

## LESSON 4: WARM-UP AND COOL-DOWN

### Grade-Level Outcomes

#### Primary Outcomes

**Fitness knowledge:** Describes the role of warm-ups and cool-downs before and after physical activity. (S3.M12.6)

**Fitness knowledge:** Describes the role of flexibility in injury prevention. (S3.M10.8)

#### Embedded Outcome

**Self-expression & enjoyment:** Identifies why self-selected physical activities create enjoyment. (S5.M4.7)

### Lesson Objectives

The learner will:

- list the distances run during a track meet and select races to run.
- demonstrate proper warm-up and cool-down techniques before and after running.
- describe why dynamic warm-ups (before activity) and static stretches (after activity) are helpful and important.
- identify the role of flexibility in preventing injury.

### Equipment and Materials

- A space to run the selected distances and warm up
- Stopwatch

### Introduction

*Does anyone want to share what mechanical advantages for the high jump he or she observed for homework? Can anyone apply these advantages to other sports?*

*Today, we will learn the importance of warming up and cooling down before and after competition.*

Discuss with students the distances in a track meet and the races that they will be able to compete in during class. Discuss why it is important to warm up and how performing dynamic stretching will help your muscles compete at their best level and prevent injury. Show and explain the warm-ups and dynamic stretches that students should perform before they compete.

## Instructional Task: Warming Up

### ■ PRACTICE TASK

Have students warm up and complete dynamic stretches of the muscle groups that they will be using, explaining how that will help prevent injuries.

The warm-up and dynamic stretching should prepare the muscle groups that students will use while running and jumping.

#### Extensions

- Explain what each warm-up drill or dynamic stretch is doing for each muscle group.
- Discuss why warm-ups and dynamic stretching play an important role in preparing to be active.
- For students who know the muscle grouping names, challenge them to learn the muscles of each group (e.g., hamstring muscles include the semimembranosus, semitendinosus, and biceps femoris).
- Repeat for each muscle group.

## Guiding questions for students:

- Why are the following stretches important?
- What is the difference between a dynamic stretch and a static stretch?
- What are two ways to stretch your hamstrings, quads, and calves?

## Student Choices/Differentiation

- The warm-up should be based on each student's endurance and ability.
- Provide more than one way to stretch each muscle group.

## What to Look For

- Are students completing the dynamic warm-up and doing the warm-up with correct form?
- Do students know the muscle groups and what muscle groups are being stretched?

## Instructional Task: Race Selections

### ■ PRACTICE TASK

Discuss how to race each distance, focusing on pacing, form, and breathing to help students finish.

## Guiding questions for students:

- Why is it important to pace yourself?
- In what ways will proper form help?

## Extension

Set predetermined distances at 100, 200, 400, and 800 meters, and students select races they would like to compete in.

## Guiding questions for students:

- Why did you select the running events you did?
- Did you enjoy the events or do you wish that you would have picked a different one? Why or why not?

## Student Choices/Differentiation

- While practice races are occurring, students are continuing to warm up and perform dynamic stretches.
- Students moderate their speed to get a feel for the length and pacing of the events.

## What to Look For

- Are students selecting race distances they are successful at in order to connect it to the embedded objective?
- Are students standing around and talking or continuing to warm up and perform dynamic stretches?

## Instructional Task: Cooling Down

### ■ PRACTICE TASK

After the races, students jog and walk a determined distance or time and then perform static stretches, discussing what muscle groups each stretch is working on.

## Guiding questions for students:

- What muscle groups are being stretched?
- What stretches stretch each muscle group?
- How does static stretching help prevent injury?
- How does static stretching help the muscles after competing or working out?

## Extension

Peer assessment: Ask students to demonstrate a static stretch for a specific muscle group and explain what muscles are being stretched.

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**EMBEDDED OUTCOME: S5.M4.7.** During the cool-down period, have students discuss why self-selected physical activities create enjoyment in one's life.

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## Student Choices/Differentiation

- Ask students if there is an area they would like to stretch more, or show specific stretches for individual students if they feel tight in an area.
- Provide modifications to stretches, if needed.

## What to Look For

- Do students know what stretches stretch the different parts of the body and muscle groups?
  - Do students know the names of the muscle groups?
  - Are students tight and need more time stretching those muscle groups?
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## Formal and Informal Assessments

- Peer assessment: Using a checklist, students peer-assess classmates' cool-down stretches, looking for correct form and technique.
- Exit slips:
  - Rules for relay races
  - What role does flexibility have in injury prevention?

## Closure

- Why is it important to warm up and perform dynamic stretching before being active and static stretching afterward?
- What is the difference between static and dynamic stretches?
- Why are they both important?
- Why is it important to participate in activities that you like?

## Reflection

- How did the races go?
- Did students pace themselves?
- Do students know different types of stretches and the muscle groups that they are stretching?

## Homework

Using a handout on stretches and dynamic warm-up activities, have students stretch specific muscle groups and complete the dynamic warm-up on their own before the next class.

## Resources

American Sport Education Program. (2008). *Coaching youth track and field*. Champaign, IL: Human Kinetics.

Dougherty, N.J. (Ed.) (2010). *Physical activity & sport for the secondary school student*. 6th ed. Reston, VA: National Association for Sport and Physical Education.

Internet keyword search: "dynamic stretching," "static stretching," "dynamic warm-ups"