.9 cm	83" = 210.8 cm	107" = 271.8 cm
60" = 152.4 cm	84" = 213.4 cm	108" = 274.3 cm
61" = 154.9 cm	85" = 215.9 cm	109" = 276.9 cm
62" = 157.5 cm	86" = 218.4 cm	110" = 279.4 cm
63" = 160 cm	87" = 221 cm	

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Other Publications Available from the Department of Education

Physical Performance Test for California, Revised Edition is one of approximately 450 publications that are available from the California State Department of Education. Some of the more recent publications or those most widely used are the following:

California Private School Directory	\$ 5.00
California Public School Directory	11.00
California School Accounting Manual (1978)	1.65
Discussion Guide for the California School Improvement Program (1978)	1.50*†
District Master Plan for School Improvement (1979)	1.50*
English Language Framework for California Public Schools (1976)	1.50
Establishing School Site Councils The California School Improvement Program (1977)	1.50*†
Guidelines and Procedures for Meeting the Specialized Physical Health Care Needs of Students (1980)	2.50
Guidelines for Evaluation of Instructional Materials with Respect to Social Content (1980)	1.15
Handbook for Planning an Effective Reading Program (1979)	1.50*
Handbook for Reporting and Using Test Results (1976)	8.50
Health Instruction Framework for California Public Schools (1978)	1.35
Improving the Human Environment of Schools (1979)	2.50
Manual of First Aid Practices for School Bus Drivers (1980)	1.25
A New Era in Special Education: California's Master Plan in Action (1980)	2.00
Parents Can Be Partners (1978)	1.35†
Pedestrian Rules of the Road in California (1979)	1.50
Pedestrian Rules of the Road in California—Primary Edition (1980)	1.50
Physical Education for Children, Ages Four Through Nine (1978)	2.50
Physical Education Framework for California Public Schools (1973)	.85
Planning for Multicultural Education as a Part of School Improvement (1979)	1.25*
Planning Handbook (1978)	1.50†
Putting It Together with Parents (1979)	.85†
Reading Framework for California Public Schools (1980)	1.75
Report of the Ad Hoc Committee on Integrated Educational Programs (1978)	2.60
Science Framework for California Public Schools (1978)	1.65
State Guidelines for School Athletic Programs (1978)	2.20
Student Achievement in California Schools (1980)	1.25
Students' Rights and Responsibilities Handbook (1980)	1.50*†
Teaching About Sexually Transmitted Diseases (1980)	1.65
A Unified Approach to Occupational Education. Report of the Commission on Vocational Education (1979)	2.00

Orders should be directed to.

California State Department of Education
P.O. Box 271
Sacramento, CA 95802

Remittance or purchase order must accompany order. Purchase orders without checks are accepted only from government agencies in California. Sales tax should be added to all orders from California purchasers.

A complete list of publications available from the Department may be obtained by writing to the address listed above.

† Also available in Spanish, at the price indicated.
* Developed for implementation of AB 65.