

LESSON 4: STATIC CLIMBING

Grade-Level Outcomes

Primary Outcomes

Lifetime activities: Demonstrates competency and/or refines activity-specific movement skills in 2 or more lifetime activities (outdoor pursuits, individual-performance activities, aquatics, net/wall games or target games). (S1.H1.L1)

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)

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

Movement concepts, principles & knowledge: Applies the terminology associated with exercise and participation in selected individual-performance activities, dance, net/wall games, target games, aquatics and/or outdoor pursuits appropriately. (S2.H1.L1)

Working with others: Uses communication skills and strategies that promote team or group dynamics. (S4.H3.L1)

Lesson Objectives

The learner will:

- participate safely in the rock climbing circuit.
- apply the three components of proper spotting technique.
- apply the concept of static climbing (no momentum) in conjunction with the concepts of three points on the wall at all times and balance over the feet.
- execute a proper overhand on a bite knot.

Equipment and Materials

- Traverse wall
- 8-foot (2.4 m) dynamic climbing rope (8)
- Portable slackline (4)
- Dumbbells (8 sets)
- Kettlebells (8)
- Body bars or a variety of weights (8 to 16)
- Station task cards
- Chalk

Introduction

Today, I will introduce the concept of static climbing (not using momentum) and demonstrate the overhand on a bite knot. First, let's see you tie that figure eight knot without looking at it!

Instructional Task: Static Climbing

■ PRACTICE TASK

Introduce the concept of static climbing (slow, controlled movements to control momentum), using the “barn door” problem.

By this time, students have had enough experience to relate to the barn door problem (in which the climber’s momentum cause him or her to swing off the wall like a door on a hinge). Ask students to explain how this happens and to identify the movement concepts behind it, and have them discuss possible solutions to the problem. Students then share ideas, and you build on their thinking.

Guiding questions for students:

- How does balance play a role in slow, controlled movements?
- Is it more important to focus on legs or arms when climbing?
- What key points are you looking for in students’ solutions to the barn door problem?

Student Choices/Differentiation

Students may review video clips of “the screen door” in action.

What to Look For

Students are talking to each other and practicing the skills of SPACE (silence, paraphrasing, accepting language, clarifying questions, evidence).

Instructional Task: Overhand on a Bite

■ PRACTICE TASK

Share the concept of a “bite” in knot tying. Demonstrate how to tie an overhand on a bite, and explain its use. Students follow along with their own pieces of rope. Students later practice the knot at the knot tying station.

EMBEDDED OUTCOME: S2.H1.1.1 Have students differentiate between the three knots they have learned.

Student Choices/Differentiation

Students may review a video clip of tying an overhand on a bite.

What to Look For

Students are engaged.

Instructional Task: Stations Activity

■ PRACTICE TASK

Students participate at each station for 7 minutes with 30 seconds in between stations.

At the climbing station, students do the first obstacle course. This course supports the concept of static climbing and requires clear communication between climber and spotter. Vary exercises for Station 5 and movements for Station 3.

1. Traverse wall
2. Traverse wall: three points on the wall
3. Knot tying: overhand knot on a bite
4. Balance (slackline): simple steps
5. Muscular endurance: circuit

Extensions

- Students at the knot tying station can practice the figure eight once they are successful at the overhand on a bite.
- Students can try different movements on the slackline.
- Students can repeat the traverse using a different route.

Refinement

Knots: Check the size of the bite for the overhand on a bite. A closed fist should just fit inside the bite.

EMBEDDED OUTCOME: S4.H3.L1 Review communication between spotter and climber. Provide corrective feedback when needed, and reinforce good communication.

Student Choices/Differentiation

- Students choose their partners.
- Students choose their routes.
- Students may review a video clip of tying an overhand on a bite.

What to Look For

- Students are on task and making safe decisions.
- Students are implementing proper climbing technique (slow, controlled movements), spotting technique, and communication.
- Students are staying focused on the slackline.
- Students are putting effort into the muscular strength and endurance exercises.

Instructional Task: Video of a Traverse

■ PRACTICE TASK

In groups of three, one student completes the traverse using static climbing moves, one spots, and the other records video of the traverse. Students then replay the traverse and identify where the climber had three points on the wall and balance over the feet.

Student Choices/Differentiation

Students choose roles within their groups.

What to Look For

- Students are accurately identifying three points on the wall and balance over the feet.
- The spotter and climber are communicating appropriately.

Formal and Informal Assessments

- Teacher assessment of students' knots
- Peer assessment of traverse

Closure

- How did you get along in meeting the expectations for the climbing stations? Provide a specific example of how you met these expectations.
- Are there things you could improve on?
- How were you successful at spotting today?
- Can you share, with an elbow partner, how you used balance over your feet to support your climbing today?

Reflection

- Do students understand the idea of a bite?
- Were students able to apply static climbing?
- Were there fewer “screen doors”?

Homework

Be able to tie an overhand on a bite without looking at the rope by the next class. A video is posted on the school's physical education website for your review.

Resources

Animated knots: www.animatedknots.com/indexclimbing.php

Internet keyword search: “traverse,” “overhand bite”