# South Brunswick Elementary Physical Educators' Fitnessgram Testing Manual

Fitnessgram is a program used to assess students fitness levels based on age and gender. The mission of the program is to promote lifespan fitness and educate the students on the importance of healthy fitness habits. Incorporating this program into our curriculum will help us to obtain this mission. The reports are individualized and even give suggestions on how to personalize a fitness plan for that child.

There are four components that will be tested on the third, fourth, and fifth grade students at all elementary schools in South Brunswick. Third graders will complete the tests as a practice year and their scores will be recorded, but published.

#### The Four Components & Their Tests:

- Aerobic capacity Pacer test
- Upper body strength and endurance 90 degree push up test
- Abdominal strength and endurance curl-up test
- Flexibility back-saver sit and reach

These tests will be administered twice throughout a school year with one practice round for the students before their scores are recorded into the program. The first round of testing will be completed between the beginning of November and the end of December, and the second round will be completed between the beginning of April and the end of May.

#### 20-Meter Pacer Test

#### Objective:

The objective is to test the students on their aerobic capacity by running as long as possible in a continuous movement within the 20-meter space that will progressively get faster each minute.

#### **Equipment Needed:**

- a space that measures 20-meters in length
- a cd player and fitnessgram cd
- marker cones
- copies of score sheet for each student
- pencils

Students will pair up and keep track of each other's scores. Group A will complete the test while group B records and visa-versa. Students will start at one side and run across the 20-meter distance and touch the line with their foot by the time the beep sounds, at which time they will run the other direction. A single beep will sound at the end of each lap and a triple beep will sound at the end of each minute indicating that the pace will get faster. If a student does not reach the line by the beep, they should stop and reverse direction immediately to get back on pace. Each student will be allowed and given credit for one miss, no matter how it happens. At the second miss, the test is over for that student and the partner will stop recording.

#### \*Alternative 15-Meter Pacer Test

(to be used if your gym space is less than 20 meters in length)

#### Objective:

The objective is to test the students on their aerobic capacity by running as long as possible in a continuous movement within the 15-meter space that will progressively get faster each minute.

#### **Equipment Needed:**

- a space that measures 15-meters in length
- a cd player and fitnessgram cd with alternative 15-meter pacing
- marker cones
- copies of 15-meter score sheet for each student
- pencils
- scoring conversion chart

Just like the 20-meter Pacer test, students will pair up and keep track of each other's scores. Group A will complete the test while group B records and visa-versa. Students will start at one side and run across the 20-meter distance and touch the line with their foot by the time the beep sounds, at which time they will run the other direction. A single beep will sound at the end of each lap and a triple beep will sound at the end of each minute indicating that the pace will get faster. If a student does not reach the line by the beep, they should stop and reverse direction immediately to get back on pace. Each student will be allowed and given credit for one miss, no matter how it happens. At the second miss, the test is over for that student and the partner will stop recording.

#### 90-Degree Push-Up Test

#### Objective:

The objective is to test the students on their upper body strength and endurance by completing as many 90-degree push-ups as possible in cadence with the cd.

#### Equipment Needed:

- a cd player with the fitnessgram cd
- an object that a student will be able to touch with their chest as they bend to 90 degrees (Equipment that may be used: deck ring and 6.25 inch gatorskin ball.)

The students will pair up. Group A will perform the test while group B records and then visa-versa. Student being tested will assume a prone position with hands placed slightly wider then shoulders and legs straight with toes tucked under. Students will push up with arms until straight keeping legs and back straight as well. The student will lower their body until elbows are bent to 90 degrees while staying in cadence with the voice commands on the cd. Students will be allowed one miss and on the second miss the partner will stop recording. A miss would consist of breaking cadence, breaking form by not bending to 90 degrees or not maintaining straight back and/or not fully extending the arms.

#### Curl-Up Test

#### Objective:

The objective is to test the students on their abdominal strength and endurance by completing as many curl-ups as possible to a maximum of 75 while keeping in cadence with the fitnessgram cd.

#### Equipment Needed:

- a measuring strip (cardboard, rubber, wood or any similar thin, flat material that is 30-35 inches in length)
- measuring device
- pencils and paper
- a piece of paper
- a gym mat

Two widths will be needed for different age groups. The third graders (5-9 year olds) should test on a strip 3 inches wide and fourth and fifth graders (10 and older) should test on 4.5 inches long. Students will be paired up and tested in 2 groups. Group A will perform the curl-ups while group B records and visa-versa. Students will lie in a supine position with knees bent at approximately 140 degrees, feet must be flat on the floor with legs slightly apart, arms straight and parallel to the trunk with palms resting on floor/mat. Fingers should be fully extended and evenly lined up with nearest edge of the strip. A paper should be placed under students' head to help the recorder make sure their partner's head is touching down on each curl-up.

The observer should be located at their partner's head to best view if they break form. Students will be allowed one miss and on the second miss the test is over. A miss would consist of the following: breaking cadence with cd, not keeping heels in contact with the floor/mat at all times, fingertips do not cross the strip, student pushes up with elbows or grabs legs to pull themselves up or swings arms to propel themselves upward.

#### Back-Saver Sit & Reach

<u>Objective</u>: The objective of this test is to test the students on their flexibility by assessing the flexibility of the hamstring muscles, which allows rotation of the pelvis in forward bending movements and posterior tilting of the pelvis for proper sitting.

#### Equipment Needed:

• a well constructed box about 12 inches high or container with a measuring device attached to it (You can use a pre-made sit and reach box, or simply use a milk crate with a yardstick attached to the top.)

The measurements must be lined up so the closest edge of the box to the student is equal to 9 inches on the measuring stick. The Fitnessgram manual recommends that the students remove their shoes for the test, but we believe that students should leave their shoes on to save time and for hygiene purposes. If a student fails, but is within an inch of the Healthy Fitness Zone Standard, they may retest with their shoes off.

Each student will sit squarely to the box and extend one leg straight out and rest their foot up against the side of the measuring box, while the other leg is bent with their foot flat on the floor within 3 inches of the straight knee. The student will then reach forward with both hands, one on top of the other, while keeping their back straight and their head up four times. They will hold their reach on the fourth time so they can be recorded. Once one leg is recorded, the student switches their position to measure the other leg. The bent knee is allowed to move to the side, but the sole of the foot must stay on the ground.

Another student or yourself may place a hand just above the straight knee to help keep in on the ground during the test. The student needs to keep their back straight and their head up while keeping their hands even. If the student breaks form, they are to retest that leg. Measurements should be to the nearest half inch and should not exceed 12 inches to discourage hypermobility. To be in the Healthy Fitness Zone, students need to meet the standard for both their left and right sides. The other students can be working at other activity stations or working independently on an activity like cup stacking.

# Fitnessgram Testing

# Things you should be looking for:

# Sit-Up Test

- Hands stay at their sides
- Knees are bent
- Both feet are touching the floor
- Head touches the ground each time
- Stays in rhythm to the cd
- Smooth motion up, no grabbing or swinging of body or body parts to help get up
- Upper back comes off the floor
- Second miss they are finished

## Push-Up Test

- Straight, flat back
- Stays in rhythm to the cd
- Elbows bend to 90 degrees
- Only hands and feet touch the ground
- Second miss they are finished

# Pacer Test

- Partner makes it to the other side before the signal
- Second miss they are finished

### Sit & Reach

- One leg straight out touching the box and one leg bent
- Smooth motion when reaching
- Three practice bounces before reaching

Fitnessgram	Standards	s for Heal	thy Fitness	Zone - Boys

Age	20-Meter Pacer Test (laps completed)	15-Meter Pacer Test (laps completed)	Curl-Ups (# completed)	90 Degree Push-Ups (# completed)	Back- Saver Sit & Reach* (inches)
7	-	-	4 – 14	4 – 10	8
8	-	-	6 – 20	5 – 13	8
9	-	-	9 – 24	6 – 15	8
10	23 – 61	30 - 80	12 – 24	7 – 20	8
11	23 - 72	30 - 94	15 – 28	8 – 20	8
12	32 – 72	42 - 94	18 – 36	10 - 20	8

<sup>\*</sup> Test is pass/fail; must reach this distance to pass with both legs

# Fitnessgram Standards for Healthy Fitness Zone - Girls

Age	20-Meter	15-Meter	Curl Hag	90 Degree	Back-
	Pacer Test	Pacer Test	Curl-Ups (#	Push-Ups	Saver Sit
	(laps	(laps	completed)	(#	& Reach*
	completed)	completed)	completed)	completed)	(inches)
7	-	-	4 – 14	4 – 10	9
8	-	-	6 – 20	5 – 13	9
9	-	-	9 – 22	6 – 15	9
10	7 – 41	9 – 54	12 - 26	7 – 15	9
11	15 – 41	19 – 54	15 – 29	7 – 15	10
12	15 – 41	19 - 54	18 – 32	7 - 15	10

<sup>\*</sup> Test is pass/fail; must reach this distance to pass with both legs

<sup>-</sup> Lap count standards are not recommended

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