

LESSON 2: BASIC CLIMBING TECHNIQUES AND SPOTTING

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)

Safety: Applies best practices for participating 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

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

Working with others: Solves problems and thinks critically in physical activity or dance settings, both as an individual and in groups. (S4.H4.L1)

Fitness knowledge: Identifies types of strength exercises (isometric, concentric, eccentric) and stretching exercises (static, proprioceptive neuromuscular facilitation [PNF], dynamic) for personal fitness development (e.g., strength, endurance, range of motion). (S3.H9.L1)

Lesson Objectives

The learner will:

- identify the expectations for safe and effective participation in the rock climbing circuit.
- apply the three components of proper spotting technique: athletic position; attentiveness; and positive, encouraging language.
- apply the concept of three points on the wall at all times.
- practice safe falling.
- execute a proper overhand 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

In our previous class, you learned about the importance of communication for safe climbing. Today, you will apply your communication skills as you learn several new climbing techniques in stations. You also will learn about spotting each other, which is an important aspect of climbing safety, and practice falling.

Instructional Task: Rock Climbing Introduction

■ PRACTICE TASK

Share expectations for the five stations (see stations handout), and demonstrate techniques for each (five to seven students per station):

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

Student Choices/Differentiation

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

What to Look For

- Students are engaged.
- Students are asking good questions about the stations.

Instructional Task: Spotting Technique

■ PRACTICE TASK

Lead a discussion about the skills related to spotting technique. Demonstrate the technique. Students practice in pairs and then switch to another partner.

EMBEDDED OUTCOME: S4.H3.L1. Emphasize and reinforce the importance of communication during spotting practice.

Guiding questions for students:

- What does it look like to be a successful spotter?
- How will you know that you are successful?
- Which stations will require spotting?
- What is down climbing?
- How can you support safe falling?

Student Choices/Differentiation

- Students choose their partners.
- Provide a poster with key communication words.

What to Look For

- Students are communicating appropriately.
- Students are spotting correctly and safely.

Instructional Task: Falling and Spotting

■ PRACTICE TASK

Discuss what to do when falling.

First Rule: Always climb down.

When the first rule doesn't apply and you are going to fall, do the following:

1. Look down to spot your landing and any obstacles that might be present. This also leads to the best body position for a safe fall.
2. Breathe out to help relax the body. Shrieking counts, although you might lose a few style points.
3. Relax your legs. Keep your arms and legs bent slightly, with your knees "soft" and ready to absorb any impact. Think: falling like a cat.
4. Practice frequently.

Students, in pairs, practice falling from a low height. Partners act as spotters.

Student Choices/Differentiation

Students choose their partners.

What to Look For

- Students are communicating appropriately.
- Students are relaxed while practicing short falls.
- Students are spotting correctly and safely.

Instructional Task: Stations Activity

■ PRACTICE TASK

Students participate at each station for 6 minutes, with 30 seconds in between stations.

At the climbing stations, student climbers receive feedback from their partners regarding the learning objective (e.g., three points on the wall).

EMBEDDED OUTCOME: S3.H9.I.1. At Station 5, have students identify the types of strength exercises they are doing and their purposes.

EMBEDDED OUTCOME: S4.H4.I.1. At Stations 1 and 2 (traversing), have students analyze the route and develop solutions for negotiating the obstacles.

Student Choices/Differentiation

- Students may review a video clip as they are tying the knot.
- Students choose their routes.
- Students choose their partners.

What to Look For

- Students are on task.
 - Students are making safe decisions.
 - Students are implementing proper spotting technique and communication.
-

Formal and Informal Assessments

- Peer assessment of three points on the wall

Closure

- Compare and contrast dynamic and static climbing rope.
- What does it mean to have three points on the wall?
- What are the expectations for the climbing stations? Give an example of how you met these expectations.
- What does a successful spotter look like?

Reflection

- Did students meet the expectations around decision making, spotting, and knot tying?
- Are they taking spotting seriously?

Homework

Practice tying an overhand knot, and be able to do it without looking at the rope. There is a video posted on the school's physical education website for your review.

Resources

Climbing: www.climbing.com

Internet keyword search: "overhand knot," "slackline," "traverse," "spotting for rock climbing"

ROCK CLIMBING MODULE: STATION ACTIVITIES

This high school rock climbing module accommodates 40 students around five stations (up to eight students at each station). Although the focus of the stations may change from lesson to lesson, students develop a routine that guides their learning during the module. Detailed task cards are found at each station. Following is a short explanation of how the 5- to 7-minute stations are set up.

Stations 1 and 2: Traverse Wall

Stations 1 and 2 take place on the traverse wall, and students complete two rotations at each station. Our traverse wall is 45 feet (13.7 m) in length and can accommodate eight climbers along with eight spotters. At this station we alternate between route climbing, where students set goals and, along with their spotters, work to complete five separate routes and skill development activities. Many of the skill development activities are obstacle courses set up on the wall and designed to support the development of specific skills such as creativity, balance over the feet, three points on the wall, static climbing, dynamic techniques, and strength of grip. Alternating between route climbing and skill development allows students to apply new techniques in their climbing and leads to personal growth and improved climbing confidence.

Station 3: Knot Tying

At the knot tying station, students develop skills in basic knots specific to safe, successful climbing. Students improve their skills throughout the module, building one knot onto another as they progress. In preparation for the end-of-course culminating activity (a field experience at a local indoor climbing facility), this station concludes with each student being able to correctly tie into a harness.

Knots: overhand, figure eight, bowline, overhand on a bite, figure eight on a bite, figure eight follow-through, water knot, double fisherman's knot, fitting a harness

Station 4: Slackline

Balance is an important component of successful rock climbing, and we have dedicated this station to that concept. The station has four portable slackline frames. These frames are about 8 feet (2.4 m) long and designed as training tools for balance and provide a portable option for teachers. Students can perform a wide variety of activities on the slackline frame that support balance development: simple steps, lunges, turns, and reverse, to name a few.

Station 5: Muscular Strength and Endurance

This station is designed to support student learning and physical development in muscle groups specific to rock climbing. Students work together to complete a list of three to five exercises (3 sets of 10 repetitions) each day at this station. Many of the exercises use body weight as resistance, but body bars, dumbbells, kettlebells, and other equipment can be used at this station.