

## LESSON 12: SPEED AND AGILITY TRAINING

### Grade-Level Outcomes

#### Primary Outcomes

**Assessment & program planning:** Analyzes the components of skill-related fitness in relation to life and career goals, and designs an appropriate fitness program for those goals. (S3.H12.L2)

**Movement concepts, principles & knowledge:** Uses movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a selected skill. (S2.H2.L1)

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

**Fitness knowledge:** Demonstrates appropriate technique on resistance-training machines and with free weights. (S3.H7.L1)

**Safety:** Applies best practices for participating safely in physical activity, exercise and dance (e.g., injury prevention, proper alignment, hydration, use of equipment, implementation of rules, sun protection). (S4.H5.L1)

#### Embedded Outcome

**Fitness knowledge:** Calculates target heart rate and applies that information to personal fitness plan. (S3.H10.L1)

### Lesson Objectives

The learner will:

- discuss sport science principles of force, motion, angles, and rotation as they relate to improved performance on skills tests.
- analyze components of fitness as they relate to career goals and identify the appropriate testing activities relevant to their development.
- demonstrate appropriate testing format and skill technique in a variety of fitness tests.
- implement a total-body workout program with a partner that includes a warm-up, testing, a workout, and a cool-down that covers total-body exercises.
- practice speed and agility training exercises safely.
- practice upper-body resistance-training exercises.

### Equipment and Materials

- Speed ladder
- Floor dots
- Floor tape
- Stopwatches
- Chalk
- Speed and agility worksheets

### Introduction

*For homework, you analyzed the skill-related fitness demands of a possible career or lifestyle activity. I want you to keep these demands in mind as you learn about speed and agility. The process will be a little different in that once we discuss the terms, you will practice several drills and then perform testing on each other. By the end of this module, you will develop a skill-related fitness plan, and these tests will help you understand your baseline for the plan.*

## **Instructional Task: Discussion on Skill-Related Fitness Components**

### ■ PRACTICE TASK

Lead a discussion on the components of skill-related fitness and how they differ from health-related fitness components.

#### **Guiding questions for students:**

- What is the difference between speed and quickness?
- Can you think of some examples of a test for speed?
- How does that differ from a test for agility?
- How are agility and balance related?

#### **Extension**

The discussion can move into the benefits of improvement in the skill-related fitness components for sports and careers.

#### **Student Choices/Differentiation**

Provide pictures and videos to reinforce content.

#### **What to Look For**

Students can identify the differences between the terms and meanings.

## **Instructional Task: Research and Practice**

### ■ PRACTICE TASK

Have students use the Internet to research activities that measure and develop speed and agility. Students then use the speed and agility worksheet to identify at least one simple field test for each of the components.

#### **Extensions**

- For each skill, identify at least three practice activities that can be used to enhance the skill.
- Research tests for other components of skill-related fitness (i.e., balance, coordination, reaction time, power).

#### **Student Choices/Differentiation**

- Students choose which activities to list.
- Experienced students can list practice activities.

#### **What to Look For**

- Listed activities are appropriate for each component.
- All students are engaged.

## **Instructional Task: Evaluation and Testing**

### ■ PRACTICE TASK

Establish testing stations for speed and agility. Have students pair up, and hand out a data collection sheet. Students complete their dynamic warm-ups before testing.

Partners alternate performing the skill test at each station and recording the data for each other.

## Extensions

- Students can attempt multiple test variations for each component.
- Students can set up tests for other skill-related fitness components.

## Refinements

- Remind students to follow the directions for each test as consistently as possible. If initial scores are outside the prescribed parameters, then have students review the steps involved and look for errors.
- Encourage students to use as few movements as possible when changing directions. The fewer times their feet touch the ground, the faster their movements will be, enhancing their test scores.

**EMBEDDED OUTCOME: S3.H10.L1.** Have students take their heart rates before the test, immediately after the test, and 1 minute later to see which zone they are in immediately after the test and how quickly they recover.

## Student Choices/Differentiation

Students choose which specific test to perform for each component.

## What to Look For

- Students are practicing the skills tests before being tested.
- Students are performing the tests accurately.
- Students are performing the activities with good form and alignment.
- When counting the pulse using the carotid method, students' hands are not around the esophagus.
- When counting the pulse using the radial method, students are not pressing into the wrist with the thumb.

# Instructional Task: Practicing the Workout Plans

## ■ PRACTICE TASK

Since students have been practicing speed and agility exercises with the lower body, have them focus on the upper-body elements of their workout programs. Partners act as spotters.

After the workout, students cool down with their static stretching routines.

## Refinement

As students are doing their plans, observe their technique. Provide corrective feedback on alignment and form.

## Student Choices/Differentiation

- Students choose their partners.
- Students work at their own pace.

## What to Look For

- Students are engaged in the workout.
- Technique for each exercise is correct.
- Spotters are communicating and attentive.

## Formal and Informal Assessments

Speed and agility testing scores

## Closure

- Although the development of speed and agility will not always be necessary for every person in the room, both components can enhance your fitness for a variety of activities. Speed and agility may be necessary for some jobs, many recreational activities, and other lifetime actions.
- As with weight resistance, once you stop training for speed and agility you may lose some of your gains, but knowing how to self-test and assess your status, you will be able to create a program to add to your health-related fitness concepts.

## Reflection

- Could students verbalize ideas of how they can use these specific training activities for their non-sport life?
- Were they performing the activities with good technique?
- Were they getting enough practice opportunities to perform well?

## Homework

- Write a brief paragraph reflecting on your performances in speed and agility testing. How do you think you did? What did you learn about your own abilities? What can you do to enhance any of the scores where you weren't as successful?
- Continue to log your physical activity outside of class, and perform your at-home resistance-training program before the next class.

## Resources

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

Topend Sports: [www.topendsports.com](http://www.topendsports.com)

TeachPE: [www.teachpe.com](http://www.teachpe.com)

Internet keyword search: "skill-related fitness testing," "skill testing"