

# **Implementing Pedometers in your P.E. Program**

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## UNIT PLAN

Game: **Implementing Pedometers**

Grade Level: **2-8**

### Pre-requisite skills & knowledge:

(Describe students' prior experiences/exposure to skills and tactics related to this game.)

- NA

### Unit Objective(s):

- **Students will be able to measure their physical activity level using a pedometer.**

### Management Strategies:

**Awareness Talks:** At the beginning of year each class will receive an Awareness Talk, teaching the following levels:

**ZERO:** I did not respect the rights and feelings of others

**I:** I did not participate in all the activities today (but I did respect everyone's rights)

**II:** I participated in all the activities today (and respected everyone's rights)

**III:** I participated in everything and worked on my own (and respected everyone's rights)

**IV:** Besides doing all the other levels, I helped someone (or more than one person)

**V:** I did level IV, and I intend to try some things from the levels outside of class

**Individual Decision Making, "No Plan No Play":** When students have a conflict with others or do not respect the rights of others, I will assign them to sit on the talking step and develop a plan on how they can resolve the conflict.

**Group Decision Making, "NBA Time Out":** Students can call a time out if they think there needs to be conflict resolution.

**Group Meetings:** At the end of class have students gather in a circle and ask them what went right, what went wrong, and ways to improve the class. Teacher writes down improvements for the class and implements at the next class.

**During Class, "Counseling Time":** One to One check in, negotiations, personal plans, and trying to talk with each students as an individual.

**TAP IN TAP OUT:** When students come in they can tap in on what level will be their goal for the day and at the end of class you can ask students or have them tap out of the poster as they leave. Or it can be a thumb up, side ways, or down on the different levels.

## Block Plan

### Unit: Implementing Pedometers

Grade Level: 3-12

<p><b>Lesson #1 Focus:</b> Fundamentals in using pedometers</p> <p><b>Objective:</b> To instruct teachers how to deliver a physical education lesson to K-12 students on the fundamentals of using pedometers.</p> <p><b>Unit Introductions:</b> Lesson #2: Moving across America Lesson #3: Design a Route Lesson #4 Soccer Golf Lesson #5 Pedometer Scavenger Hunt Lesson #6 Develop a Personal Fitness Routine</p> <p><b>Warm-ups:</b> NA</p> <p><b>Activity Description:</b> 1) INTRODUCTION: (Assessment tool for physical activity) 2) Developing lesson plans 3) Developing routines for pedometer use 4) Check list</p> <p><b>Group Reflection:</b> Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.</p>	<p><b>Lesson #2 Focus:</b> Moving across America</p> <p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To instruct students the importance of physical activity.</li> <li>To allow students to record their total steps taken during physical education.</li> <li>To integrate physical activity into academic subjects, including social studies, math, and English.</li> </ol> <p><b>Warm-ups:</b> Physical Best, Flip Card File</p> <p><b>Activity Description:</b> While wearing pedometers and recording steps, students will learn how much activity they are accumulating during physical education by implementing Moving Across America. This will allow students to add their total steps and calculate the total number of miles walked.</p> <p><b>Group Reflection:</b> Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.</p>	<p><b>Lesson #3 Focus:</b> Design a Route</p> <p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To provide students with the opportunity to design walking/jogging routes on school grounds.</li> <li>To add variety to a walking/jogging lesson.</li> <li>To encourage students to cooperate with classmates.</li> </ol> <p><b>Warm-ups:</b> Physical Best, Muscle Magic</p> <p><b>Activity Description.</b> Given maps to students of the school area in groups of three will design a route and record the number of steps their selected routes.</p> <p><b>Group Reflection.</b> Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.</p>
<p><b>Lesson #4 focus</b> Soccer Golf</p> <p><b>Objective</b></p> <ol style="list-style-type: none"> <li>To learn the basic rules of golf.</li> <li>To play the game with an emphasis on step counts rather than soccer kicks.</li> </ol> <p><b>Warm-up:</b> Physical Best, Push-up-Curl-up Fun</p> <p><b>Activity Description:</b> Soccer balls are kicked rather than golf balls hit. Give the students maps of the course and start the students in groups of three at different holes to decrease the time spent waiting to tee off. Match winners can be based on highest individual step count, lowest, highest group test count and lowest. You also can adapt to Frisbee golf, throwing golf, and rolling golf.</p> <p><b>Group Reflection:</b> Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.</p>	<p><b>Lesson #5 focus</b> Pedometer Scavenger Hunt</p> <p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To provide students with a fun way to accumulate physical activity.</li> <li>To integrate other academic areas into physical education</li> </ol> <p><b>Warm-up:</b> Physical Best, Balancing the Body</p> <p><b>Activity Description:</b> Set up a course similar to an orienteering course. Place an envelope at each mark with an index card for each group. Adding clues to each card to the puzzle that must be answered. Students will visit all markers to solve the problem.</p> <p><b>Group Reflection:</b> Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.</p>	<p><b>Lesson #6 focus</b> Develop a Personal Fitness Routine</p> <p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To monitor the level of fitness activity for each student.</li> <li>To offer students a chance to control the number of steps they accumulate during fitness activities.</li> </ol> <p><b>Warm-up:</b> Physical Best, Measuring your heart rate.</p> <p><b>Activity Description:</b> Have students design a fitness routine that alternates aerobic exercises with strength and flexibility exercises. Challenge the students to accumulate a total of 1,200 steps and provide students will the choice of a variety of P.E. equipment.</p> <p><b>Group Reflection:</b> Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.</p>

**PHYSICAL EDUCATION  
LESSON PLAN**

**NAME:** \_\_\_\_\_

**TITLE: Fundamentals in using  
Pedometers**

**GRADE:** K-12

**DATE:** \_\_\_\_\_

**National Standards:** #3 Participates regularly in physical activity, #4 Achieves and maintains a health-enhancing level of physical fitness

Integration Area (s): Math and Writing

**Lesson:** 1 of 6

Equipment Needed/materials: Pedometers & Personal Fitness Books.

**Lesson/Procedures:**

- 1) **Objectives:** To instruct teachers how to deliver a physical education lesson to K-12 students on the fundamentals of using pedometers.
- 2) **Warm-up:**
  - a) Na
- 3) **Activity Description: (Assessment tool for physical activity)**
  - a) Electronic pedometers detect movement through a spring-loaded, counter balanced mechanism that records vertical acceleration at the hip. Compared with other currently used assessment tools, self-report questionnaires or diaries, pedometers are now an acceptable method of objectively measuring total daily step counts.
  - b) Pedometers measure the up-and-down motion of the hip in a vertical plane. Numerous studies have examined the validity of pedometers and have concluded that the device is a suitable tool for assessing the physical activity patterns of students.
  - c) A primary use of pedometers in physical education is to help students monitor their daily activity and set meaningful goals.
  - d) **When developing a lesson plan for introducing pedometers, do the following:**
    - i) Establish guidelines for use. Some students may shake the pedometer to artificially increase step counts. A consequence is needed to prevent this behavior. “You shake it, we take it” (i.e., loss of the privilege of using the pedometer) is an effective deterrent.
    - ii) Discuss how pedometers work, including why they are suitable for physical education. To hold the interest of the students, keep the introduction short, about 2 to 3 minutes. If necessary, break up a long discussion by allowing the students to try the pedometers and come back later for more instruction.
    - iii) After a brief discussion, distribute the pedometers to the class. Encourage the students, under supervision only, to satisfy their curiosity about the pedometers. Let the students open the devices, shake them, reset them, and listen to them.
    - iv) Teach students how to wear the pedometers. Pedometers are worn on the waistband directly above the knee. You should provide belts to students who wear dresses,

overalls, or other types of beltless garments. Nylon belts similar to the type used for flag football works very well and are easy to make.

- v) Once the students have the pedometers properly attached to their waists, have them walk inside the teaching area.
- vi) Finally, have the students engage in a few teacher-directed games while wearing the pedometers. While participating in activities, students periodically read the pedometers to determine their activity levels. Let the students know that their pedometer steps are private and personal, and they have no obligation to share their step counts with their peers.

#### 4) **Developing Routines for Pedometer Use**

- a) Assign each student a pedometer that has been labeled with an identifying number. Students use only their assigned pedometers during physical education class. Students in other PE classes are assigned these same pedometers.
- b) Keep a master list of which pedometer is assigned to which student.
- c) Designate a retrieval area for the pedometers. This can be on a stage around the perimeter of the teaching area, or in a storage device. Use the same area each lesson, and place the pedometers in the same sequence to expedite distribution and return.
- d) We suggest that one student is chosen as a team leader for each team and they are responsible for retrieving their team's pedometer case, belts, and personal fitness books and return back to their teams designated area to distribute the pedometers to their team. When the pedometers are distributed the pedometer box is returned to the retrieval area as soon as possible. During this time ensure that you remind the students to reset their pedometer to zero prior to starting their physical activity.
- e) At the conclusion of class instruct the team leaders and/or equipment managers to retrieve their team pedometer case and collect all the pedometers and return the case after their team records all pedometer information in their personal fitness books.
- f) ***Ensure that the "Fundamentals in Using Pedometers" checklist is discussed with all pedometer users.***

#### 5) **Group reflection:**

Ask students/teachers if they think the pedometers can be used in their school.

# Fundamentals in Using Pedometers

## Checklist

Ensure that the following bullets are discussed to all classes when introducing pedometers:

### Introducing Pedometers to a Class:

- Who has used pedometers prior to this session or implemented pedometers?
- Purpose: to increase physical activity levels.
- Pedometers are small devices that measure steps or physical activity.
- Divide participants up into groups of three
- Create team names, select pedometer numbers, 1 team leaders, and 2 equipment managers.
- Explain retrieval process with personal fitness books, belts, and pedometer cases.

### After Pedometers Have Been Given to Students

- Explain in detail the **terminology** of the pedometer and how you retrieve information.
  - Explain how you **open** the pedometer while it is on your body using the top clip.
  - Explain the **three modes** of the pedometer, 1. ex time 2. mile 3. Step
  - Reinforce that the students should never press the **Set** button in the middle. This will erase all programmed stride length for the pedometer.
  - Explain the holding the **yellow reset** button for 2-3 seconds will reset their pedometer to Zero.
- Under your supervision, allow students to **shake** the pedometers to observe the numbers increasing, and then reset the pedometer.
- Set the rule, “You shake it, I take it.” (Explain that shaking destroys the accuracy of pedometers.) Cheating.
- Demonstrate correct placement and allow students to practice putting the pedometers on. Attach the pedometer to your waistband or belt directly above the knee. Make sure it is closed.
- Discuss belts for students without waistbands.
- Have students reset the pedometers and walk in the teaching area, periodically checking the pedometers.
- Allow students to participate in teacher-directed activities while checking the pedometers from time to time.
- Assure students that step counts are private and do not have to be shared with classmates.
- Explain that the retrieval/return system will require several practice opportunities for children to become efficient with the routine.
- Reinforce the importance of honesty, respect, and cooperation when using pedometers. Remind students that using pedometers is a privilege that can be revoked for bad behavior.

**Sample Pedometer sign-out sheet**

SCHOOL \_\_\_\_\_ ROOM # \_\_\_\_\_

<b>Name</b>	<b>Pedometer #</b>

SCHOOL \_\_\_\_\_ ROOM # \_\_\_\_\_

<b>Name</b>	<b>Pedometer #</b>



**PHYSICAL EDUCATION  
LESSON PLAN**

**NAME:** \_\_\_\_\_

**TITLE: Moving across America**

**GRADE:** K-12

**DATE:** \_\_\_\_\_

Integration Area (s): Reading and Writing

**Lesson:** 2 of 6

Equipment Needed/materials: Pedometers & log sheets.

**Lesson/Procedures:**

**1) Objective:**

- a) To instruct students the importance of physical activity.
- b) To allow students to record their total steps taken during physical education.
- c) To integrate physical activity into academic subjects, including social studies, math, and English.

**2) Warm-up:** Physical Best, Flip Card File

**3) Activity Description:**

- a) Explain to the class that they will track their progress across the designed area, and you will track the class' progress across the United States.
- b) Give the students a map of a smaller area (city or county) on which to track their progress. A mileage scale should be shown on the map. Predrawn routes with the corresponding distances labeled on the map may be useful (e.g., routes from cities to landmarks or from city to city).
- c) Allow the students to wear pedometers and record their steps and mile counts in P.E. class.
- d) Allow the students to track their progress on their maps using predetermined routes or routes of their choice.
- e) Calculate and chart the total miles for each class on the large map of the United States.

**4) Classroom Integration:**

- a) As classes progress to different regions or states, the PE teacher or classroom teacher asks the students to find some unique geographic characteristics of the state or region. To learn directions, students determine what is north, south, east, or west of their current location.
- b) An imaginary trip around the U.S. through the use of P.E. central **Log It** can be used throughout the entire school year. This also can be done by using the classroom teachers yearly plan for history by establishing routes around these lessons.
- c) Teach developmentally appropriate rhythm routines using music from different regions or states.
- d) Art class activities can be coordinated with pedometer use. Have students make posters or other projects that advocate physical activity or a healthy lifestyle in the region they are currently visiting and use those posters to decorate the gym or school.

**5) Group Reflection:**

Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.

**PHYSICAL EDUCATION  
LESSON PLAN**

**NAME:** \_\_\_\_\_

**TITLE:** Design a Route

**GRADE:** K-12

**DATE:** \_\_\_\_\_

Integration Area (s): Reading and Writing

**Lesson:** 3 of 6

Equipment Needed/materials: Pedometers, log sheets, and maps.

**Lesson/Procedures:**

**1) Objective:**

- a. To provide students with the opportunity to design walking/jogging routes on school grounds.
- b. To add variety to a walking/jogging lesson.
- c. To encourage students to cooperate with classmates.

**2) Warm-ups:**

Physical Best, Muscle Magic

**3) Activity Description:**

- a) Draw maps of the school area and mark locations that are off-limits.
- b) At the beginning of the lesson, discuss the importance of walking/jogging in promoting health and fitness. Explain the importance of pace and walking with a friend. Discuss safety issues such as avoiding high-traffic streets, not talking to strangers, and walking where other students and parents walk.
- c) Organize the students into groups of three or four. Ask each student to wear a pedometer.
- d) Give each group a map of the school grounds.
- e) Record the number of steps the students needed to walk their selected routes. Calculate the total score by adding the scores of all students in the group. Mark the legend for the map in steps.

**4) Variations:**

- a) Allow groups to switch maps and walk other routes.
- b) Ask students to guess how many steps the route will require before they start the walk.
- c) Let the students use routes from other classes and see if their group has the same number of steps. Discuss why or why not?

**5) Group Reflection.**

Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.

**PHYSICAL EDUCATION  
LESSON PLAN**

**NAME:** \_\_\_\_\_

**TITLE: Soccer Golf**

**GRADE:** K-12

**DATE:** \_\_\_\_\_

Integration Area (s): Reading and Writing

**Lesson:** 4 of 6

Equipment Needed/materials: Pedometers, log sheets, cones/markers, and soccer balls.

**Lesson/Procedures:**

**1) Objective**

- a. To learn the basic rules of golf.
- b. To play the game with an emphasis on step counts rather than soccer kicks.

**2) Warm-up:**

Physical Best, Push-up-Curl-up Fun

**3) Activity Description:**

- a) Teach the students the rules of soccer golf. Post a rules sign and course map at teach tee box.
- b) Boundary cones with numbers are used for tees, and holes are marked with boxes, hula hoops, trees, tires, trash cans, or any other available equipment on the school grounds. Areas around swings and slides can be designated bunkers or out of bounds.
- c) Draw a course map and provide a copy for every three or four students.
- d) Start the groups at different holes to decrease the time spent waiting to tee off. Once a course is established, laminating the maps increases their longevity. Over time, several courses can be created and alternated.
- e) Explain the basics of soccer golf to the students: "Every kick counts as a stroke and the object is to get all the way around the course with as few strokes as possible." Keep the game simple by making hazards count as one stroke.
- f) Discuss golf etiquette with the students, including "playing through" and waiting for a group to putt out.
- g) Give each student a pedometer and a soccer ball. As the students play the course, give feedback and randomly check step counts.
- h) Determine match winners based on the following:
  - i) Highest individual step count
  - ii) Lowest individual step count (it can be argued that the person who completes the course with the fewest kicks will also take the fewest steps.)
  - iii) Highest group step count.
  - iv) Lowest group step count.

**4) Group Reflection:**

Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.

## 5) Soccer Golf Rules

Soccer golf is played like regular golf. One stroke is counted each time the ball is kicked or when a penalty is incurred. The object of the game is to acquire the lowest score. The following rules dictate play.

- Tee kicks: Tee kicks must be completed within or behind the designated tee area.
- Lie: The lie is the spot on or directly underneath the spot where the previous kicked stopped.
- Kicking order: The player whose ball is the farthest from the hole kicks first. The player with the least number of kicks on the previous hole tees off first.
- Fairway kicks: Fairway kicks must be made with the foot closest to the hole on the lie. A run-up is allowed.
- Dogleg: A dogleg is one or more designated trees or poles in the fairway that must be passed on the outside when approaching the hole.
- Putt kick: A putt kick is any kick within 10 feet of the hole. A player may not move past the point of the lie in making the putt kick. Falling or jumping putts are not allowed.
- Unplayable lies: Any ball that comes to rest 6 feet or more above the ground is unplayable. The next kick must be played from a new lie directly underneath the unplayable lie (one-stroke penalty).
- Out of bounds: A kick that lands out of bounds must be played from the point at which the ball went out (one-stroke penalty).
- Course courtesy: Do not kick until the players ahead are out of range.
- Completion of hole: A ball coming to rest in the hole (box or hoop) or striking the designated hole (tree or pole) constitutes successful completion of that hole.



**PHYSICAL EDUCATION  
LESSON PLAN**

**NAME:** \_\_\_\_\_

**TITLE:** Pedometer Scavenger Hunt

**GRADE:** K-12

**DATE:** \_\_\_\_\_

Integration Area (s): Reading and Writing

**Lesson:** 5 of 6

Equipment Needed/materials: Pedometers, log sheets, index cards, and cones/markers.

**Lesson/Procedures:**

**1) Objective:**

- a. To provide students with a fun way to accumulate physical activity.
- b. To integrate other academic areas into physical education

**2) Warm-up:** Physical Best, Balancing the Body

**3) Activity Description:**

- a) Set up a course similar to an orienteering course.
- b) Place an envelope at each marker with an index card for each group (laminating these cards will improve their longevity). Provide a landmark, direction, and distance on each index card, but add a clue to a puzzle that must be solved. This puzzle can be a word, a picture, or a statement, depending on the age level of the students. For example, if eight markers are used, each card could contain two of the following letters PH, YS, IC, AL, AC, TI, VI, and T'I Once all markers have been visited, the students would have eight cards that must be unscrambled to spell PHYSICAL ACTMTY.

**4) Variations:**

- a) To add difficulty, scramble the letters (e.g., PY, IC, AL, TV, II, SH, AY, TC). In this variation, the two letters on the card do not necessarily go side by side in the solution PHYSICAL ACTMTY.
- b) Cut pictures into eight pieces and paste the pieces on index cards to create a puzzle.
- c) Create a puzzle with a physical activity theme to reinforce the concept of lifestyle activity. The puzzle can also integrate other subject areas into physical education. The following ideas for integration could be considered when developing clues and puzzles.

**5) Classroom Integration:**

- a) Class spelling words for the week
- b) Characteristics of a country, state, or city the class has studied
- c) Numbers and math symbols that make a math problem
- d) Pictures of coins (or fake coins) that must be added to determine a total
- e) Words that describe a specific animal
- f) Descriptions of books the class has read
- g) Pictures of national monuments or landmarks that have been cut into puzzle pieces

**6) Group Reflection:**

Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.

**PHYSICAL EDUCATION  
LESSON PLAN**

**NAME:** \_\_\_\_\_

**TITLE: Develop a Personal Fitness Routine**

**GRADE:** K-12

**DATE:** \_\_\_\_\_

Integration Area (s): Reading and Writing

**Lesson:** 6 of 6

Equipment Needed/materials: Pedometers, log sheets, index cards, and cones/markers.

**Lesson/Procedures:**

**1) Objective:**

- a) To monitor the level of fitness activity for each student.
- b) To offer students a chance to control the number of steps they accumulate during fitness activities.

**2) Warm-up:** Physical Best, Measuring your heart rate.

**3) Activity Description:**

- a) Design a fitness routine that alternates aerobic exercises with strength and flexibility exercises.
- b) Ask the students to find a workout partner and give each team the following challenge: Accumulate a total of 1,200 steps. While one person does a strength or flexibility exercise, the other person does aerobic walking, running in place, or any other form of aerobic exercise for 30 to 60 seconds.
- c) Have the students switch exercise roles after 30 to 60 seconds and continue until the 1,200 steps are accumulated.
- d) Provide the students with various types of PE equipment to assist them with designing their routines.

The goal is to teach students to work together while learning that fitness is personal. In some pairs, one partner may accumulate 700 steps, whereas the other accumulates 500 steps. Teach them to record the steps performed during each interval and to total the number of accumulated steps.

This lesson may have to be modified for younger elementary school students.

**4) Group Reflection:**

Ask the students how they did today with their responsibility levels and evaluate how they liked the lesson.