Miami-Dade County Public Schools

Physical Fitness Testing Program

Fitness Gram

Division Of Life Skills
Physical Education

TEST ADMIMISTRATION

1. One Mile Walk/Run

a.Objective:

To measure aerobic capacity by walking and/or running a mile distance at the fastest pace possible. If a student cannot run the total distance, walking is permitted.

b. Equipment/Facilities:

A flat running course, stopwatch, pencil, and scoresheets are required. The course may be a track or any other measured area.

c. Test Instructions:

Before administering this test, teachers must properly condition students for the stress it places upon the body. By gradually increasing the distances run over a period of time and using interval training, which can be used for conditioning purposes as well as introducing the concept of pace, students may be conditioned for testing. Consideration must be given to a training period that utilizes gradual progression in intensity, and recognizes potential problems with local heat and humidity. In addition, students with known medical problems which contraindicate vigorous exercise should be allowed to walk the mile test.

Students begin on the signal "Ready, Start." As they cross the finish line elapsed time should be called to the participants (or their partners).

d. Scoring:

The one mile walk/run is scored in minutes and seconds.

2. Body Composition

a. Objective:

To measure the triceps and calf skinfold thicknesses for calculation of percent of body fatness.

b. Equipment/Facilities:

A skinfold caliper is necessary to perform this measurement. Cost of calipers range from $5 -$200. An accurate low-cost model can be purchased from local physical education supply vendors.

Body Composition

c. Test Instructions:

The triceps and calf skinfolds have been chosen for the FITNESSGRAM because they are easily measured and are highly correlated with total body fat. The tricep skinfold is measured on the back of the arm over the triceps muscle of the right arm midway between the elbow and the acromion process of the scapula. The skinfold sight should be vertical. Pinching the fold slightly above the midpoint will ensure that the fold is measured right on the midpoint. The calf skinfold is measured on the inside of the right leg at the level of the maximal calf girth. The right foot is placed flat on an elevated surface with the knee flexed at a 90 degree angle. The vertical skinfold should be grasped just above the level of maximal girth and the measurement made below the grasp of maximal girth.

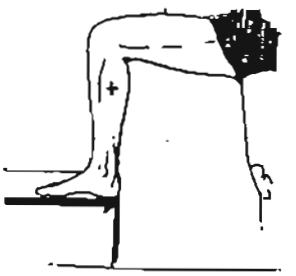
d. Scoring:

The skinfold measure is registered on the dial of the caliper. Each measurement should be taken three times with the recorded score being the median(middle) of the three scores.

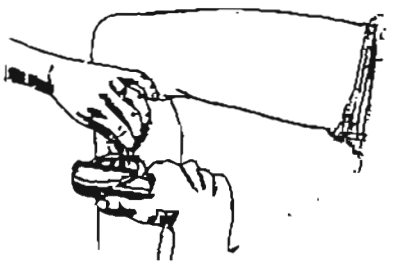
Locating triceps skinfold site.

Site of triceps skinfold.

Triceps skinfold measurement.



Placement of leg for locating calf skinfold site.



Calf skinfold measurement.

3. The Curl-up

a. Objective:

To evaluate abdominal muscular strength and endurance by completing as many curl-ups as possible up to a maximum of 75 at a specified pace.

b. Equipment/Facilities:

Gym mats and a cardboard measuring strip for every two students are needed. The strip should be approximately 30" x 4.5". (See diagram)

c. Test Instructions:

Allow students to form groups of three. One will perform the curl-ups, another will place hands under the head of student doing curl-ups and count, the third will secure the measuring strip so that it does not move.

The student being tested lies in a supine position on the mat, knees bent at an angle of approximately 140 degrees, **feet flat on the floor**, legs slightly apart,arms straight and parallel to the trunk with palms of hands resting on the mat. The fingers are stretched out and the head is in contact with the partner's hand, resting on the mat. After the student has assumed the correct position on the mat, place measuring strip under the knees on the mat so that fingertips are just resting on the edge of the measuring strip. The third student in each group should stand astride the one being tested securing the ends of the measuring strip with the feet.

Keeping the heels in contact with the mat, the student curls up slowly sliding fingers across the measuring card until fingertips reach the other side, then curl back down until the head touches the partner's hand. Movement should be slow and controlled to the specified cadence which is about 20 curl-ups per minute. The teacher should call a cadence or use a pre-recorded cadence. **The student continues without pausing until he/she can no longer continue or has completed a maximum number of 75 curl-ups.**

d. Scoring:

The score is the number of correctly performed curl-ups. Count should be made when the student's head returns to contact the partner's hand on the mat. Do not count a curl-up if the feet completely leave the floor at any time during the movement.

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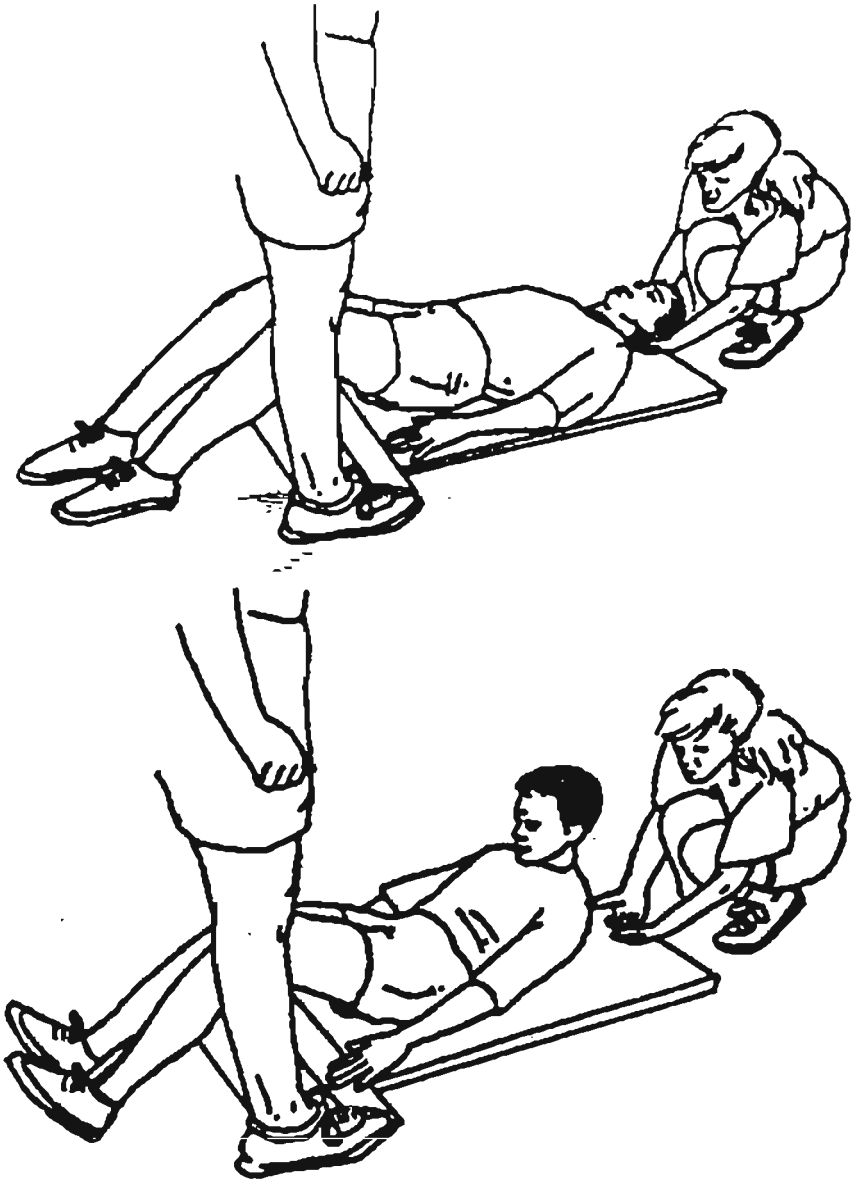
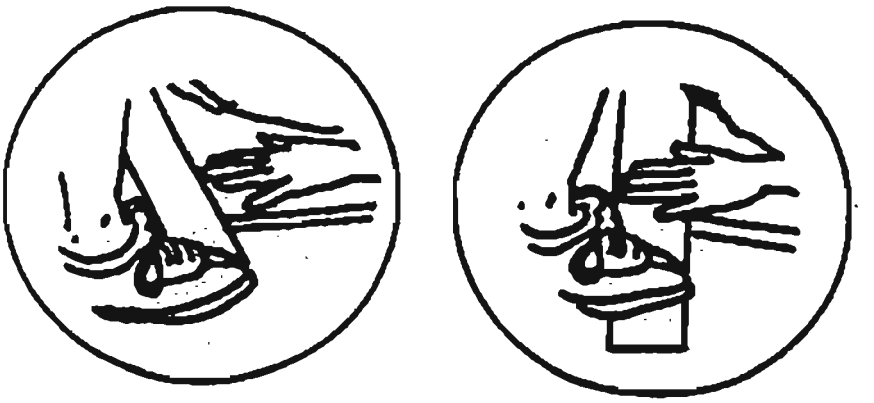
SEE NEXT PAGE FOR ILLUSTRATIONS OF PROPER CURL-UP PROCEDURES





Close-up of fingertips sliding from one side of measuring strip to the other.

4. Trunk Lift

a. Objective:

Trunk extensor strength and flexibility is being included in the FITNESSGRAM because of its relationship to low back health, especially proper vertibral alignment. It is important that attention is given to performance technique during this test. The movement should be performed in a slow and controlled manner.

The objective is to lift the upper body 12 inches off the floor using the muscles of the back and hold the position to allow for the measurement.

b. Equipment/Facilities:

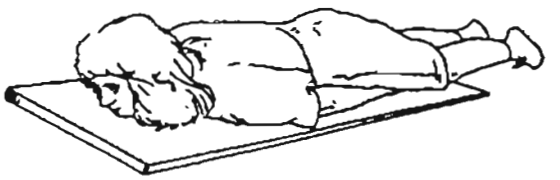
Gym mats and a measuring stick with colored tape marking the 6 inch and the 12 inch mark.

c. Test Instructions:

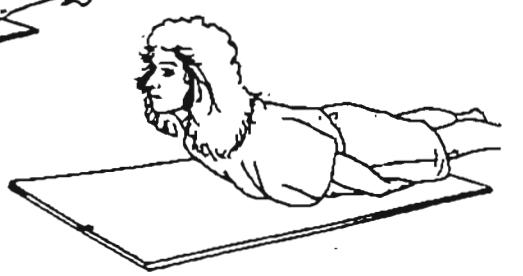
The student being tested lies face down on the mat. Toes are pointed and hands are placed under the thighs. Have the student find and look at a spot on the floor that is close to the nose. During the movement, the student's focus should not move from that spot. The student lifts the upper body off the floor, in a very slow and controlled manner, to a maximum height of 12 inches. The position is held long enough to allow tester to place the ruler on the floor in front of the student and determine the distance of the student's chin from the floor. The ruler should be placed at least an inch to the front of the student's chin and **not directly under the chin.** Once the measurement has been made the student returns to starting position in a controlled manner. Allow two trials recording the highest score.

d. Scoring:

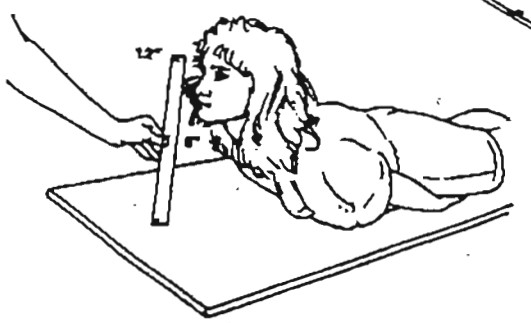
The score is recorded to the nearest inch. Distances above 12" should be recorded as 12".



Starting position for the trunk lift.



Student in the "up" position for t trunk lift test.



Measurement of trunk lift.

5. Push-up

a. Objective:

The push-up to an elbow angle of 90 degrees is the recommended test for the upper body strength and endurance. The objective is to complete as many push-ups as possible at a rhythmic pace.

b. Equipment/Facilities:

The only equipment necessary is an audio tape with the recorded cadence or a teacher set cadence of 20 push-ups per minute.

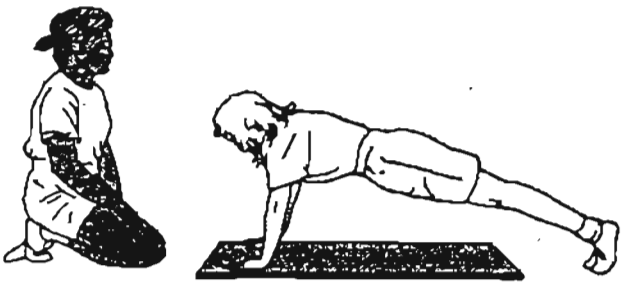
c. Test Instructions:

The students should be paired; one will perform the test while the other counts push-ups and watches to see that the student being tested bends the elbow to 90 degrees with the upper arm parallel to the floor.

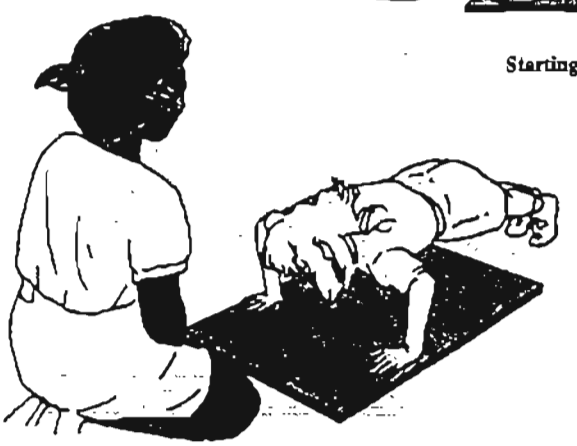
The student being tested lies face down on the mat with the hands placed under the shoulders, fingers stretched out, legs straight, parallel and slightly apart, and toes tucked under. The student pushes up off the mat with the arms until arms are straight, keeping legs and back straight. The back should be kept in a straight line from head to toes throughout the test. The student then lowers the body until the elbows bend at 90 degrees and the upper arms are parallel to the floor. This movement is repeated as many times as possible. Students are stopped when the second form correction is made. Corrected push-ups do not count toward the student's score.

d. Scoring:

The score is the number of push-ups completed successfully.



Starting poistion for push-up test.



Student in the "down" position for the push-up test.

6. Backsaver Sit and Reach

a. Objective:

To evaluate the flexibility of the lower back and hamstring muscles. The backsaver sit and reach is very similar to the traditional sit and reach except that it is performed on one side at a time. The measurement is performed on one side at at time so that students are not encouraged to hyperextend. The objective is to be able to reach a specified distance on the right and left sides of the body.

b. Equipment/Facilities:

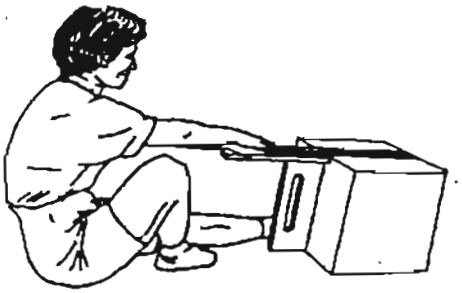
Sit and Reach box or any other sturdy box measuring approximately 12 inches high. If using a self constructed box, place a measuring scale on top of the box with the 9 inch mark even with the near edge of the box. The zero end of the ruler is nearest the student.

c. Test Instructions:

The student removes his/her shoes and sits down at the test apparatus. One leg is fully extended with the foot flat against the end of the box. The other knee is bent with the sole of the foot flat on the floor and 2-3 inches to the side of the straight knee.The arms are extended forward over the measuring scale with the hands placed one on top of the other. With palms down, the student reaches directly forward with both hands along the scale four times and holds the position of the fourth reach for at least one second. After measuring one side the student switches the position of the legs and reaches again.

d. Scoring:

Record the number of inches on each side to the last whole inch reached to a maximum score of 12". The FITNESSGRAM will report this as a "pass" or "fail" depending on the distance reached as it compares to the appropriate standard.



Starting position for measuring the left side.

Back-saver sit and reach stretch for the left side.

THE PRUDENTIAL FITNESSGRAM
STANDARDS FOR HEALTHY FITNESS ZONE*

BOYS

AGE	ONE MILE min/sec		PERCENT FAT		CURL-UP # completed		TRUNK LIFT inches		PUSH-UP # completed		BACKSAVER SIT&REACH** inches
5	Time Standards Not Recommended.		25	10	2	10	6	12	3	8	8
6			25	10	2	10	6	12	3	8	8
7			25	10	4	14	6	12	4	10	8
8			25	10	6	20	6	12	5	13	8
9			25	10	9	24	6	12	6	15	8
10	11:30	9:00	25	10	12	24	9	12	7	20	8
11	11:00	8:30	25	10	15	28	9	12	8	20	8
12	10:30	8:00	25	10	18	36	9	12	10	20	8
13	10:00	7:30	25	10	21	40	9	12	12	25	8
14	9:30	7:00	25	10	24	45	9	12	14	30	8
15	9:00	7:00	25	10	24	47	9	12	16	35	8
16	8:30	7:00	25	10	24	47	9	12	18	35	8
17	8:30	7:00	25	10	24	47	9	12	18	35	8
17+	8:30	7:00	25	10	24	47	9	12	18	35	8

* Number on left is lower end of HFZ; number on right is upper end of HFZ.
**Test scored Pass/Fail; must reach this distance to pass.

THE PRUDENTIAL FITNESSGRAM
STANDARDS FOR HEALTHY FITNESS ZONE*

GIRLS

AGE	ONE MILE min/sec		PERCENT FAT		CURL-UP # completed		TRUNK LIFT inches		PUSH-UP # completed		BACKSAVER SIT&REACH** inches
5	Time Standards Not Recommended		32	17	2	10	6	12	3	8	9
6			32	17	2	10	6	12	3	8	9
7			32	17	4	14	6	12	4	10	9
8			32	17	6	20	6	12	5	13	9
9			32	17	9	22	6	12	6	15	9
10	12:30	9:30	32	17	12	26	9	12	7	15	9
11	12:00	9:00	32	17	15	29	9	12	7	15	10
12	12:00	9:00	32	17	18	32	9	12	7	15	10
13	11:30	9:00	32	17	18	32	9	12	7	15	10
14	11:00	8:30	32	17	18	32	9	12	7	15	10
15	10:30	8:00	32	17	18	35	9	12	7	15	12
16	10:00	8:00	32	17	18	35	9	12	7	15	12
17	10:00	8:00	32	17	18	35	9	12	7	15	12
17+	10:00	8:00	32	17	18	35	9	12	7	15	12

* Number on left is lower end of HFZ; number on right is upper end of HFZ.
**Test is scored Pass/Fail; must reach this distance to pass.

THE PRUDENTIAL *FITNESS*GRAM
BODY COMPOSITION CONVERSION CHART
BOYS

Total MM	% FAT
1.0	1.7
1.5	2.1
2.0	2.5
2.5	2.8
3.0	3.2
3.5	3.6
4.0	3.9
4.5	4.3
5.0	4.7
5.5	5.0
6.0	5.4
6.5	5.8
7.0	6.1
7.5	6.5
8.0	6.9
8.5	7.2
9.0	7.6
9.5	8.0
10.0	8.4
10.5	8.7
11.0	9.1
11.5	9.5
12.0	9.8
12.5	10.2
13.0	10.6
13.5	10.9
14.0	11.3
14.5	11.7
15.0	12.0
15.5	12.4

Total MM	% FAT
16.0	12.8
16.5	13.1
17.0	13.5
17.5	13.9
18.0	14.2
18.5	14.6
19.0	15.0
19.5	15.3
20.0	15.7
20.5	16.1
21.0	16.4
21.5	16.8
22.0	17.2
22.5	17.5
23.0	17.9
23.5	18.3
24.0	18.6
24.5	19.0
25.0	19.4
25.5	19.7
26.0	20.1
26.5	20.5
27.0	20.8
27.5	21.2
28.0	21.6
28.5	21.9
29.0	22.3
29.5	22.7
30.0	23.1
30.5	23.4

Total MM	% FAT
31.0	23.8
31.5	24.2
32.0	24.5
32.5	24.9
33.0	25.3
33.5	25.6
34.0	26.0
34.5	26.4
35.0	26.7
35.5	27.1
36.0	27.5
36.5	27.8
37.0	28.2
37.5	28.6
38.0	28.9
38.5	29.3
39.0	29.7
39.5	30.0
40.0	30.4
40.5	30.8
41.0	31.1
41.5	31.5
42.0	31.9
42.5	32.2
43.0	32.6
43.5	33.0
44.0	33.3
44.5	33.7
45.0	34.1
45.5	34.4

Total MM	% FAT
46.0	34.8
46.5	35.2
47.0	35.5
47.5	35.9
48.0	36.3
48.5	36.6
49.0	37.0
49.5	37.4
50.0	37.8
50.5	38.1
51.0	38.5
51.5	38.9
52.0	39.2
52.5	39.6
53.0	40.0
53.5	40.3
54.0	40.7
54.5	41.1
55.0	41.4
55.5	41.8
56.0	42.2
56.5	42.5
57.0	42.9
57.5	43.3
58.0	43.6
58.5	44.0
59.0	44.4
59.5	44.7
60.0	45.1
60.5	45.5

Total MM	% FAT
61.0	45.8
61.5	46.2
62.0	46.6
62.5	46.9
63.0	47.3
63.5	47.7
64.0	48.0
64.5	48.4
65.0	48.8
65.5	49.1
66.0	49.5
66.5	49.9
67.0	50.2
67.5	50.6
68.0	51.0
68.5	51.3
69.0	51.7
69.5	52.1
70.0	52.5
70.5	52.8
71.0	53.2
71.5	53.6
72.0	53.9
72.5	54.3
73.0	54.7
73.5	55.0
74.0	55.4
74.5	55.8
75.0	56.1
75.5	56.5

THE PRUDENTIAL *FITNESS*GRAM
BODY COMPOSITION CONVERSION CHART
GIRLS

Total MM	% FAT
1.0	5.7
1.5	6.0
2.0	6.3
2.5	6.6
3.0	6.9
3.5	7.2
4.0	7.5
4.5	7.8
5.0	8.2
5.5	8.5
6.0	8.8
6.5	9.1
7.0	9.4
7.5	9.7
8.0	10.0
8.5	10.3
9.0	10.6
9.5	10.9
10.0	11.2
10.5	11.5
11.0	11.8
11.5	12.1
12.0	12.4
12.5	12.7
13.0	13.0
13.5	13.3
14.0	13.6
14.5	13.9
15.0	14.3
15.5	14.6

Total MM	% FAT
16.0	14.9
16.5	15.2
17.0	15.5
17.5	15.8
18.0	16.1
18.5	16.4
19.0	16.7
19.5	17.0
20.0	17.3
20.5	17.6
21.0	17.9
21.5	18.2
22.0	18.5
22.5	18.8
23.0	19.1
23.5	19.4
24.0	19.7
24.5	20.0
25.0	20.4
25.5	20.7
26.0	21.0
26.5	21.3
27.0	21.6
27.5	21.9
28.0	22.2
28.5	22.5
29.0	22.8
29.5	23.1
30.0	23.4
30.5	23.7

Total MM	% FAT
31.0	24.0
31.5	24.3
32.0	24.6
32.5	24.9
33.0	25.2
33.5	25.5
34.0	25.8
34.5	26.1
35.0	26.5
35.5	26.8
36.0	27.1
36.5	27.4
37.0	27.7
37.5	28.0
38.0	28.3
38.5	28.6
39.0	28.9
39.5	29.2
40.0	29.5
40.5	29.8
41.0	30.1
41.5	30.4
42.0	30.7
42.5	31.0
43.0	31.3
43.5	31.6
44.0	31.9
44.5	32.2
45.0	32.6
45.5	32.9

Total MM	% FAT
46.0	33.2
46.5	33.5
47.0	33.8
47.5	34.1
48.0	34.4
48.5	34.7
49.0	35.0
49.5	35.3
50.0	35.6
50.5	35.9
51.0	36.2
51.5	36.5
52.0	36.8
52.5	37.1
53.0	37.4
53.5	37.7
54.0	38.0
54.5	38.3
55.0	38.7
55.5	39.0
56.0	39.3
56.5	39.6
57.0	39.9
57.5	40.2
58.0	40.5
58.5	40.8
59.0	41.1
59.5	41.4
60.0	41.7
60.5	42.0

Total MM	% FAT
61.0	42.3
61.5	42.6
62.0	42.9
62.5	43.2
63.0	43.5
63.5	43.8
64.0	44.1
64.5	44.4
65.0	44.8
65.5	45.1
66.0	45.4
66.5	45.7
67.0	46.0
67.5	46.3
68.0	46.6
68.5	46.9
69.0	47.2
69.5	47.5
70.0	47.8
70.5	48.1
71.0	48.4
71.5	48.7
72.0	49.0
72.5	49.3
73.0	49.6
73.5	49.9
74.0	50.2
74.5	50.5
75.0	50.9
75.5	51.2

Explanation of Healthy Fitness Zone Standards

The Healthy Fitness Zone Standards were set to accommodate the differences in variability of body type among children. (ie. bone structure, growth and development, maturation, heredity, etc.). The FITNESSGRAM standards were established based upon research conducted by the Cooper Aerobics Institute and supported by the Centers for Disease Control. These standards represent an acceptable level of fitness required to both maintain a healthy lifestyle and reduce preventable diseases resulting from a sedentary lifestyle.

With regard to aerobic fitness level, research has shown a significant decrease in risk of all-cause mortality from getting out of the lower 20% of the population. Risk levels continue to decrease as fitness levels increase but not as dramatically as getting out of the bottom 20%. Aerobic capacity standards were set to equal getting out of the lower 20% of the population.

Body fat percentages were also set by following the recommendations of current research. Children with body fat levels above 25% for boys and 30-35% for girls, are more likely to exhibit elevated cholesterol levels and hypertension.

All students should strive to achieve a score that places them inside the Healthy Fitness Zone. Performance above the Healthy Fitness Zone should be recognized appropriately but should not be the goal for **all** students. Teachers and students should work together to set realistic and individual performance goals.