

FITNESS MEASUREMENTS

Curl-Ups

Objective: Students will assess their muscular endurance in their abdominals and hip flexors by completing the curl-up measurement.

Equipment: Mats, Stopwatch, Recording Sheet, Pencil

Explanation:

Muscular endurance is the ability of the muscles to repeat a movement many times or hold a position without stopping to rest. Being able to keep the muscles working without having to stop and rest is important for everyone. The one-minute curl-up measurement is used to determine the amount of muscular endurance in the abdominals and hips.

Protocols:

1. Pair students together.
2. One student lies down on the mat on their back.
3. Student lying on mat has knees bent with feet flat on floor.
4. Make sure the student on the mat has heels 12-18 inches from their gluteals.
5. Arms are crossed with hands on shoulders.
6. Their partner kneels down in front of them and places hands around partner's ankles with their thumbs on the inside of the ankles.
7. On teacher's signal "Ready, Go!", students begin performing Curl-Ups for one minute.
8. With arms crossed, the student curls up to touch elbows to thighs and returns to starting position, so scapulas touch the mat. This equals one curl-up.
9. The partner will count the correctly completed Curl-Ups.
10. On teacher's signal, "Stop!", the curl-up measurement is finished.
11. Teachers should encourage students to keep going throughout the measurement and every 15 seconds let them know how much time is left.
12. Upon completion of the fitness measurement, have student record his/her score on the Five for Life Fitness Measurements Recording Sheet.

Common Student Mistakes:

1. Gluteals lift off the floor
2. Hands off shoulders
3. Scapulas not touching floor
4. Partners not holding feet correctly

Management Ideas:

- Curl-Ups can be done with $\frac{1}{2}$ the class at a time with one person holding legs and counting while the other is doing the Curl-Ups. Set class up in two columns with the teacher able to walk between the columns to observe the counting and watch for protocol for curl-ups. Switch partners.
- Set up a fun circuit with four to six at a station. Have one station be the curl-up station. The teacher stays at the station and observes three students at a time doing curl-ups while other students are holding and counting. Stations rotation time would be 3 to 4 minutes.
- If in tournament play situation or team play, have an odd number of teams and have one rotation be to the curl-up station.

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Height & Weight

Objective: Students will measure their height and weight to determine their Body Mass Index (BMI) and monitor their growth.

Equipment: Weight Scale, Height Rod, Recording Sheet

Explanation:

Body composition is the combination of fat-free mass and fat mass. Fat-free mass is the combined weight of bones, muscles, organs, blood and water. Fat mass is the total weight of fat stored in the body. Having a healthy body is the correct balance of fat-free mass and fat mass. Measuring a person's height and weight will allow for monitoring the body's natural changes during growth, which in turn helps with understanding body composition.

Protocols:

1. Teacher will privately weigh and measure each student in a designated area.
2. Height is recorded to the nearest half inch.
3. Weight is rounded down to the nearest pound.
4. This is an opportune time to make positive comments about healthy eating choices and increased levels of activity.
5. Upon completion of the fitness measurement, students record their scores on the Five for Life Fitness Measurement Recording Sheet.

Management Ideas:

- Be sure to have a private place for students to measure height and weight. Have mats set up as a barrier, go into an office if available, have a line that students' can't cross while waiting.
- Have a volunteer or health worker administer by pulling students over during class in a private area.
- Have height marked on a wall or door jam – use a clipboard on the head for accurate measurement.
- Put into a circuit (make sure it is private).

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Pacer

Objective: Students will assess their cardiorespiratory endurance by completing the Pacer test to determine the health of the heart and lungs.

Equipment: 20 Meter Space, Pacer CD, Recording Sheets, Pencils, Measuring Tape, Cones

Explanation:

Cardiorespiratory endurance is the ability of the heart and lungs to supply oxygen to the body during long periods of physical activity. Like the engine of a car, the heart gives the body power to run long distances. Distance measurements such as the Pacer are used to determine the strength of the heart. Muscles demand oxygen to produce energy. The heart is the muscle that delivers oxygen to the rest of the body. During the Pacer, when a person slows down, it is because his/her muscles are not receiving enough oxygen from the heart. A stronger heart will allow a person to run faster for longer distances. When running the Pacer, it is important to run at a comfortable speed. This is called pacing.

Protocols:

1. Measure out a 20 meter course with lines at each end.
2. Lead students in a 2-3 minute warm-up followed by stretches.
3. Use explanation for ideas on how to motivate and explain purpose for running the Pacer.
4. Allow students to select a partner. Have students who are being assessed line up behind the start line. The other student stands off to the side of the 20 meter course. They will record their partners correct number of lines attained.
5. The Pacer CD will instruct the students when to run to the opposite side of the 20 meter course. If they arrive before the beep they must stop on the line and wait for the next beep before running in the opposite direction.
6. If a student is unable to make it to the line before the beep he/she is to immediately turn around and run in the opposite direction.
7. Each participant is allowed one time where he/she is unable to make it to a line. The second time he/she is unable to make it to a line, the measurement is over.
8. Have students walk 2-3 minutes as a cool-down technique and end with light stretching.
9. Upon completion of the fitness measurement, have student record his/her score on the Five for Life Fitness Measurements Recording Sheet

Management Ideas:

- Practice the Pacer measurement with students counting their own laps before administering the assessment so students can become familiar with the process.
- During the actual assessment, divide the class in half. One partner runs while the other partner counts the laps using a score sheet. Dividing the class by fitness

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level will make the process more efficient and motivational. The more fit students run together and lower fit students run together.

- As students finish have them move to the side of the testing area and continue walking until all students in their group have completed the Pacer.
- Encourage those who have finished the pacer to practice keeping pace, outside of the testing area, with the group still running the pacer. This allows students to get accustomed to the increasing pace of the measurement.
- Tell students that the starting line is always an even number and the opposite an odd.
- Mark the lines with a cone so students do not get confused by which line to run to.
- Have students set goals before each run.
- Run the Pacer throughout the term as a challenge, warm-up, practice, class average, goal checks and just for fun.

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Push-Ups

Objective: Students will assess their muscular strength by completing the push-up measurement.

Equipment: Recording Sheet, Pencil, Mats

Explanation:

The push-up is a measure of muscular strength. Muscular strength is the ability of a muscle or muscles to push or pull with its/their total force. This measurement is done by performing as many right angle Push-Ups as possible. By improving muscular strength, every physical activity becomes easier.

Protocols:

1. The student lies face down on the mat with thumbs touching shoulders and fingers pointing forward.
2. The legs are straight, parallel and feet slightly apart.
3. The toes should be rolled slightly under, to keep the body from sliding.
4. The student pushes up until his/her arms are fully extended, keeping knees, hips and shoulders in a straight line, head up and eyes looking forward.
5. On teacher's signal, "Ready, Go", the student begins.
6. The student lowers the body until there is a 90-degree angle at the elbows with the upper arms parallel to the floor.
7. Return to starting position, keeping knees, hips and shoulders in a straight line for the completion of one push-up.
8. The teacher will count each correct push-up.
9. Push-Ups should continue with a student's natural rhythm. If a student stops to rest for more than one second and breaks the rhythm, the measurement is complete. The measurement is also over if the student touches any part of his/her body on the floor.
10. If a student performs a push-up incorrectly (i.e., not reaching 90 degrees) the teacher allows the student to continue, but does not count the push-up.
11. Upon completion of the fitness measurement, have student record his/her score on the Five for Life Fitness Measurements Recording Sheet

Student Mistakes:

1. Not reaching a 90 degree bend at the elbow
2. Hands too wide or narrow
3. Incorrect toe position
4. Fingers not pointing forward
5. Knees, hips and back out of alignment

Management Ideas:

- The push-up assessment should be administered by the teacher or trained personnel due to protocol difficulty.

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- Put an object (e.g. pencil, poly spot) out in front of student to help keep neck straight.
- Kneel down next to and behind the students shoulder to determine if they are coming down to a 90 degree angle.
- Hold a pencil at the level of 90 degrees as a reference point during the push-ups
- Keep students feet away from the wall.
- Set up a fun circuit with four at a station. Have one station be the push-up station. The teacher stays at the station and assesses students one at time. Stations rotation time would be 5 to 6 minutes.
- If in tournament play situation or team play, have an odd number of teams and have one team rotate to the push-up station.
- Have students in participating in large group activity and call students over throughout the period until finished. Have three at the station at a time when one student gets finished send them out to get the next person and then join the large group activity.

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Sit and Reach

Objective: Students will assess their flexibility of the hamstrings and lower back by completing the sit and reach measurement.

Equipment: Sit and Reach Box, Clipboard, Pencil, Recording Sheet

Explanation:

Flexibility is the muscles' ability to move a joint through a full range of motion. It is important for many reasons, including good posture, reducing the risk of injury, and preventing tightening of the muscles. A common way to measure flexibility is the sit and reach measurement. This measurement is done using a box designed to determine how far the body will stretch forward at the waist, which measures the flexibility of the hamstrings and lower back.

Protocols:

1. Students remove shoes.
2. Sit down on the floor at the sit and reach box with knees fully extended.
3. Place feet shoulder width apart and flat against the end of the box.
4. Students place hand over hand, lining up middle fingers together, palms down and arms fully extended.
5. Students should inhale and exhale as they slowly push the bar as far forward as possible without bending their legs.
6. Place clipboard on student's knees. If clipboard moves, have student measure again.
7. After one practice reach, the second reach is held for three seconds while the distance is recorded to the nearest half inch.
8. Both middle fingers must remain in contact with the bar.
9. Upon completion of the fitness measurement, students record their scores on the Five for Life Fitness Measurement Recording Sheet.

Common Student Mistakes:

1. Bouncing
2. Flicking the bar
3. Bending the knees
4. Hands separating

Management Ideas:

- The sit and reach assessment should be administered by the teacher or trained personnel.
- Set a clipboard on the knees to indicate if the knees come up during the assessment.
- Two sit and reach boxes will increase the time needed for the assessment. One student will be performing the assessment while one will be getting ready at the second box.
- Have a warm-up and shoe on and off area.

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- Set up a fun circuit with four at a station. Have one station be the sit and reach station. The teacher stays at the station and assesses students one at time.
- If in tournament play situation or team play, have an odd number of teams and have one team rotate to the sit and reach station.
- Have students in participating in large group activity and call students over throughout the period until finished. Have three at the station at a time when one student gets finished send them out to get the next person and then join the large group activity.
- Remind students to exhale during stretch
- Post reminder signs of protocol and hints; hold stretch for three seconds, exhale during reach, finger tips even, one hand on top of the other, head down, knees down.....
- Administer a quality cardiorespiratory warm-up prior to sit and reach.