

LESSON 3: DESIGNING AN AT-HOME BODY-WEIGHT FITNESS PROGRAM

Grade-Level Outcomes

Primary Outcomes

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

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

Health: Analyzes the health benefits of a self-selected physical activity. (S5.H1.L1)

Social interaction: Identifies the opportunity for social support in a self-selected physical activity or dance. (S5.H4.L1).

Engages in physical activity: Participates several times a week in a self-selected lifetime activity, dance or fitness activity outside of the school day. (S3.H6.L1)

Lesson Objectives

The learner will:

- identify appropriate exercises to stimulate muscular strength and muscular endurance using only body weight.
- recall basic muscle groups in the human body.
- develop a basic workout program that can be performed outside of class.
- supervise and spot peers during workout routines.

Equipment and Materials

- Anatomical chart
- Peer assessment rubrics
- Basic workout program templates
- Muscle group and exercise worksheets
- Clipboards
- Whiteboard easel
- Worksheets for listing exercises

Introduction

Today, we will explore various options of resistance training that you can perform at home with no equipment. You can attain lifetime fitness without going to a gym or spending money on equipment, if you know what to do. First, we will explore the various exercises; then you will be paired with a partner to demonstrate to each other how to perform the exercises. Partners evaluate each other on the proper technique. Then, we'll design a workout plan for one week using only the exercises listed on your worksheets.

Instructional Task: Discussion on Body Weight as Resistance

■ PRACTICE TASK

Lead the class in a discussion of basic workout exercises that require only body weight.

Guiding questions for students:

- What activities have you performed that might be considered exercise?
- What are the benefits of performing weight resistance training?
- How often should you perform weight resistance training?

Extension

Discuss the overload and frequency, intensity, time, and type (FITT) principle in relation to resistance training, particularly frequency and intensity. Include the importance of recovery.

Student Choices/Differentiation

Students perform activity examples and explain why they believe this activity can be considered exercise.

What to Look For

- Students are able to come up with the benefits of performing weight resistance exercise.
- Students are able to describe the FITT principle as it applies to weight resistance programming.

Instructional Task: Total-Body Exercise Compilation

■ PRACTICE TASK

Students work with a partner to identify the muscle groups associated with the lower body and the upper body.

Students identify at least two exercises for each muscle group of the lower body and two for each group of the upper body. They include directions and critical elements.

Extension

Students can use the Internet to research additional exercises for each muscle group.

Refinement

Be sure that students are identifying exercises that are appropriate for each muscle group.

Student Choices/Differentiation

- Students select their partners.
- Students provide additional options for each muscle group.

What to Look For

- Exercises match the muscle group indicated.
- Exercises have directions for performance and cues for evaluation.

Instructional Task: Dynamic Warm-Up

■ PRACTICE TASK

Students perform the dynamic stretching routines that they planned in Lesson 1.

Refinement

Ask students to adjust their plans if their assessment scores indicated an area of weakness.

Student Choices/Differentiation

- Students have designed their warm-ups.
- Students may use an index card with the exercises on it if they have trouble remembering the exercises.

What to Look For

- Warm-ups are raising students' heart rates and causing them to break a sweat.
- Students are performing the exercises correctly.
- Exercises are addressing all the major muscle groups.

Instructional Task: Peer Evaluation**■ PRACTICE TASK**

Discuss how to evaluate another student's performance during an exercise by using the critical elements. For example, for push-ups, hands should be straight under the shoulders and the core.

Allow students to practice body-weight resistance activities while being evaluated by their partners.

EMBEDDED OUTCOME: S5.H4.L1. Remind students to provide positive feedback and encouragement while their "client" is performing each skill.

Student Choices/Differentiation

Students select the exercises.

What to Look For

- Students are using proper form and following the directions for the exercise.
- Peers are providing feedback on form and technique.

Instructional Task: Body-Weight Training Program**■ PRACTICE TASK**

Students use the template to create a three-day-a-week at-home body-weight training program using a variety of exercises (stipulate the number of exercises) throughout the week. They use data from Lesson 2 for a baseline, where appropriate. Students must include exercises that develop opposing muscle groups.

Extensions

- Have students select a new partner, and allow them to guide the new partner through the workout listed on their body-weight training program, performing one set of each exercise.
- Students may go through their routines multiple times in one day.
- Students cool down with their static stretching routines.

EMBEDDED OUTCOME: S5.H1.L1. Ask students to analyze and share the health benefits of their selected exercises.

Student Choices/Differentiation

- Have examples of total-body weight resistance plans available for students to view.
- Students decide on the length of their plans (one day or multiple days).
- Students may choose to create a four-day-a-week split routine (two upper-body workouts and two lower-body workouts).

What to Look For

- Programs contain at least one exercise for each muscle group.
 - Students are maintaining proper form during exercises.
 - Students are giving maximum effort.
 - Peers are providing feedback and positive reinforcement while supervising exercises.
 - Students are performing exercises with a high level of effort.
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Formal and Informal Assessments

- Peer evaluation rubrics for exercise technique
- Basic workout plans for three days of body-weight training

Closure

- You have completed an assignment to add to your fitness portfolio, an at-home body-weight workout program. We have discussed the benefits of a weight resistance program, identified specific exercises for each muscle group, and created a general workout program for use at home.
- Starting today, I want you to keep a log of your body weight exercises as well as any other physical activity you do outside of class.
- Next class, you will learn about using weight-training machines for resistance training.

Reflection

- Did students demonstrate a strong understanding of the connection between the exercises and the specific muscle groups worked during the routine?
- Do students have a general idea about how to create a basic total-body fitness plan?
- Can students effectively evaluate form and technique during exercise?
- Review workout plans to see if students are on track or if they need additional information or clarifications.

Homework

- Continue to practice technique and form for the body-weight exercises in your program.
- Record your repetitions and exercises in a log. Include your other physical activity done outside of class. Remember that although this module doesn't focus on cardio, you should still be getting that component outside of class to meet the physical activity guidelines. (Embedded outcome: S3.H6.L1)

Resources

Haff, G. Gregory, and Triplett, N. Travis. (2017). *Essentials for strength training and conditioning*. 4th ed. Champaign, IL: Human Kinetics.

Internet keyword search: "body-weight workout plan," "body-weight training"

HIGH SCHOOL RESISTANCE-TRAINING TEMPLATE FOR AT-HOME TOTAL-BODY BODY-WEIGHT WORKOUT

Use this template to design an at-home body-weight workout plan for one week, essentially three separate days. Try to list different exercises for each body part on successive days. As before, at a minimum, you can list exercises for the primary body part; including exercises for the subset of muscle groups is considered a bonus.

Primary body part	Subset body parts	Day 1	Day 2	Day 3
Ankle	Calves			
	Shins			
Knees	Quads			
	Hams			
Hips	Abductors			
	Adductors			
	Hip flexors			
	Hip extensors			
Shoulders	Chest			
	Back			
	Deltoids			
	Traps			
Elbows	Biceps			
	Triceps			
Wrists	Forearm flexors			
	Forearm extensors			