

Unit 4: Wellness, Fitness, and First Aid

Chapter 1: Achieving a Healthy Lifestyle

Lesson 2: Cadet Challenge

Exercise 1: Keeping Track of Your Progress on “The Cadet Challenge”

Directions: At least five times prior to the date set by your instructor for the Cadet Challenge, complete the exercises that make up the Cadet Challenge. Try to achieve the 85th percentile standards listed in this unit. Record the dates you complete the exercises and your scores on the chart on the bottom of the page.

Since you are practicing these events on your own, the following guidelines will help:

- For the one-mile run/walk and shuttle run, try to run on a track -- many already have distances marked. If not, choose a location where you will be able to measure and mark these distances. Make sure the running surface is smooth and that there is little pedestrian, bicycle, or automobile traffic, so you will not be slowed down or distracted.
- Have a friend or family member time you in the one-mile run/walk, shuttle run, and curl-ups; and have them hold your feet and legs for the curl-ups and v-sit reach.
- If you do not have blocks for the shuttle run, use any light, small items that you can grip easily that are approximately 2" x 2" x 4".
- For the v-sit reach, use any straight line on the floor as your baseline (i.e., where carpet ends and tile begins, or place a piece of tape on the floor). Place a yardstick perpendicular to this line with 0" at the baseline. Make sure you place the heels of your feet on either side of where the yardstick meets the baseline, and measure the number of inches you stretch past the baseline with the yardstick.
- List personal goals for each event.

Detach and turn in

Exercise 1: Keeping Track of Your Progress on “The Cadet Challenge”

SCHOOL _____

STUDENT’S NAME _____ AGE ____ WEIGHT _____

Scores

DATE	CURL-UPS*	PULL-UPS*	V-SIT REACH *	ONE- MILE RUN/WALK	SHUTTLE RUN
1					
2					
3					
4					
5					

* Remember, you can use the Flexed-Arm Hang, or Right Angle Push-ups, as an alternative to Pull-ups (but only for the National Physical Fitness Award). You can also substitute Sit and Reach for the V-Sit Reach, as well as, Partial Curl-ups for Curl-ups.

Cadet Challenge

- 1. Curl-ups:** Conduct this event on a flat, clean surface, preferably with a mat. Start cadets in a lying position on their backs with their knees up so their feet are flat on the floor and about 12 inches from their buttocks. Cadets should have their arms crossed with their hands placed on opposite shoulders and their elbows held close to the chest throughout the exercise. The feet are to be held by a partner at the instep. At the command "ready, go," cadets raise the trunks of their bodies, curling up to touch the elbows to the thighs. They must then lower their backs so that their shoulder blades touch the floor/mat. This constitutes one repetition of a curl-up. During each repetition, bouncing off the floor/mat is not allowed and the fingers must touch the shoulders at all times. Cadets must try to complete as many curl-ups as possible in 60 seconds.
- 2. Partial Curl-ups:** This event should be used as an alternative to curl-ups. Have cadet lie on cushioned, clean surface with knees flexed and feet about 12 inches from buttocks. Do not hold or anchor the feet. Arms are extended forward with fingers resting on the legs and pointing toward the knees. The cadet's partner is behind the head with hands cupped under the cadet's head. The cadet being tested curls up slowly sliding the fingers up the legs until the fingertips touch the knees, then back down until the head touches the partner's hands. The curl-ups are done to a metronome (or audio tape, clapping, drums) with one complete curl-up every three seconds, and are continued until the cadet can do no more in rhythm (has not done the last three in rhythm) or has reached the target number for the test.
- 3. Pull-ups:** Conduct this event using a horizontal bar approximately one and one-half inches in diameter. A doorway bar or a piece of pipe can serve the purpose. The bar should be high enough so that cadets can hang with their arms fully extended and their feet free of the floor/ground. Have cadets assume the hanging position on the bar using either an overhand grasp (palms facing away from body) or underhand grip (palms facing toward body). Cadets begin the exercise by first raising their body until the chin is over the bar without touching it. To complete one repetition, the body must be lowered to the full-hang starting position. During each repetition, the body must not swing, legs must not kick or bend, and the pull must not be jerky. Cadets are scored on the number of pull-ups they can correctly execute. There is no time limit on this event. For cadets who cannot accomplish one-pull-up, have them do the flexed-arm hang (below) as an alternative event.
- 4. Flexed-arm Hang:** This event should be used when a cadet cannot execute one pull-up. (This event is only for the National Physical Fitness Award). Using a horizontal bar as in the pull-ups, have cadets climb a ladder until their chin is above the bar. They begin the exercise by grasping the bar with their hands, shoulder width apart -- using either an overhand grasp (palms facing away from body) or underhand grip (palms facing toward body). At the command "ready, go," the cadets step off the ladder. Simultaneously, an assistant instructor will remove the ladder and prevent any forward swinging of the legs. The cadet's chin should be level above the bar. Kicking and other body movements are not permitted while the cadets are on the bar. Start the stopwatch on the command "go" and stop it when the cadet's chin rests on the bar, the chin tilts backward to keep it above the bar, or the chin falls below the level of the bar. Scoring is to the nearest second.
- 5. Right Angle Push-ups:** The cadet lies face down on the mat in push-up position with hands under shoulders, fingers straight, and legs straight, parallel, and slightly apart, with the toes supporting the feet. The cadet straightens the arms, keeping the back and knees straight, then lowers the body until there is a 90-degree angle at the elbows, with the upper arms parallel to the floor. A partner holds her / his hand at the point of the 90-degree angle so that the cadet being tested goes down only until her / his shoulder touches the partner's hand, then back up. The push-ups are done to a metronome (or audio tape, clapping, drums) with one complete push-up every three seconds, and are continued until the cadet can do no more in rhythm (has not done the last three in rhythm) or has reached the target number for the PPFA.
- 6. V-sit Reach:** Conduct this event on a flat, clean floor. Use a yardstick and adhesive tape to make a baseline that is two feet long. Make a measuring line perpendicular to the midpoint of the baseline extending two feet out from either side of the baseline. Place one-inch and half-inch marks along the measuring line with "0" where the baseline and measuring line intersect. Have cadets remove their shoes and sit on the floor with the soles of their feet placed immediately behind the baseline. The measuring line should be between their heels, which should be 8 to 12 inches apart. Cadets must clasp their thumbs so that their hands are together, palms down, and place them on the floor between their legs. While their legs are held flat on the floor by a partner (or partners), cadets performing the exercise keep the soles of their feet perpendicular to the floor (feet flexed) and slowly reach forward along the measuring line as far as possible keeping the fingers in contact with the floor. Cadets receive three practice tries for the v-sit reach. On the fourth extension, cadets must hold their farthest reach for three seconds. Scores are recorded where fingertips touch the floor to the nearest half-inch. Scores beyond the baseline are recorded as plus scores, whereas those behind the baseline are recorded as minus scores.

7. **Sit and Reach:** A specially constructed box with a measuring scale marked in centimeters, with 23 centimeters at the level of the feet. Cadet removes shoes and sits on floor with knees fully extended, feet shoulder-width apart and soles of the feet held flat against the end of the box. With hands on top of each other, palms down, and legs held flat, cadet reaches along the measuring line as far as possible. After three practice reaches, the fourth reach is held while the distance is recorded. Participants are most flexible after a warm-up run. Best results may occur immediately after performing the endurance run. Legs must remain straight, soles of feet against box and fingertips of both hands should reach evenly along measuring line. Scores are recorded to the nearest centimeter.

8. **One-Mile Run/Walk:** Conduct this event on a flat area that has a known measured distance of one mile with a designated start and finish line. Give cadets a lightweight numbered device to carry or wear in any manner that will not slow them down while running. (Note: Use of the numbered device makes it possible to have many cadets run at one time by having them pair off before the start of the event, then having one cadet from each pair run while the other cadets keep track of the number of laps their partners complete as well as listening for their times as they cross the finish line.) Start cadets at the standing position. At the command "ready, go," start the cadets running the one-mile distance. Although walking is permitted, encourage cadets to cover the distance in the shortest time possible. Scoring should be to the nearest second.

9. **Shuttle Run:** Conduct this event on an area that has two parallel lines 30 feet apart. The width of a regulation volleyball court can serve as a suitable area. Start cadets at the standing position. At the command "ready, go," have the cadets run to the opposite line, pick up one block, run back to the starting line, and place the block behind the line. Cadets then run back and pick up the second block, which they carry across the line. Two runs are allowed for this event with the better of the runs recorded. Scoring should be to the nearest tenth of a second.

Awards for Completing the Cadet Challenge

- a. Cadets that successfully complete all events will receive a participation certificate signed by the Bde Cdr or a designated representative.

- b. The President's Physical Fitness Award recognizes students who achieve an outstanding level of physical fitness. Students who score at or above the 85th percentile on all events are eligible for this award. Awards may be requested by accessing the President's Challenge web site at http://www.presidentschallenge.org/educators/program_details.aspx.

- c. The JROTC Physical Fitness Ribbon (N-2-2) will be presented to cadets who receive the 85th percentile rating or better in each of the five events of the Cadet Challenge program.

- d. The National Physical Fitness Award recognizes students who demonstrate a basic, yet challenging level of physical fitness. Students who score above 50% percentile on all five events are eligible for this award.

- e. The JROTC Athletics Ribbon (N-2-3) will be presented to cadets who receive the 50th percentile rating or better in each of the five events of the Cadet Challenge program.

- f. The top five male and five female cadets in each unit will receive individual medals

CURL-UP FOR BOYS

Percentile Scores Based on Age/Test in No. of Curl-ups in 60 seconds

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	53	56	58	60	64	68	67	76	79	81	77	73
95	40	42	47	48	51	51	57	59	62	62	62	61
90	37	38	42	44	48	49	53	55	58	59	58	57
85	33	36	40	41	45	47	50	53	56	57	56	55
80	31	34	38	40	43	45	48	51	54	55	53	53
75	28	33	37	38	41	43	47	50	52	53	51	51
70	26	31	36	37	40	42	45	48	51	51	50	50
65	25	31	35	35	40	40	44	46	49	50	48	48
60	24	30	34	34	38	39	43	45	48	49	48	46
55	23	29	32	33	36	38	42	43	47	47	46	45
50	22	28	31	32	35	37	40	42	45	45	45	44
45	21	26	30	31	34	36	39	41	44	44	44	43
40	20	25	29	30	33	35	38	40	42	43	42	41
35	19	24	28	29	32	34	37	39	41	41	40	40
30	17	22	26	27	30	32	35	38	40	40	40	40
25	16	21	25	26	30	31	34	36	39	38	38	37
20	14	20	23	24	28	29	32	34	37	36	37	36
15	13	18	20	22	25	27	30	32	35	35	35	35
10	10	15	18	20	23	25	27	30	33	32	31	32
5	7	12	14	16	19	20	25	26	28	29	27	27
0	0	1	0	1	4	0	7	0	0	0	6	1

CURL-UP FOR GIRLS

Percentile Scores Based on Age/Test in No. of Curl-ups in 60 seconds

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	55	55	59	62	61	67	62	72	72	74	77	67
95	36	42	43	45	45	48	50	52	53	55	53	53
90	33	36	40	41	42	44	47	50	49	51	49	47
85	32	34	38	39	40	42	45	46	47	48	45	44
80	31	32	36	38	38	40	43	44	45	46	43	41
75	30	31	35	36	37	39	41	42	43	44	41	40
70	28	30	33	35	35	37	40	42	42	41	40	38
65	27	29	31	34	34	35	39	40	41	40	38	37
60	25	27	30	32	32	35	38	40	40	39	37	36
55	24	26	30	31	31	33	36	38	39	37	36	35
50	23	25	29	30	30	32	35	37	37	36	35	34
45	21	24	28	30	30	31	34	36	36	35	34	33
40	20	23	27	29	29	30	32	35	35	34	33	31
35	20	22	25	27	27	29	31	33	34	32	32	30
30	19	21	24	26	26	28	30	31	32	31	30	30
25	17	20	23	25	25	27	29	30	31	30	30	28
20	16	19	22	23	23	25	27	28	30	28	27	25
15	14	17	20	20	20	24	25	26	28	26	25	25
10	11	15	18	19	19	20	23	23	25	23	23	22
5	7	10	12	13	13	16	20	19	20	20	19	19
0	0	0	0	0	0	2	0	0	0	0	0	0

PARTIAL CURL-UP FOR BOYS

Percentile Scores Based on Age/Test in No. of Curl-ups every 3 sec.

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
95	27	30	36	48	47	58	100	79	85	100	100	96
90	23	27	31	41	38	49	100	60	77	100	79	82
85	22	24	30	37	35	43	64	59	62	75	73	66
80	20	23	27	33	35	40	58	55	58	70	61	63
75	18	21	26	30	30	37	54	51	54	67	50	58
70	15	20	25	27	29	35	48	48	52	60	48	50
65	14	17	22	26	28	30	42	45	50	51	45	50
60	12	16	20	23	27	29	36	42	48	50	40	47
55	11	15	17	22	25	27	34	40	43	47	38	44
50	10	13	17	20	24	26	32	39	40	45	37	42
45	9	12	16	19	21	23	31	37	39	42	36	41
40	9	12	15	18	20	22	31	35	33	40	34	39
35	8	11	14	16	19	21	29	31	31	36	33	33
30	8	10	13	15	19	21	27	31	30	32	30	31
25	7	9	12	14	16	18	26	30	30	30	29	30
20	7	9	11	14	14	18	24	30	28	29	28	28
15	6	8	10	11	12	17	22	28	24	26	24	25
10	5	7	9	11	10	13	18	21	24	22	23	24
5	4	5	7	10	7	8	11	16	21	20	16	19

PARTIAL CURL-UP FOR GIRLS

Percentile Scores Based on Age/Test in No. of Curl-ups every 3 sec.

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
95	27	60	36	48	50	54	66	92	73	49	63	70
90	23	27	31	41	36	44	56	63	51	45	50	60
85	22	24	30	37	33	43	50	59	48	38	49	58
80	20	23	27	33	29	40	49	52	44	37	41	50
75	18	21	26	30	28	39	43	50	41	35	35	49
70	15	20	25	27	27	37	40	46	40	35	32	48
65	14	17	22	26	26	34	39	45	37	30	29	44
60	12	16	20	23	25	32	34	41	33	30	27	42
55	11	15	17	22	25	30	32	40	31	28	26	40
50	10	13	17	20	24	27	30	40	30	26	26	40
45	9	12	16	19	24	25	29	38	30	25	24	35
40	9	12	15	18	21	24	26	36	28	25	23	33
35	8	11	14	16	20	23	25	36	26	22	21	30
30	8	10	13	15	19	21	24	32	25	22	20	30
25	7	9	12	14	18	20	22	29	22	20	20	30
20	7	9	11	14	17	18	21	27	21	19	19	28
15	6	8	10	11	17	18	19	22	20	15	16	26
10	5	7	9	11	12	18	16	20	16	13	15	24
5	4	5	7	10	10	14	4	16	10	10	11	11

PULL-UPS FOR BOYS

Percentile Scores Based on Age/Test Scores in Number of Pull-ups

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	11	14	15	21	22	25	21	20	23	29	26	26
95	5	6	8	8	9	10	10	11	13	14	15	17
90	3	5	6	6	7	7	8	9	11	12	12	15
85	2	4	5	5	6	6	7	7	10	11	11	13
80	1	4	4	5	5	5	6	7	9	10	10	12
75	1	3	4	4	4	4	5	6	8	10	10	11
70	1	2	3	4	4	4	5	5	7	9	9	10
65	0	2	3	3	3	3	4	5	6	8	8	10
60	0	2	2	3	3	3	3	4	6	7	8	10
55	0	1	2	2	2	2	3	4	5	7	7	9
50	0	1	1	2	2	2	2	3	5	6	7	8
45	0	1	1	1	2	1	2	2	4	5	7	7
40	0	1	1	1	1	1	1	2	4	5	6	7
35	0	0	0	1	1	1	1	1	3	4	5	6
30	0	0	0	0	1	0	1	1	3	4	5	5
25	0	0	0	0	0	0	0	1	2	3	4	5
20	0	0	0	0	0	0	0	0	1	2	4	4
15	0	0	0	0	0	0	0	0	1	2	3	3
10	0	0	0	0	0	0	0	0	0	1	2	2
5	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0

PULL-UPS FOR GIRLS

Percentile Scores Based on Age/Test Scores in Number of Pull-ups

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	8	8	14	11	9	24	22	18	24	14	10	21
95	4	4	5	4	5	5	5	5	4	3	4	4
90	3	3	3	3	3	3	3	2	3	2	2	2
85	2	2	2	2	3	3	2	2	2	2	1	1
80	1	1	2	2	2	2	2	1	1	1	1	1
75	1	1	1	1	2	2	1	1	1	1	1	1
70	1	1	1	1	1	1	1	0	1	1	1	1
65	0	0	1	1	1	1	0	0	1	0	0	1
60	0	0	0	0	1	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

FLEXED-ARM HANG FOR BOYS

Percentile Scores Based on Age/Test Scores in Seconds

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	55	95	63	101	120	101	111	127	117	130	125	116
95	23	60	34	40	48	52	47	48	68	79	71	64
90	16	23	28	28	38	37	36	37	61	62	61	56
85	14	20	23	24	31	31	30	33	47	58	51	49
80	12	17	18	20	25	26	25	29	40	49	46	45
75	10	15	17	18	22	22	21	25	35	44	42	41
70	9	13	15	16	20	19	19	22	31	40	39	39
65	9	11	14	14	17	17	16	20	28	37	36	37
60	8	10	12	12	15	15	15	18	25	35	33	35
55	7	9	11	11	14	13	13	16	22	33	30	33
50	6	8	10	10	12	11	12	14	20	30	28	30
45	5	7	9	8	10	10	10	12	17	28	25	29
40	5	6	8	8	8	9	9	10	15	25	22	26
35	4	5	6	7	7	7	8	9	13	22	20	23
30	3	4	5	5	6	6	6	8	11	20	18	20
25	2	4	4	5	5	5	5	6	10	18	15	17
20	2	3	3	3	3	4	4	5	8	14	12	15
15	1	2	2	3	2	3	2	4	5	10	10	11
10	1	1	1	2	1	1	1	2	3	8	7	8
5	0	0	0	0	0	0	0	0	1	3	3	5
0	0	0	0	0	0	0	0	0	0	0	0	0

FLEXED-ARM HANG FOR GIRLS

Percentile Scores Based on Age/Test Scores in Seconds

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	55	72	97	78	152	150	99	68	100	125	131	127
95	22	29	26	35	38	33	37	35	38	41	40	37
90	15	21	21	23	29	25	27	28	31	34	30	29
85	13	17	17	20	22	20	21	21	25	28	24	24
80	11	14	15	16	19	16	16	19	21	23	21	20
75	10	12	13	14	16	14	14	16	18	18	18	18
70	9	11	11	12	14	13	13	14	16	15	16	15
65	8	9	10	11	12	11	11	12	13	12	13	12
60	6	8	10	10	11	9	10	10	11	10	10	11
55	6	7	9	9	9	8	8	9	10	9	9	10
50	5	6	8	8	8	7	7	8	9	7	7	7
45	5	5	7	7	7	6	6	6	7	6	6	6
40	4	5	6	6	6	5	5	5	6	5	5	5
35	3	5	5	5	5	4	4	5	5	4	4	5
30	3	4	4	4	4	4	3	4	4	4	3	4
25	2	3	3	3	3	3	2	3	3	3	2	3
20	1	2	3	2	2	2	1	1	2	2	2	3
15	1	1	1	1	1	1	1	1	1	1	1	1
10	0	0	0	0	0	0	0	0	0	1	0	1
5	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

RIGHT ANGLE PUSH-UPS FOR BOYS

Percentile Scores Based on Age/Test Scores in # of Push-ups every 3 sec.

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
95	12	19	21	22	30	31	42	51	47	50	59	60
90	11	17	19	20	25	30	34	41	41	44	46	56
85	9	14	17	18	22	27	31	39	40	42	44	53
80	9	13	15	17	21	26	30	35	37	40	41	50
75	7	12	14	17	20	24	28	35	32	37	40	46
70	7	11	13	15	18	23	25	31	30	35	36	44
65	7	10	12	15	18	20	24	30	28	34	34	43
60	7	9	11	13	16	19	20	28	25	32	32	41
55	7	8	10	12	14	16	20	26	24	31	30	40
50	7	8	9	12	14	15	18	24	24	30	30	37
45	5	8	9	11	13	15	17	21	22	30	29	35
40	5	7	8	10	12	14	15	20	21	27	28	34
35	5	6	8	9	12	12	15	20	20	25	25	30
30	4	5	7	8	11	10	13	16	18	25	25	30
25	4	5	7	8	11	10	12	16	18	24	25	27
20	3	4	6	7	10	8	10	12	15	21	23	25
15	2	3	6	5	8	5	9	11	13	20	22	23
10	2	3	4	5	7	3	7	9	11	18	20	21
5	0	2	2	3	4	1	4	4	7	15	15	20

RIGHT ANGLE PUSH-UPS FOR GIRLS

Percentile Scores Based on Age/Test Scores in # of Push-ups every 3 sec.

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
95	12	19	21	22	21	30	25	25	25	34	32	29
90	11	17	19	20	21	20	21	22	21	23	26	28
85	9	14	17	18	20	19	20	21	20	20	24	25
80	9	13	15	17	19	18	20	17	19	20	22	22
75	7	12	14	17	19	17	17	17	15	20	20	20
70	7	11	13	15	17	17	15	15	12	18	19	19
65	7	10	12	15	17	16	12	14	11	18	16	18
60	6	9	11	13	14	15	11	13	10	16	15	17
55	6	8	10	12	14	12	10	12	10	15	13	16
50	6	8	9	12	13	11	10	11	10	15	12	16
45	5	8	9	11	11	9	10	10	9	15	12	15
40	5	7	8	10	10	8	8	10	8	13	12	15
35	5	6	8	9	10	8	7	8	5	11	11	14
30	4	5	7	8	9	7	2	7	5	11	10	12
25	4	5	7	8	8	7	5	6	5	11	8	11
20	3	4	6	7	8	6	3	5	5	10	52	9
15	2	3	6	5	7	4	2	4	3	7	4	7
10	2	3	4	5	4	2	1	3	2	5	3	5
5	0	2	2	3	1	1	1	2	1	2	1	2

V-SIT REACH FOR BOYS

Percentile Scores Based on Age/Test Scores in Inches

AGE

PERCENTILE	6	7	8	9	10	11	12	13	14	15	16	17+
100	7.0	9.0	7.0	13.0	14.5	14.5	13.5	11.0	12.0	12.0	13.0	12.5
95	5.0	5.0	4.0	5.0	7.0	6.5	5.5	5.0	6.5	7.0	8.0	8.5
90	4.0	4.0	3.5	4.0	5.0	5.0	5.0	4.0	5.0	6.0	7.0	8.0
85	3.5	3.5	3.0	3.0	4.0	4.0	4.0	3.5	4.5	5.0	6.0	7.0
80	3.0	3.0	2.5	3.0	3.0	4.0	3.0	3.0	4.0	5.0	5.5	6.0
75	2.0	2.0	2.0	2.0	3.0	3.0	3.0	2.5	3.5	4.0	5.0	5.5
70	2.0	2.0	2.0	2.0	2.0	2.5	2.0	2.0	3.0	4.0	4.5	5.0
65	1.5	2.0	1.0	1.5	2.0	2.0	2.0	1.5	2.5	3.0	4.0	4.5
60	1.0	1.5	1.0	1.0	1.5	2.0	1.5	1.0	2.0	3.0	3.5	4.0
55	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.5	3.0	3.5
50	1.0	1.0	0.5	1.0	1.0	1.0	1.0	0.5	1.0	2.0	3.0	3.0
45	0.5	0.5	0.0	0.0	0.5	1.0	0.0	0.0	1.0	2.0	2.0	3.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0
35	0.0	0.0	-1.0	-0.5	0.0	0.0	-0.5	-1.0	0.0	1.0	1.5	1.5
30	0.0	-0.5	-1.0	-1.0	0.0	-1.0	-1.0	-1.0	0.0	0.0	1.0	1.0
25	-1.0	-1.0	-1.5	-1.5	-1.0	-1.0	-2.0	-2.0	-1.0	0.0	0.5	1.0
20	-1.5	-1.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.5	-2.0	-1.0	0.0	0.0
15	-2.0	-2.0	-3.0	-2.5	-2.5	-3.0	-3.0	-3.0	-2.0	-2.0	-1.0	-1.0
10	-3.0	-3.0	-3.0	-3.0	-3.5	-3.5	-4.5	-4.0	-4.0	-3.0	-3.0	-2.0
5	-4.5	-4.0	-4.0	-5.0	-5.0	-5.0	-6.0	-6.0	-5.0	-5.0	-4.0	-4.0
0	-10.0	-9.0	-10.0	-13.0	-12.0	-10.0	-12.0	-12.5	-12.0	-10.0	-12.0	-10.0

V-SIT REACH FOR GIRLS

Percentile Scores Based on Age/Test Scores in Inches

AGE

PERCENTILE	6	7	8	9	10	11	12	13	14	15	16	17+
100	9.5	9.0	12.0	14.0	13.0	15.0	14.5	14.5	14.0	15.0	15.0	15.0
95	7.0	6.5	6.0	8.0	8.0	10.0	9.0	9.0	10.0	10.0	10.5	10.5
90	6.0	5.5	5.0	6.0	7.0	8.0	8.0	8.0	8.5	9.0	9.5	96.0
85	5.5	5.0	4.5	5.5	6.0	6.5	7.0	7.0	8.0	8.0	9.0	8.0
80	5.0	4.5	4.0	5.0	5.0	6.0	6.0	6.0	7.0	7.5	8.0	7.5
75	5.0	4.0	4.0	4.0	5.0	5.0	6.0	6.0	6.5	7.0	8.0	7.0
70	4.0	4.0	3.5	4.0	4.0	5.0	5.0	5.0	6.0	6.5	7.0	6.0
65	3.5	3.0	3.0	3.5	4.0	4.5	5.0	5.0	6.0	6.0	7.0	6.0
60	3.0	3.0	3.0	3.0	3.0	4.0	4.5	4.5	5.0	6.0	6.0	5.5
55	3.0	3.0	2.5	3.0	3.0	4.0	4.0	4.0	5.0	5.0	6.0	5.0
50	2.5	2.0	2.0	2.0	3.0	3.0	3.5	3.5	4.5	5.0	5.5	4.5
45	2.0	2.0	2.0	2.0	2.5	3.0	3.0	3.0	4.0	4.5	5.0	4.0
40	1.5	2.0	1.5	2.0	2.0	2.5	3.0	3.0	4.0	4.0	1.5	4.0
35	1.0	1.5	1.0	1.0	2.0	2.0	2.5	2.5	3.5	3.5	4.0	3.5
30	1.0	1.0	1.0	1.0	1.0	1.5	2.0	2.0	3.0	3.0	4.0	3.0
25	1.0	1.0	0.5	0.0	1.0	1.0	2.0	2.0	2.5	2.0	3.0	2.5
20	0.0	0.0	0.0	0.0	0.5	1.0	1.0	1.0	2.0	2.0	2.5	2.0
15	0.0	0.0	0.0	-0.5	0.0	0.0	0.5	0.5	1.0	1.0	2.0	1.5
10	-1.0	-1.0	-1.0	-1.0	-1.0	-0.5	0.0	0.0	0.0	0.5	1.0	1.0
5	-2.5	-3.0	-2.5	-3.0	-2.5	-3.0	-2.5	-2.5	-1.5	-1.0	-0.5	-1.0
0	-9.0	-9.0	-6.0	-11.0	-17.0	-11.0	-11.0	-11.0	-10.0	-10.0	-6.0	-12.0

SIT AND REACH FOR BOYS

Percentile Scores Based on Age/Test Scores in Centimeters

PERCENTILE	AGE												
	5	6	7	8	9	10	11	12	13	14	15	16	17+
99	36	37	38	38	37	37	39	52	41	43	47	45	48
95	32	34	33	34	34	33	34	35	36	39	41	42	45
90	31	32	31	32	32	31	32	32	34	37	39	40	43
85	30	31	30	31	31	30	31	31	33	36	37	38	41
80	29	30	29	30	30	29	30	30	32	34	36	37	40
75	29	29	28	29	29	28	29	29	30	33	34	36	40
70	28	28	27	28	28	28	28	29	29	31	33	35	38
65	27	28	27	27	28	27	27	28	28	30	32	34	37
60	26	27	26	27	27	26	26	27	27	30	32	32	36
55	26	26	25	26	26	26	26	27	27	29	31	31	35
50	25	26	25	25	25	25	25	26	26	28	30	30	34
45	25	25	24	25	25	24	24	25	25	27	29	29	33
40	24	24	24	24	24	23	23	24	24	26	28	28	32
35	23	24	23	23	23	22	23	23	23	25	27	27	31
30	23	23	22	23	22	21	22	22	22	24	26	26	30
25	22	22	22	22	22	20	21	21	20	23	24	25	28
15	21	20	19	20	20	18	18	18	18	21	22	21	25
10	19	18	18	18	18	17	16	16	15	18	19	18	23
5	17	16	16	16	16	12	12	13	12	15	13	11	15

SIT AND REACH FOR GIRLS

Percentile Scores Based on Age/Test Scores in Centimeters

PERCENTILE	AGE												
	5	6	7	8	9	10	11	12	13	14	15	16	17+
99	37	38	37	39	39	41	41	46	49	49	49	48	47
95	34	34	34	36	35	35	37	40	43	44	46	46	44
90	32	33	33	34	34	34	36	38	40	42	44	43	43
85	31	32	32	33	33	33	34	36	38	40	43	42	42
80	31	31	31	32	32	32	33	35	37	39	42	41	41
75	30	30	31	31	31	31	32	34	36	38	41	39	40
70	29	29	30	30	30	30	31	33	35	36	40	38	40
65	28	29	29	30	30	29	30	32	33	36	39	37	39
60	28	28	29	29	29	29	30	32	32	35	37	36	37
55	27	27	28	28	28	28	29	31	31	34	37	35	36
50	27	27	27	28	28	28	29	30	31	33	36	34	35
45	26	26	27	27	27	27	28	29	30	32	34	33	34
40	25	25	26	26	26	27	27	28	29	31	33	33	33
35	25	25	26	25	25	26	26	27	27	30	32	32	33
30	24	24	25	24	24	25	25	26	26	29	32	31	32
25	23	23	24	23	23	24	24	25	24	28	31	30	31
20	23	22	23	22	22	22	23	23	23	26	30	28	29
15	22	22	22	21	21	21	22	22	22	24	28	26	28
10	20	20	20	19	20	19	20	20	20	23	25	23	26
5	18	18	16	17	17	16	16	15	17	18	19	14	22

ONE-MILE RUN/WALK FOR BOYS

Percentile Scores Based on Age/Test Scores in Minutes and Seconds

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	6:18	7:41	6:30	6:50	6:24	6:29	6:03	5:40	4:30	4:42	4:49	4:46
95	8:54	8:31	8:00	7:48	7:10	6:56	6:43	6:25	6:01	5:50	5:40	5:35
90	9:41	5:56	8:28	8:14	7:39	7:17	6:57	6:39	6:13	6:07	5:56	5:57
85	10:15	9:22	8:48	8:31	7:57	7:32	7:11	6:50	6:26	6:20	6:08	6:06
80	10:32	9:43	9:00	8:47	8:08	7:45	7:25	7:00	6:33	6:29	6:18	6:14
75	10:53	10:02	9:23	9:04	8:19	8:00	7:41	7:11	6:45	6:38	6:25	6:23
70	11:17	10:20	9:38	9:12	8:37	8:14	7:56	7:20	6:59	6:48	6:33	6:32
65	11:41	10:34	9:56	9:30	8:59	8:27	8:05	7:29	7:09	6:57	6:44	6:40
60	12:00	10:55	10:15	9:47	9:11	8:45	8:14	7:41	7:19	7:06	6:50	6:50
55	12:20	11:19	10:39	10:07	9:29	9:01	8:25	7:55	7:29	7:16	6:58	6:57
50	12:36	11:40	11:05	10:30	9:48	9:20	8:40	8:06	7:44	7:30	7:10	7:04
45	13:00	11:56	11:27	10:46	10:10	9:46	8:58	8:17	7:59	7:39	7:20	7:14
40	13:39	12:17	11:55	11:03	10:32	10:07	9:11	8:35	8:13	7:52	7:35	7:24
35	14:11	12:50	12:08	11:20	10:58	10:25	9:40	8:54	8:30	8:08	7:53	7:35
30	14:48	13:23	12:30	11:44	11:14	10:54	10:00	9:10	8:48	8:29	8:09	7:52
25	15:12	13:49	12:54	12:08	11:40	11:25	10:22	9:23	9:10	8:49	8:37	8:06
20	15:34	14:16	13:23	12:33	12:15	12:00	10:52	10:02	9:35	9:05	8:56	8:25
15	16:30	15:00	14:10	12:59	13:07	12:29	11:30	10:39	10:18	9:34	9:22	8:56
10	17:25	16:12	14:57	13:52	13:50	13:08	12:11	11:43	11:22	10:10	10:17	9:23
5	18:12	17:43	16:08	15:01	14:47	14:35	13:14	12:11	12:11	11:25	11:49	10:15
0	22:05	21:20	22:40	19:40	23:00	23:32	23:05	18:10	18:10	21:44	20:15	16:49

ONE MILE RUN-WALK FOR GIRLS

Percentile Scores Based on Age/Test Scores in Minutes and Seconds

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	8:36	8:04	8:00	6:11	6:26	7:07	6:22	5:42	5:00	5:51	5:58	6:20
95	10:06	9:30	9:10	8:21	8:07	8:06	7:35	7:21	7:20	7:25	7:26	7:22
90	10:29	10:05	9:45	9:07	8:49	8:40	8:00	7:49	7:43	7:52	7:55	7:58
85	11:20	10:36	10:02	9:30	9:19	9:02	8:23	8:13	7:59	8:08	8:23	8:15
80	11:37	10:55	10:20	10:03	9:38	9:22	8:53	8:29	8:20	8:24	8:39	8:34
75	12:00	11:17	10:55	10:22	10:08	9:44	9:15	8:49	8:36	8:40	8:50	8:52
70	12:12	11:25	11:20	10:45	10:19	10:04	9:36	9:09	8:50	8:55	9:11	9:15
65	12:20	11:45	11:38	10:58	10:42	10:24	10:05	9:30	9:09	9:09	9:25	9:33
60	12:31	12:20	11:53	11:13	10:52	10:42	10:26	9:50	9:27	9:23	9:48	9:51
55	12:45	12:39	12:10	11:32	11:00	11:00	10:44	10:07	9:51	9:37	10:09	10:08
50	13:12	12:56	12:30	11:52	11:22	11:17	11:05	10:23	10:03	9:58	10:31	10:22
45	13:56	13:21	12:46	12:13	11:40	11:36	11:23	10:57	10:25	10:18	10:58	10:48
40	14:14	13:44	13:07	12:24	11:58	12:00	11:47	11:20	10:51	10:40	11:15	11:05
35	14:45	14:04	13:31	12:48	12:08	12:21	12:01	11:40	11:10	11:00	11:44	11:20
30	15:09	14:32	13:56	13:19	12:30	12:42	12:24	12:00	11:36	11:20	12:08	12:00
25	15:27	14:55	14:21	13:44	13:00	13:09	12:46	12:29	11:52	11:48	12:42	12:11
20	16:10	15:12	14:53	14:07	13:29	13:44	13:35	13:01	12:18	12:19	13:23	12:40
15	16:45	16:00	15:19	14:57	14:00	14:16	14:12	14:10	12:56	13:33	14:16	13:03
10	17:36	16:35	15:45	15:40	14:30	14:44	14:39	14:49	14:10	14:13	16:03	14:01
5	19:00	17:27	16:55	16:58	15:43	16:07	16:00	16:10	15:44	15:17	18:00	15:14
0	21:40	22:19	20:40	24:00	24:00	21:02	24:54	20:45	20:04	24:07	21:00	28:50

SHUTTLE RUN FOR BOYS

Percentile Scores Based on Age/Test Scores in Seconds and Tenths

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	11.0	8.3	8.0	8.1	7.4	7.0	7.5	8.0	6.6	6.3	6.5	6.9
95	11.7	10.8	10.4	10.4	9.8	9.5	9.3	9.0	8.8	8.5	8.4	8.5
90	12.0	11.2	10.9	10.6	10.0	9.9	9.6	9.3	9.0	8.8	8.6	8.6
85	12.1	11.5	11.1	10.9	10.3	10.0	9.8	9.5	9.1	9.0	8.7	8.7
80	12.3	11.7	11.2	11.0	10.5	10.2	9.9	9.6	9.3	9.1	8.9	8.9
75	12.4	12.0	11.4	11.1	10.7	10.4	10.0	9.8	9.4	9.2	8.9	8.9
70	12.5	12.2	11.5	11.3	10.8	10.5	10.1	9.9	9.5	9.3	9.0	9.0
65	12.8	12.4	11.0	11.5	11.0	10.6	10.3	10.0	9.6	9.4	9.1	9.1
60	13.0	12.5	11.9	11.6	11.2	10.8	10.4	10.1	9.7	9.5	9.2	9.2
55	13.1	12.7	12.0	11.8	11.3	11.0	10.5	10.1	9.8	9.5	9.3	9.3
50	13.3	12.8	12.2	11.9	11.5	11.1	10.6	10.2	9.9	9.7	9.4	9.4
45	13.5	13.0	12.3	12.0	11.6	11.2	10.7	10.3	10.0	9.8	9.5	9.5
40	13.7	13.2	12.5	12.2	11.8	11.4	10.8	10.4	10.1	9.9	9.6	9.6
35	13.8	13.3	12.7	12.5	12.0	11.5	11.0	10.6	10.2	10.0	9.7	9.6
30	14.0	13.5	13.0	12.8	12.2	11.7	11.1	10.7	10.3	10.1	9.8	9.8
25	14.3	13.8	13.3	13.0	12.4	12.0	11.2	10.8	10.5	10.2	10.0	9.9
20	14.5	14.0	13.6	13.3	12.7	12.2	11.4	11.0	10.7	10.4	10.1	10.1
15	14.8	14.5	13.8	13.6	13.1	12.6	11.6	11.1	11.0	10.7	10.3	10.3
10	15.2	14.9	14.2	14.1	13.6	13.0	12.0	11.4	11.3	11.0	10.6	10.6
5	16.0	15.4	15.0	14.5	14.5	13.5	12.4	12.0	12.0	11.8	11.1	11.1
0	19.5	25.0	18.0	18.8	16.9	16.8	16.1	16.4	19.9	19.8	23.0	23.0

SHUTTLE RUN FOR GIRLS

Percentile Scores Based on Age/Test Scores in Seconds and Tenths

PERCENTILE	AGE											
	6	7	8	9	10	11	12	13	14	15	16	17+
100	9.1	9.5	8.3	8.3	7.2	7.1	7.7	9.0	8.0	8.3	6.4	7.6
95	12.0	11.5	11.2	10.4	10.1	10.0	10.0	9.8	9.6	9.5	9.6	9.5
90	12.2	11.9	11.5	10.8	10.6	10.3	10.2	10.0	9.9	9.8	10.0	9.9
85	12.4	12.1	11.8	11.1	10.8	10.5	10.4	10.2	10.1	10.0	10.1	10.0
80	12.7	12.3	12.0	11.3	11.1	10.6	10.5	10.4	10.3	10.1	10.2	10.2
75	13.0	12.6	12.1	11.5	11.3	10.8	10.7	10.5	10.5	10.3	10.4	10.3
70	13.0	12.6	12.2	11.7	11.4	11.0	10.8	10.6	10.6	10.4	10.5	10.4
65	13.3	12.8	12.4	11.9	11.6	11.1	10.9	10.8	10.8	10.6	10.6	10.6
60	13.4	13.0	12.6	12.1	11.8	11.2	11.0	10.9	10.9	10.7	10.7	10.7
55	13.6	13.1	12.8	12.2	11.9	11.4	11.2	11.0	11.0	10.8	10.8	10.9
50	13.8	13.2	12.9	12.5	12.1	11.5	11.3	11.1	11.2	11.0	10.9	11.0
45	14.0	13.5	13.0	12.7	12.2	11.7	11.4	11.2	11.3	11.1	11.0	11.1
40	14.1	13.6	13.3	12.9	12.4	11.9	11.5	11.4	11.4	11.2	11.2	11.2
35	14.5	13.9	13.5	13.0	12.6	12.1	11.7	11.5	11.6	11.4	11.4	11.3
30	14.7	14.0	13.7	13.2	12.8	12.2	11.9	11.6	11.7	11.5	11.5	11.5
25	14.8	14.3	13.9	13.4	13.1	12.5	12.1	11.8	11.9	11.7	11.7	11.7
20	15.0	14.5	14.3	13.7	13.3	12.8	12.3	12.0	12.1	11.9	11.9	11.9
15	15.3	14.9	14.8	14.0	13.7	13.0	12.5	12.4	12.5	12.2	12.2	12.1
10	15.5	15.4	15.2	14.6	14.2	13.4	12.9	12.8	12.9	12.6	12.6	12.7
5	16.1	16.4	16.2	15.6	15.0	14.0	13.4	13.4	14.0	13.2	13.2	13.2
0	19.8	29.1	20.5	20.5	17.8	20.6	16.1	19.8	21.4	16.6	15.4	19.8