# Coopers Run/Walk Test

The 12-minute run fitness test was developed by Kenneth Cooper, M.D., in 19681

as an easy way to measure aerobic fitness and provide an estimate of [VO2 max](https://www.verywellfit.com/what-is-vo2-max-3120097) for military personnel. The Cooper test, as it's also known, is still used today as a field test for determining aerobic fitness.

Dr. Cooper found that there is a very high correlation between the distance someone can run (or walk) in 12 minutes and their VO2 max value, which measures the efficiency with which someone can use oxygen while exercising. This test is still one of the basic fitness tests [used by the military](https://www.afpc.af.mil/Portals/70/documents/06_CAREER%20MANAGEMENT/03_Fitness%20Program/Fitness%20Program%20Frequently%20Asked%20Questions.pdf).

It is also used by many coaches and trainers to determine [cardiovascular fitness](https://www.verywellfit.com/cardiovascular-fitness-1230820) and track fitness over time. This simple test also allows you to compare your cardiovascular endurance with others of your age and gender.

## What Is Cardiovascular Endurance?

In sports, cardiovascular endurance refers to an athlete's ability to sustain prolonged exercise for minutes, hours, or even days. Endurance testing is a way to measure the efficiency of an athlete's circulatory system and respiratory system in supplying oxygen to the working muscles and support sustained physical activity.

Endurance generally refers to aerobic endurance. Aerobic exercise requires oxygen to help supply the energy needed for exercise. The objective of endurance training, then, is to develop and improve the body systems that produce and deliver the energy needed to meet the demands of prolonged activity.2﻿

## How to Perform the 12-Minute Run Test

The Cooper 12-minute run test requires the person being tested to run or walk as far as possible in a 12 minute period. The objective of the test is to measure the maximum distance covered by the individual during the 12-minute period1﻿ and is usually carried out on a [running track](https://www.verywellfit.com/rules-for-running-on-a-track-2912009) by placing cones at various distances to enable measuring of the distance. A stopwatch is required for ensuring that the individual runs for the correct amount of time.

* **Safety First**. This is a strenuous fitness test and it's recommended that you have your physician's clearance before performing this test on your own.
* **Equipment**. You'll need a timer to know when 12 minutes are up. Note that some running watches and fitness monitors have a 12-minute fitness test mode.
* **Location**. This test is designed to be conducted on a track with clearly marked distance. You can perform the test on a treadmill, but be sure to raise the incline to one degree to simulate outdoor running.
* [**Warm Up**.](https://www.verywellfit.com/how-to-warm-up-before-exercise-3119266) Perform a short warm-up of 10 to 15 minutes of low to moderately strenuous activity before performing any fitness testing.
* **Run or Walk**. When you are warmed up, get going. Run or walk as far as you can in 12 minutes.
* **Record Your Distance**. Record the total number of miles or kilometers you traveled in 12 minutes.

## Calculate Your 12-Minute Run Test Results

To calculate your estimated VO2 Max results (in ml/kg/min) use either of these formulas:

* **Miles**: VO2max = (35.97 x miles) - 11.29.1﻿
* **Kilometers**: VO2max = (22.351 x kilometers) - 11.288

The easiest way to get your test results (your VO2 max score) and compare yourself with others of your age and gender is with an [online 12-minute test results calculator](https://www.exrx.net/Calculators/MinuteRun).

After you complete the test, you can compare your results to the norms and recommendations for your age and gender.

## 12-Minute Run Fitness Test Results

Instead of using the calculation and getting your VO2 max, you can use the distance you achieved to find how you rate.

**BUT DON’T WORRY!! I AM NOT MAKING YOU DO MATH!!! Although, maybe I should? Hmmmmmm?**

**Now for the HOMEWORK!!**

We will be doing a modified Coopers Run/Walk Test using the scale below. I just wanted you to know that this is a real thing and that I didn’t just make it up to be mean! You can see the real scale if you search for Coopers Run Test. **You may choose to walk or run, but there are rules. If you choose to run, you may stop and walk, however if you choose to walk, you may NEVER run.** Feel free to try both more than once, but please document on your log sheet, which one you did each day.

The first thing you will need to do is establish a 1 mile course. You may use a trip odometer on a vehicle to mark a starting spot. You may go .5 miles out, so you return to your starting spot at the 1 mile mark, or you may mark out a full mile. On a standard track, this would be four laps minus about 33 yards . Our track here at Willow Creek is 300 meters. It is your choice.

You will need to time your work. Use a stopwatch, kitchen timer, your phone, etc. Problem solve.

In the beginning, just start and record your time on the enclosed log sheet. Each day try to beat your previous time. As with any exercise program, start small and build up. **Do this 3-5 days this first week. Take a picture of the log sheet each week and send to me at 579-6917 by the Homework Dropoff Deadline.** The goal for this project is to actually complete the run/walk test when we get back here at school for some grades in May. It will probably take some time to get to the FAIR range. You are where you are, and you will need to work toward at least the FAIR goal which is a C grade.

# Coopers Run/Walk Test

Walk (1 mile)

Under 11:33

11:34-13:00

13:01-14:33

14:34-16:06

Over 16:07

SUPERIOR 10 pts

EXCELLENT 9 pts

GOOD 8 pts

FAIR 7 pts

POOR 6 pts

DANGER 5 pts

Run (1 mile)

8:45 or less

8:46-9:45

9:46-11:00

11:01-13:00

13:01-14:30

over 14

