

LESSON 6: UPPER-BODY MACHINES

Grade-Level Outcomes

Primary Outcomes

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)

Fitness knowledge: Designs and implements a strength and conditioning program that develops balance of opposing muscle groups (agonist/antagonist) and supports a healthy, active lifestyle. (S3.H7.L2)

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

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)

Lesson Objectives

The learner will:

- demonstrate proper form and technique for two different machines for the upper body.
- teach an upper-body machine exercise to a partner and evaluate the partner's movement after practice.
- calculate the 10-rep-max weight a peer should use.
- identify upper-body exercises in agonist/antagonist pairings.

Equipment and Materials

- Upper-body exercise machines (identified by name)
- Peer assessment grading form and rubrics
- 10-rep-max progression worksheets
- Upper-body workout plan templates
- Lifting straps
- Lifting belts

Introduction

Before we start on today's assignment, turn in your workout logs from the lower-body machines workout. For today's activity, I will go over each of the machines for the upper body, providing directions on how to adjust the machines, giving cues for performing the activities correctly, and identifying common mistakes you may experience along the way. In addition, you will help determine the 10-rep max for the bench press machine. Once we have been through all the machines, you will take your partner through a total-body dynamic warm-up and then through an upper-body workout using the machines. Remember, you must describe the machine and what body parts it works, perform a demonstration, and provide instruction of what NOT to do, or what might be incorrect form. Once you feel comfortable, get my attention and I will assess your ability to teach and supervise during your partner's performance.

Instructional Task: Demonstration of Proper Technique

■ PRACTICE TASK

Demonstrate proper technique and adjustments on a variety of upper-body machines. The upper-body machines can include chest press and chest fly, lat pull-down, seated row, military press, deltoid flys, seated biceps curl, seated dips, and the hyperextension machine. Students make sure that all body parts are making contact with the pads and that each joint is located in line with the colored dots at each juncture.

Students practice techniques and safety on upper-body machines using light resistance.

Student Choices/Differentiation

- Students select the machines that they want to use.
- Students determine time for testing based on comfort level.
- Experienced students may use free weights in place of machines.
- Inexperienced students may perform body-weight exercises if they are uncomfortable on the machines.

What to Look For

- Students are using proper technique and reviewing the safety components of each exercise.
- Students are adjusting the machines when needed.

Instructional Task: Peer Assessment of Performance in Upper-Body Machines

■ PRACTICE TASK

Students perform their dynamic stretching routines. Partners work together to review the correct procedures for each exercise. Students evaluate the technique of a partner on at least one upper-body machine using a rubric.

EMBEDDED OUTCOME: S2.H2.L1.1 Partners provide feedback on technique to help improve performance on a selected exercise.

Student Choices/Differentiation

Student selects which exercise to assess.

What to Look For

- Students are providing supportive, corrective feedback.
- Students are critiquing technique accurately.

Instructional Task: Predicting Maximum Effort

■ PRACTICE TASK

Partners follow protocol for establishing a 10-max rep for the bench press. Students cool down with their static stretching routines.

Extension

Experienced students can use the bench press or machine chest press.

Refinement

Instruct students not to increase the weight too much from one set to the next. If the weight changes too much, it might become a safety issue for the lifter and result in injury.

Student Choices/Differentiation

Students choose their partners.

What to Look For

- Students supervise their peers and monitor for proper technique.
- Students use the protocol to proceed with the test.
- Students attempt to perform the exercise with maximum effort.

Instructional Task: Upper-Body Exercise Discussion

■ PRACTICE TASK

Review overload and the FITT principle. Have students work together to create a list of upper-body machine exercises by name and the muscles they work. Students then pair agonist/antagonist exercises.

Have pairs turn in a list of all the exercises they performed during class. Review the lists at the end of the day so students can add new exercises they haven't performed to their workout lists.

Extension

Have students find additional exercises for the upper body online and include them in their workout plans.

Student Choices/Differentiation

- Students choose their partners.
- Students find alternative exercises online.

What to Look For

- Exercises work just the upper body.
- Students are identifying the machines and exercises correctly.

Formal and Informal Assessments

- Student demonstration of appropriate technique for upper-body exercises
- Peer evaluation of movement technique using supervisor protocol
- Assessment of upper-body strength using the 10-rep-max protocol
- Exercise lists

Closure

- Today, we examined a variety of upper-body exercises using machines.
- You were able to demonstrate proper technique and the ability to effectively evaluate the technique of others.
- Finally, you learned how to estimate your maximum strength in a safe manner.
- Next time, you will learn how to use free weights for resistance training.

Reflection

- Did students follow the 10-rep-max protocol better than with the lower body?
- Are they able to determine opposing muscle groups and how to work them?

Homework

- Taking your assessment results into account, write down which exercises you would use to address upper-body weaknesses.
- Record your body-weight exercise repetitions and exercises in a log. Include your physical activity outside of class.

Resources

Bompa, T. (2015). *Conditioning young athletes*. Champaign, IL: Human Kinetics.

Internet keyword search: “resistance machines,” “10 rep max protocol,” “upper body conditioning”