

Pull-ups (or Right Angle Push-ups or Flexed-Arm Hang)¹

This activity measures upper body strength and endurance.

Pull-ups Testing

Here's what you do:

- The student hangs from a horizontal bar at a height the student can hang from with arms fully extended and feet free from floor, using either an overhand grasp (palms facing away from body) or underhand grip (palms facing toward body). Small students may be lifted to starting position.
- The student raises body until chin clears the bar and then lowers body to full-hang starting position. Student performs as many correct pull-ups as possible.



Pull-ups Tips

Spend as little time hanging from the bar beforehand as possible because the extra time on the bar may reduce the number of pull-ups performed. Discourage any leg kicking or body swinging as this may also decrease the number of repetitions.

Pull-ups Scoring

Pull-ups should be done in a smooth rather than jerky motion. Kicking or bending the legs is not permitted and the body must not swing during the movement.

Right Angle Push-ups Testing

Here's what you do:

- The student starts in push-up position with hands under shoulders, arms straight, fingers pointed forward, and legs straight, parallel, and slightly apart (approximately 2-4 inches) with the toes supporting the feet.
- Keeping the back and knees straight, the student then lowers the body until there is a 90-degree angle formed at the elbows with upper arms parallel to the floor. A partner holds her/his hands at the point of the 90-degree angle so that the student being tested goes down only until her/his shoulders touch the partner's hand, then back up.
- The push-ups are done to a metronome (or audio tape, clapping, drums) with one complete push-up every three seconds, and are continued until the student can do no more at the required pace. The student should remain in motion during the entire three second interval.



Right Angle Push-ups Tip

As with the pull-up, spend as little time in the starting position beforehand in order to increase the number of repetitions. Any extra movement may also decrease the number of repetitions.

Right Angle Push-ups Scoring

Record only those push-ups done with proper form and in rhythm.

Right Angle Push-ups Rationale

Right angle push-ups are a good indicator of the range of strength/endurance found in kids, whereas some kids are unable to do any pull-ups. Pull-ups remain an option for those students at higher levels of strength/endurance.

¹ <https://www.presidentschallenge.org/challenge/physical/activities/pull-ups.shtml>

Flexed-arm Hang Testing

Students who can't do one pull-up or want an alternative to the pull-ups or right angle push-ups may do the flexed-arm hang in order to qualify for the National or Participant Physical Fitness Award. To qualify for the Presidential Award, students are required to do pull-ups or right angle push-ups.

Here's what you do:

- Using either an overhand grasp (palms facing away from body) or underhand grip (palms facing toward body), student assumes flexed-arm hang position with chin clearing the bar. Students may be lifted to this position.
- Student holds this position as long as possible.



Flexed-arm Hang Tip

Rather than doing a pull-up to start, lift the participant to the starting position. This decreases any extra exertion and may possibly increase the length of time.

Flexed-arm Hang Scoring

Chest should be held close to bar with legs hanging straight. Timing is stopped when student's chin touches or falls below the bar.