

LESSON 2: WALKING PACE

Grade-Level Outcomes

Primary Outcome

Fitness activities: Demonstrates competency in 1 or more specialized skills in health-related fitness activities. (S1.H3.L1)

Embedded Outcome

Fitness knowledge: Identifies types of strength exercises (isometric, concentric, eccentric) and stretching exercises (static, proprioceptive neuromuscular facilitation [PNF], dynamic) for personal fitness development (e.g., strength, endurance, range of motion). (S3.H9.L1)

Lesson Objectives

The learner will:

- perform good walking technique at different paces.
- estimate step counts for particular paces (17-minute mile, 15-minute mile, 13-minute mile).
- evaluate the effects of different walking paces on step counts.

Equipment and Materials

- Pedometers (1 per student)
- Task sheets (1 per student)
- Stopwatch

Introduction

We will continue our walking unit today. First, let's review: What are some of the health benefits of walking? Describe correct walking technique. About how many steps did you take in a mile? Approximately how many miles would you walk in 10,000 steps? From your homework, can you tell me why 10,000 steps is considered a good daily goal? Today, you will see how different walking paces can affect your step count. In following lessons we will discuss pace relative to heart rate to maximize the health benefits of walking at a moderate pace.

Instructional Task:

Warm-Up (Slow, Medium, and Fast Pace)

Note: If pedometers are not available, you can tie walking directly to heart rate and design the unit to work on keeping within a moderate target heart rate zone (50 percent to 70 percent). This lesson demonstrates how pace affects heart rate.

■ PRACTICE TASK

Students put on their pedometers and reset them to zero. When the music begins, they walk at a slow pace for 60 seconds using correct walking technique. When the music pauses, they stop, look at the step count, and reset. When the slightly faster music begins, students walk around at a moderate pace for 60 seconds. When the music pauses, they look at their pedometers and reset. When fast-beat music begins, students walk at their fastest power-walk speed for 60 seconds, then stop, check step count, and reset.

Repeat one or two times.

Preparation Phase

- Stand tall (head to ankle alignment).
- Pull shoulders back.
- Tighten abdominal muscles.

Execution

- Step forward.
- Heel strikes first (45 degrees).
- Toe pushes off.

Follow-Through

- Swing arms in opposition to legs.

Extension

Repeat with different movements (e.g., lunges, butt kickers, carioca).

Guiding questions for students:

- Did you notice what happens to your heart rate when you power-walk or when you pick up the pace?
- Why does this matter?
- Did your step count or heart rate change doing different movements? How?

Refinement

Watch for changes in walking technique. Remind students to pick up the pace but keep proper technique.

Extensions

- Students walk with a partner and compare their steps with each other at different paces.
- Alter the walking direction or the time.
- Have students do each pace for a particular distance (e.g., 20 yards or meters).
- Change to slow-, moderate-, and fast-paced intervals for 2 minutes each. Repeat two times, and have students look at differences in step count for each 2-minute interval.

Student Choices/Differentiation

Students may choose to use poles (Nordic walking) or walking stick.

What to Look For

- Students are using good walking technique at all three paces.
- Students have their pedometers on appropriately and are resetting and closing them properly.

Instructional Task: Lap Pacing

■ PRACTICE TASK

Students walk laps at different paces and record their step counts after each lap.

- For the first lap, students walk a 17-minute-mile pace.
- Students walk a second lap at a 15-minute-mile pace.
- Students walk the third lap at a 13-minute-mile pace.
- For the fourth lap, students may choose any pace and record both lap time and step count.

At the end, students calculate their estimated steps for a mile at each pace. See the task sheet.

Guiding questions for students:

- How did each pace feel?
- What did your heart rate feel like at each pace?
- If you wanted to get more benefit from walking and still enjoy it, what pace do you think would be most beneficial for you?

Student Choices/Differentiation

- Students may choose lap paces.
- Students may walk one lap very slowly, one lap at a typical pace, and one lap at a very fast pace and time each, and then estimate mile times and steps from each lap's pace.

What to Look For

- Students can pace themselves while walking.
- Students can estimate their steps for a mile at each pace based on one-lap step counts.
- Students can describe what happens to their step counts at different paces and why.
- Students can describe what happens to their heart rates at different walking paces.

Instructional Task: Cool-Down Stretches

■ PRACTICE TASK

Cooling down and stretching are important after walking. Have students put their pedometers away and come together as a class for a flexibility cool-down routine. Students hold each stretch for 15 to 20 seconds on both sides of the body.

- Calf stretch
- Achilles stretch
- Hamstring stretch
- Glute stretch
- Shoulder stretch
- Chest stretch
- Triceps stretch

EMBEDDED OUTCOME: S3.H9.L1. While stretching, students identify the types of stretching they are doing and what the purpose is.

Guiding questions for students?

- Why is flexibility important?
- Why is it good to stretch after walking?

Student Choices/Differentiation

Students may stretch on their own or with a partner (upper and lower body).

What to Look For

- Students can perform the flexibility routine with correct form and technique.
 - Students can discuss why stretching after physical activity is important.
-

Formal and Informal Assessments

Exit slip: Describe three ways to incorporate more stretching into your everyday life.

Closure

- Today, we looked at how pacing can affect step count. What happened to your step count as your pace increased?
- How did the walking pace affect your heart rate? Why does this matter?
- How can you include more walking in your daily routine?
- How might wearing a pedometer affect your walking behavior?

Reflection

- Could students adequately pace?
- Could students estimate their steps per mile?
- Should I add heart rate and calculating target heart rate in our next class?

Homework

- Think about all the walking you do. How many steps do you believe you take throughout the day?
- By next class, log your total steps for one day.

Resources

Darst, P.W. & Pangrazi, R.P. (2009). *Lesson plans: Dynamic physical education for secondary school students*. 6th ed. San Francisco: Pearson Benjamin Cummings.

Pangrazi, R.P., Beighle, A., & Sidman, C.L. (2007). *Pedometer power: Using pedometers in school and community*. 2nd ed. Champaign, IL: Human Kinetics.

PACING TASK SHEET

Estimated 17-minute-mile step count: _____

Lap 1: 17-minute-mile step count _____

Estimated 15-minute-mile step count: _____

Lap 2: 15-minute-mile step count _____

Estimated 13-minute-mile step count: _____

Lap 3: 13-minute-mile step count _____

Lap 4: your choice. Lap time _____ Step count _____

Estimated mile step count at this pace _____

Total steps taken today in class: _____

What pace did you prefer? Why? _____

What happened to your step count when your pace increased? Did it change? How? Why do you think that is? Explain. _____

