

FitnessGram® Data Collection Protocol

PACER (Progressive Aerobic Cardiovascular Endurance Run). This test estimates aerobic capacity from the number of 15-meter lengths that a student can run back and forth across a straight course. The class is split into at least two paired groups; one group will be running while the other group counts and records the number of lengths the running partner completes on a score sheet used specifically for this test. This test starts out easy and becomes progressively more difficult. Students are instructed to run as long as possible across a distance and at a specified pace set to beeps played on a CD player. For this test, a set of parallel lines is drawn 15 meters apart. Students start on one line, run the distance, and cross the opposite line. Once they hear the sound of a single chime, students turn around and run back to the starting line. Every minute, indicated by a triple chime, the pace gets faster. Students continue in this manner until they fail twice to reach the line before they hear the single chime.

PACER

PURPOSE: To provide an estimate of cardiorespiratory fitness level.

EQUIPMENT:	Flat, non-slippery surface measuring at least 20 meters	
	CD player	Cones
	PACER CD	Pencils
	50' Measuring Wheel	Scoring sheets
	Tape	Student Score Card

Estimated time to Complete: 20- 25 minutes per group

Instructions for Administration of the Test

1. Lay down a line of tape at one end of the area where the PACER test will be performed. Measure the 15-meter (49.2 ft) course from that tape with the measuring wheel. Lay down another line of tape to mark the turn around line. Place marker cones to divide lanes (beginning, middle, and end); each lane should be 40-60 inches wide.
2. Divide the class in two by asking students to pair up with a partner. One partner will line up behind the start line.
3. The other partner will stand a few feet away from the start line and count and record the numbers of laps completed by the partner who is running.
4. After the 5-second countdown, student will begin running toward the line 15 meters away.
5. Students must run across the line by the time the beep sounds.
6. Students will turn around, and at the sound of the next beep will run back to the other end. If a student makes it to the line before the beep, he/she must turn around and wait for the next beep before running again.

7. Students continue in this manner until they are told to stop.
8. A single beep will sound at the end of the time for each lap. A triple beep sounds at the end of each minute. The pace will get faster after each triple beep. Inform students that when the triple beep sounds they should not stop but should continue running toward the other end of the area.
9. If they hear a beep before they get to the line, students should turn around at once and run back to the line they just started from. In order to get back on pace, students should wait once they get there for the rest of the class to return to that end. Then, they continue as normal.
10. Tell the partner who is scoring that he/she should watch to make sure that their partner reaches each line by the time the single beep sounds. The scoring partner should put a diagonal line through each circle on the score sheet that their partner runs as a successful lap. They should put an X in the circle if their partner does not make it to the next line in time.
11. The test ends when the student fails to make it to the 15-meter line the second time OR if the student remains at one end of the testing area through 2 beeps.

Instructions to the Students

[Introduce test.]

The PACER is a test for your heart and lungs. During this test you will be running back and forth between these two lines on the ground, while I play a CD with beeps on it. The beeps are really important, and I'll tell you more about them in just a minute. You will each have a partner, and your partner will count how many times you run across the area and will record it on the score sheet. Each of you will have your own "lane" to run in.

At the start of the test, there will be a 5 second countdown and then a start signal. Then you will run until you cross the line. You must make it across the line before another beep plays. When you cross the line, turn around, but don't start running back yet. Wait to run until you hear another beep and then run back down to the other end. Remember, you are trying to make it across the lines before you hear a beep play on the CD.

You will start out slow and each minute the pace will get faster. At the end of each minute, you will hear 3 beeps, and those beeps mean that the pace is about to get faster.

If you do not cross the line before the beep sounds, stop where you are, turn around and run back to the line you just left. Wait there until the rest of the class reaches that line. Then, start running with them again. This will help you get back on pace. The second time you do not make it to the line before the beep, your test is over.

[Start test.]

Ok, everybody pair up with your partner, and choose who will run first. These people should step up to the starting line right now. There should only be one person between each set of cones. Remember to stay in your own lane when you turn around to run back.

Remember, those of you who are scoring, stand a few feet from the line, and stay out of the way of those who are running. On the Scoring Sheet, write the first and last name of your partner. As your partner runs, put a diagonal line in a circle every time s/he makes it to the next line by the time you hear the beep. Put an X in the circle if your partner does not make it to the line before the beep. The second time you have to put an X in a circle, the test is over, and you can tell your partner to stop running.

Ok, let's start. I will start the CD. You will hear a 5 second countdown on the CD. You will start when the CD tells you to.

Run to the line at the end of the cones before you hear the next beep. When you get to the line, turn around and wait for the beep before running back across. Keep doing this. If you do not make it across the line before the beep, turn around and run back immediately.

Remember, when you hear three beeps together, you will know that the pace will get faster. You will need to run faster to make it to the line before the beep. Do not stop when you hear the triple beep. Continue as normal.

We'll keep playing the CD as long as there are students who are still running. When the last student finishes, we'll switch partners and the people who are keeping score now will take their turn running.

Ok, here we go!

[After each group runs, collect the Scoring Sheet. You will transfer these scores to the Student Score Cards and use the PACER Conversion Chart to convert their score.]

Height, Weight and BMI

PURPOSE: To measure height and weight to determine Body Mass Index (BMI)

EQUIPMENT: Digital Scale
Tape measure
Stadiometer
Wall triangle
Duct Tape
Bowl for personal items
Clipboard
Student Score Card
Pencil

Estimated time to complete: 3 min per student

Instructions for Administration of the Test - Height

1. Visit the height/weight space to make sure it will be appropriate. Ensure privacy will be adequate, floor is uncarpeted or has flat carpet, and the wall for height measurement has no measurable molding.

2. Try to obtain a partition or screen if you have doubts about the adequacy of privacy.
3. Place the stadiometer and digital scale on a level surface.
4. Instruct the student to remove shoes, removable hair accessories, and hats. Have student back up to the stadiometer. Instruct the student to stand up straight, feet or knees together (which ever touches first), arms hanging in a relaxed position by the sides of the body, with heels, buttocks and upper back (but not necessarily the head) touching the wall.
5. Ask the student to stand up as tall as possible while keeping heels on the ground. Ask student to take a deep breath, let it go, and continue breathing normally.
6. Position the student's head so the visual plane is horizontal. Place the measuring square/triangle so the longer side rests on the student's head (the sagittal crest), with the shortest side flush against the wall-mounted measuring tape, forming a right angle. There might be cases where students have hairdos that could add to their height. Whenever possible, get the student to let their hair down. If this is not possible, press down with the triangle as much as possible without hurting the student. Adjust your eye level to the level of the measurement before attempting to read the measurement. If the student is extremely tall, stand on a bench or chair to obtain an accurate measurement.
8. Check to make sure the student's heels are in contact with the floor and record to the nearest inch. Read the tape value immediately **under the lower edge of the measurement square/triangle**.
9. Using the clipboard for a firm, flat writing surface, lightly write the first height measurement on the Student Score Card so you don't forget it. Height is recorded by dropping fractions of an inch and using the last whole number (i.e., 5 feet 5 ½ inch should be recorded as 5 feet 5 inches).
10. Measure height twice. Record the higher of the two measurements on the Student Score Card.

Instructions for Administration of the Test - Weight

1. Make sure the scale is zero-balanced before **each** student is weighed.
2. Ask the student to empty his/her pockets into the small bowl and remove outer clothing including coats, sweaters, and so on.
3. Ask the student to step on the scale and stand motionless in the middle of the scale platform with the feet slightly apart and the body weight distributed equally on both feet. The arms should be relaxed and hanging down loosely at the sides of the body. The scale will beep two times to indicate the weight was capture.
4. Using the clipboard for a firm, flat writing surface, lightly write the first weight measurement on the Student Score Card. Weights are recorded to the last whole number (i.e, 112.7 pounds should be recorded as 112 pounds).
5. Ask the student to step off the scale. Re-zero the scale by pressing on the personal key with your toe (the first weight measurement will be displayed in the lower corner of the screen). After the

scale re-zeroes, take a second measurement. Record the higher of the two measurements on the Student Score Card.

Instructions to the Students

[Introduce height and weight measurement.]

I will be measuring your height and your weight using a stadiometer – basically a large ruler – and an electronic scale. When your height is measured, you will be asked to remove your shoes, stand up straight with your back and your heels against the wall. You will then be asked to take a deep breath and let it out. We will measure your height twice. You will then have your weight measured. Again with your shoes off, you will be asked to step onto the scale while looking straight ahead with your arms by your side. You will be asked to step off and then to step back on again. Weight will be measured twice.

[Start height and weight measurement.]

Height

Please remove your shoes, removable hair accessories, and hats.

Please stand up straight, stand up straight, feet/knees together, arms hanging in a relaxed position by the sides of the body, with heels, buttocks and upper back touching the wall.

Stand up as tall as possible while keeping your heels on the ground. Let your arms hang freely at your sides, palms facing thighs.

Now, breathe in deeply and slowly exhale. Continue breathing normally. **[Take measurement.]**

Step away from the wall. Ok, let's do it all again one more time.

Weight

Please empty your pockets into this small bowl and remove your coat/sweater, etc., and shoes.

Step on the scale with your feet slightly apart and the body weight distributed equally on both feet. Just relax your arms and let them hang down by your side. Don't move until the scale beeps two times.

[Take measurement.]

Please step off the scale. Ok, let's do it one more time.