

## LESSON 4: INTENSITY AND TRAINING FOR A 5K, DAY 3

### Grade-Level Outcomes

#### Primary Outcomes

**Fitness knowledge:** Identifies each of the components of the overload principle (FITT formula: frequency, intensity, time, type) for different types of physical activity (aerobic, muscular fitness and flexibility). (S3.M11.6)

**Fitness knowledge:** Employs correct techniques and methods of stretching. (S3.M9.6)

#### Embedded Outcomes

**Working with others:** Accepts differences among classmates in physical development, maturation and varying skill levels by providing encouragement and positive feedback. (S4.M4.6)

**Engages in physical activity:** Participates in self-selected physical activity outside of physical education class. (S3.M2.6)

### Lesson Objectives

The learner will:

- continue her experience of the progressive overload principle through a walk/run progression.
- discuss and list benefits of being physically active.
- discuss intensity and why it is important in a workout.
- perform correct stretching techniques after participating in a walk/run progression.

### Equipment and Materials

- Stopwatches (1 per group of 4 or 5 students)
- Whiteboard easel on casters
- Index cards
- Pencils
- Pedometers
- Beginner's 5K Training Schedule, 1 copy per group of 4 or 5 students (see lesson 2)

### Introduction

*Today, we will continue our walk/run progression so you can continue to experience the progressive overload principle. Today's major topic is intensity and where we find intensity in our walk/jog progression.*

## Instructional Task: Warm-Up

### ■ PRACTICE TASK

Have students complete a brisk 5-minute walk in small groups of four or five, with one person in each group keeping time.

Have students again discuss the benefits of being physically active.

#### Guiding questions for students:

- Did your discussions change after using the provided index cards in the last lesson? In what ways?
- Did knowing the additional benefits of physical activity motivate you to walk a little faster today?
- If you were going to explain the benefits to a sibling or parent, what would you say?

## Student Choices/Differentiation

Students can use a running program they have downloaded to their smartphones.

## What to Look For

- Students are walking briskly enough to elevate heart rate.
- Students' discussion of the benefits of physical activity is more sophisticated.
- Group leaders are precisely timing the 5-minute warm-up.

## Instructional Task: Training (Week 1, Workout 3)

### ■ PRACTICE TASK

Provide some or all students with pedometers depending on class size and available equipment.

Have students alternate 60 seconds of jogging and 90 seconds of walking for a total of 20 minutes.

Leaders in each small group time the 60- and 90-second intervals; you keep track of the 20-minute duration.

Have students keep track of the distance traveled during the 20-minute walk/jog (e.g., How many laps did they cover during that time? How many steps?).

## Refinement

*Students should focus on a relaxed arm swing while running.*

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**EMBEDDED OUTCOME: S4.M4.6.** Discuss with students that not all classmates perform at the same fitness level as themselves. Teach students how to accept differences among classmates and to provide encouragement and positive feedback.

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## Student Choices/Differentiation

Students can choose to run with a peer with the same running ability.

Note: You can modify the Beginner's 5K Training Schedule to fit various school and class schedules (e.g., block schedule, shorter or longer class periods).

## What to Look For

- Students are alternating the 60 seconds of jogging with 90 seconds of walking.
- Students are keeping track of distance traveled (e.g., laps around the school, field, track).

## Instructional Task: Review of Training Program

### ■ PRACTICE TASK

Define *progressive overload*, *frequency*, and *intensity* on the portable whiteboard.

Ask students how far they traveled today during the 20-minute walk/jog.

*In week 2 of our walk/jog training program, we will step it up to 90 seconds of jogging and 2 minutes of walking for a total of 20 minutes. This week, we alternated 60 seconds of jogging with 90 seconds of walking.*

## Guiding questions for students:

- Form a hypothesis about the distance you will travel next week. If we increase the amount of running to 90 seconds rather than 60 seconds and increase the walking to 2 minutes rather than 90 seconds, what do you think your distance traveled might be?
- If you see an increase in the distance traveled, does this tell you something about the intensity of your workout?

## Extension

Provide the following example: A group of students were able to perform two to four Fitnessgram push-ups at the beginning of the school year. As a result, the teacher suggested that these students perform 10 modified push-ups with the rest of the class, who were performing 10 traditional push-ups for a few weeks as part of their physical education class. After a few weeks, the teacher suggested that the first group of students attempt 10 traditional push-ups for training.

## Guiding questions for students:

- What component of the overload principle is this?
- How did you come up with that answer?

## Student Choices/Differentiation

- Provide videos or handouts for lower-skilled students.
- More advanced students can draw a visual representation (graph) of what the training program will look like over a span of weeks in addition to identifying *intensity* as the answer.

## What to Look For

- Students recognize that, with an increase in running time, they should see an increase in the distance traveled even though they are increasing the walking time, as well.
- Students recognize that if they don't see an increase in the distance traveled next week, they are likely to see an increase the following week because the progression continues.

## Instructional Task: Stretching

### ■ PRACTICE TASK

Demonstrate for students the proper way to stretch the major muscles of the legs after walking and jogging.

Have students perform these stretches while you provide feedback.

On the whiteboard, write *contract-relax-antagonist-contract* (CRAC) and the definition for *PNF* (proprioceptive neuromuscular facilitation).

Explain what PNF is and how the CRAC sequence works for PNF.

Demonstrate how they can do this individually or in pairs.

## Extensions

- Depending on class time, conduct a more in-depth discussion of how PNF stretching works.
- Have students stretch the same muscle or muscle group multiple times. Ask if they see an improvement in the range of motion each time.

## Student Choices/Differentiation

- Students can perform PNF stretching in pairs or individually.
- Student volunteers can lead small groups of students.

## What to Look For

- Students are holding the stretch long enough to make improvements in range of motion or to maintain range of motion.
- Students are following the sequence for PNF stretching.

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## Formal and Informal Assessments

- Index cards (identifying *intensity* as the component of overload being manipulated)
- Informal assessment on stretching
- Exit slip: What is the difference between PNF and static stretching?

## Closure

- Have the walk/jog groups share something new that they learned today.
- How does PNF compare to static stretching?
- Explain in your own words how progressive overload works.

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**EMBEDDED OUTCOME: S3.M2.6.** *To increase overall fitness, try to participate in at least one physical activity outside of physical education class.*

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## Journal assignment:

- How do you plan to use intensity to achieve your goal?
- Do you find stretching to be enjoyable or not? Why?

## Reflection

- Are students interested in this new concept of PNF stretching?
- Do students seem to understand that as the distance increases in the 20-minute walk/jog, the intensity of the workout has also increased?

## Homework

*Demonstrate for you parent or guardian how PNF stretching works. Make sure everyone's muscles are warmed up before doing this.*

*Participate in physical activity outside of class, and record the activity and how long you participated in your physical activity log.*

*Finish your journal assignment.*

## Resources

Corbin, C.B., & Lindsay, R. (2007). *Fitness for life*. Updated 5th ed. Champaign, IL: Human Kinetics.

Couch to 5K® Running Program: [www.coolrunning.com](http://www.coolrunning.com)

Internet keyword search: "5K running plans"