



FITNESSGRAM® Healthy Fitness Zones®

The FITNESSGRAM® uses Healthy Fitness Zones® (HFZs®) to evaluate fitness performance. These zones represent minimum levels of fitness that offer protection against the diseases that result from sedentary living.

Females

| Age | Aerobic Capacity | | | Body Composition ⁽²⁾ | |
|-----|---|---|--|--|-----------------|
| | One-Mile Run VO ₂ max (ml/kg/min) ⁽¹⁾ | 20m PACER VO ₂ max (ml/kg/min) ⁽¹⁾ | Walk Test VO ₂ max (ml/kg/min) ⁽¹⁾ | Skinfold Measurements/ Bioelectric Impedance Analyzer Percent Body Fat | Body Mass Index |
| 5 | Lap count or time standards not recommended. VO ₂ max HFZs® not available. | | Completion of test standards not recommended. VO ₂ max HFZs® not available. | 20.8 – 9.8 | 16.7 – 13.6 |
| 6 | | | | 20.8 – 9.9 | 17.0 – 13.5 |
| 7 | | | | 20.8 – 10.1 | 17.5 – 13.5 |
| 8 | | | | 20.8 – 10.5 | 18.2 – 13.6 |
| 9 | | | | 22.6 – 10.8 | 18.9 – 13.8 |
| 10 | ≥ 40.2 | | | 24.3 – 11.6 | 19.5 – 14.1 |
| 11 | ≥ 40.2 | | | 25.7 – 12.2 | 20.4 – 14.5 |
| 12 | ≥ 40.1 | | | 26.7 – 12.7 | 21.2 – 14.9 |
| 13 | ≥ 39.7 | | ≥ 39.7 | 27.7 – 13.4 | 22.0 – 15.4 |
| 14 | ≥ 39.4 | | ≥ 39.4 | 28.5 – 14.0 | 22.8 – 15.9 |
| 15 | ≥ 39.1 | | ≥ 39.1 | 29.1 – 14.6 | 23.5 – 16.4 |
| 16 | ≥ 38.9 | | ≥ 38.9 | 29.7 – 15.3 | 24.1 – 16.9 |
| 17 | ≥ 38.8 | | ≥ 38.8 | 30.4 – 15.9 | 24.6 – 17.3 |
| 17+ | ≥ 38.6 | | ≥ 38.6 | 31.3 – 16.5 | 25.1 – 17.6 |

| Age | Abdominal Strength and Endurance | Trunk Extensor Strength and Flexibility | Upper Body Strength and Endurance | | | Flexibility | |
|-----|--|---|--|---|---|--|---|
| | Curl-Up # completed up to max of 75 | Trunk Lift # of inches up to max of 12 | 90° Push-Up # completed up to max of 75 | Modified Pull-Up # completed up to max of 75 | Flexed-Arm Hang # of seconds up to max of 90 | Back-Saver Sit & Reach ⁽³⁾ # of inches up to max of 12 | Shoulder Stretch |
| 5 | ≥ 2 | 6 – 12 | ≥ 3 | ≥ 2 | ≥ 2 | 9 | Touching fingertips together behind the back on both the right and left sides. |
| 6 | ≥ 2 | 6 – 12 | ≥ 3 | ≥ 2 | ≥ 2 | 9 | |
| 7 | ≥ 4 | 6 – 12 | ≥ 4 | ≥ 3 | ≥ 3 | 9 | |
| 8 | ≥ 6 | 6 – 12 | ≥ 5 | ≥ 4 | ≥ 3 | 9 | |
| 9 | ≥ 9 | 6 – 12 | ≥ 6 | ≥ 4 | ≥ 4 | 9 | |
| 10 | ≥ 12 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 4 | 9 | |
| 11 | ≥ 15 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 6 | 10 | |
| 12 | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 7 | 10 | |
| 13 | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 8 | 10 | |
| 14 | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 8 | 10 | |
| 15 | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 8 | 12 | |
| 16 | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 8 | 12 | |
| 17 | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 8 | 12 | |
| 17+ | ≥ 18 | 9 – 12 | ≥ 7 | ≥ 4 | ≥ 8 | 12 | |

≥ To achieve the HFZ®, the score must be greater than or equal to the indicated value.

⁽¹⁾ VO₂max reflects the maximum rate that oxygen can be taken up and utilized by the body during exercise. It is estimated by utilizing the student's height, weight, and other specific information, which is based on the test option (i.e., One-Mile Run, 20m PACER, or Walk Test) administered. The calculation procedures are found in the Reference Guide on the California Department of Education (CDE) Physical Fitness Test (PFT) Overview Web page at <http://www.cde.ca.gov/ta/tg/pf/overview.asp>.

⁽²⁾ The California Department of Education (CDE) considers a student who exceeds the HFZ® as meeting the HFZ®. For Body Composition, exceeding the HFZ® means obtaining a score less than a number on the lower end or right side of the HFZ®.

⁽³⁾ Student must reach the distance on **both** the right and left sides to achieve the HFZ®.

© 2010 by The Cooper Institute, Dallas, Texas. All rights reserved.



FITNESSGRAM® Healthy Fitness Zones®

The FITNESSGRAM® uses Healthy Fitness Zones® (HFZs®) to evaluate fitness performance. These zones represent minimum levels of fitness that offer protection against the diseases that result from sedentary living.

Males

| Age | Aerobic Capacity | | | Body Composition ⁽²⁾ | |
|-----|---|---|--|--|-----------------|
| | One-Mile Run VO ₂ max (ml/kg/min) ⁽¹⁾ | 20m PACER VO ₂ max (ml/kg/min) ⁽¹⁾ | Walk Test VO ₂ max (ml/kg/min) ⁽¹⁾ | Skinfold Measurements/ Bioelectric Impedance Analyzer Percent Body Fat | Body Mass Index |
| 5 | Lap count or time standards not recommended. VO ₂ max HFZs® not available. | | Completion of test standards not recommended. VO ₂ max HFZs® not available. | 18.8 – 8.9 | 16.7 – 13.9 |
| 6 | | | | 18.8 – 8.5 | 16.9 – 13.8 |
| 7 | | | | 18.8 – 8.3 | 17.3 – 13.8 |
| 8 | | | | 18.8 – 8.4 | 17.8 – 13.9 |
| 9 | | | | 20.6 – 8.7 | 18.5 – 14.1 |
| 10 | ≥ 40.2 | | | 22.4 – 8.9 | 18.9 – 14.3 |
| 11 | ≥ 40.2 | | | 23.6 – 8.8 | 19.7 – 14.6 |
| 12 | ≥ 40.3 | | | 23.6 – 8.4 | 20.5 – 15.1 |
| 13 | ≥ 41.1 | | ≥ 41.1 | 22.8 – 7.8 | 21.3 – 15.5 |
| 14 | ≥ 42.5 | | ≥ 42.5 | 21.3 – 7.1 | 22.1 – 16.1 |
| 15 | ≥ 43.6 | | ≥ 43.6 | 20.1 – 6.6 | 22.9 – 16.6 |
| 16 | ≥ 44.1 | | ≥ 44.1 | 20.1 – 6.5 | 23.7 – 17.2 |
| 17 | ≥ 44.2 | | ≥ 44.2 | 20.9 – 6.7 | 24.4 – 17.8 |
| 17+ | ≥ 44.3 | | ≥ 44.3 | 22.2 – 7.0 | 25.1 – 18.3 |

| Age | Abdominal Strength and Endurance | Trunk Extensor Strength and Flexibility | Upper Body Strength and Endurance | | | Flexibility | |
|-----|--|---|--|---|---|--|---|
| | Curl-Up # completed up to max of 75 | Trunk Lift # of inches up to max of 12 | 90° Push-Up # completed up to max of 75 | Modified Pull-Up # completed up to max of 75 | Flexed-Arm Hang # of seconds up to max of 90 | Back-Saver Sit & Reach ⁽³⁾ # of inches up to max of 12 | Shoulder Stretch |
| 5 | ≥ 2 | 6 – 12 | ≥ 3 | ≥ 2 | ≥ 2 | 8 | Touching fingertips together behind the back on both the right and left sides. |
| 6 | ≥ 2 | 6 – 12 | ≥ 3 | ≥ 2 | ≥ 2 | 8 | |
| 7 | ≥ 4 | 6 – 12 | ≥ 4 | ≥ 3 | ≥ 3 | 8 | |
| 8 | ≥ 6 | 6 – 12 | ≥ 5 | ≥ 4 | ≥ 3 | 8 | |
| 9 | ≥ 9 | 6 – 12 | ≥ 6 | ≥ 5 | ≥ 4 | 8 | |
| 10 | ≥ 12 | 9 – 12 | ≥ 7 | ≥ 5 | ≥ 4 | 8 | |
| 11 | ≥ 15 | 9 – 12 | ≥ 8 | ≥ 6 | ≥ 6 | 8 | |
| 12 | ≥ 18 | 9 – 12 | ≥ 10 | ≥ 7 | ≥ 10 | 8 | |
| 13 | ≥ 21 | 9 – 12 | ≥ 12 | ≥ 8 | ≥ 12 | 8 | |
| 14 | ≥ 24 | 9 – 12 | ≥ 14 | ≥ 9 | ≥ 15 | 8 | |
| 15 | ≥ 24 | 9 – 12 | ≥ 16 | ≥ 10 | ≥ 15 | 8 | |
| 16 | ≥ 24 | 9 – 12 | ≥ 18 | ≥ 12 | ≥ 15 | 8 | |
| 17 | ≥ 24 | 9 – 12 | ≥ 18 | ≥ 14 | ≥ 15 | 8 | |
| 17+ | ≥ 24 | 9 – 12 | ≥ 18 | ≥ 14 | ≥ 15 | 8 | |

≥ To achieve the HFZ®, the score must be greater than or equal to the indicated value.

⁽¹⁾ VO₂max reflects the maximum rate that oxygen can be taken up and utilized by the body during exercise. It is estimated by utilizing the student's height, weight, and other specific information, which is based on the test option (i.e., One-Mile Run, 20m PACER, or Walk Test) administered. The calculation procedures are found in the Reference Guide on the California Department of Education (CDE) Physical Fitness Test (PFT) Overview Web page at <http://www.cde.ca.gov/ta/tg/pf/overview.asp>.

⁽²⁾ The California Department of Education (CDE) considers a student who exceeds the HFZ® as meeting the HFZ®. For Body Composition, exceeding the HFZ® means obtaining a score less than a number on the lower end or right side of the HFZ®.

⁽³⁾ Student must reach the distance on **both** the right and left sides to achieve the HFZ®.

© 2010 by The Cooper Institute, Dallas, Texas. All rights reserved.