



Progressive Aerobic Cardiovascular Endurance Run (PACER) Look-Up and Goal Setting Table

Beginning with 2013–14, the PACER, which is one of the three Aerobic Capacity test options available in the *FITNESSGRAM*¹, is based on student gender, age, and laps only. This table provides the minimum number of 20-meter (20m) laps that males and females need to achieve the Healthy Fitness Zone (HFZ) for the PACER, which is still reported in terms of $VO_2\text{max}$ ². Although students can set goals based on the minimum number of PACER laps, teachers are encouraged to discuss the importance of aerobic capacity and to ensure that students understand how $VO_2\text{max}$ is influenced by gender and age.

| Age | Females Minimum Number of 20m PACER Laps | Females Aerobic Capacity HFZ $VO_2\text{max}$ | Males Minimum Number of 20m PACER Laps | Males Aerobic Capacity HFZ $VO_2\text{max}$ |
|-----|------------------------------------------------|-----------------------------------------------------|----------------------------------------------|---------------------------------------------------|
| 10 | 17 | ≥ 40.2 | 17 | ≥ 40.2 |
| 11 | 20 | ≥ 40.2 | 20 | ≥ 40.2 |
| 12 | 23 | ≥ 40.1 | 23 | ≥ 40.3 |
| 13 | 25 | ≥ 39.7 | 29 | ≥ 41.1 |
| 14 | 27 | ≥ 39.4 | 36 | ≥ 42.5 |
| 15 | 30 | ≥ 39.1 | 42 | ≥ 43.6 |
| 16 | 32 | ≥ 38.9 | 47 | ≥ 44.1 |
| 17 | 35 | ≥ 38.8 | 50 | ≥ 44.2 |
| 17+ | 38 | ≥ 38.6 | 54 | ≥ 44.3 |

Note: The information in this table should not be used to attempt to derive a formula for calculating $VO_2\text{max}$ from PACER laps. The $VO_2\text{max}$ values establish the HFZ for the gender and age and are not the exact $VO_2\text{max}$ values that would be obtained from the number of laps displayed.

¹ The *FITNESSGRAM* and Healthy Fitness Zone (HFZ) are registered trademarks of The Cooper Institute.

² $VO_2\text{max}$ refers to the maximum oxygen consumption of an individual during exercise. The acronym is derived from V = volume per time; O_2 = oxygen; and max = maximum.