

LESSON 1: EXPLORING THE BIKE

Grade-Level Outcomes

Primary Outcomes

Outdoor pursuits: Demonstrates correct technique for basic skills in 1 self-selected outdoor activity. (S1.M22.6)

Individual-performance activities: Demonstrates correct technique for basic skills in 1 self-selected individual-performance activity. (S1.M24.6)

Embedded Outcomes

Working with others: Demonstrates cooperation skills by establishing rules and guidelines for resolving conflict. (S4.M4.7)

Engages in physical activity: Participates in a variety of lifetime recreational team sports, outdoor pursuits or dance activities. (S3.M5.6)

Lesson Objectives

The learner will:

- identify different parts of a mountain bike.
- demonstrate the ability to fit a helmet and bike properly.
- demonstrate an even pedal stroke on a mountain bike.
- demonstrate the ability to use the brakes to stop.

Equipment and Materials

- Mountain bikes
- Helmets
- Variety of other bicycles (optional)
- Variety of cones
- First aid kit
- Air pump
- Mini tool kit for adjusting and repairing bikes on the go

Introduction

Today, we will explore the world of mountain biking. We first will view a short video (Internet keyword search: mountain biking) that will give you a better idea of what mountain biking really is. You will have an opportunity to get on the bikes and ride today. But first, you must learn about the bike and bike safety.

Instructional Task: Exploring the Bike and Bike Safety

■ PRACTICE TASK

Working in small groups, take some time to explore a bike:

1. *Examine the bike before getting on.*
2. *Adjust the seat and handlebar height.*
3. *Get on the bike and use your feet to push off the ground. Try putting your feet on the wheels.*

Share and discuss everything you know about mountain biking.

Demonstrate how to fit a helmet.

Have students work in groups while practicing fitting a helmet.

Extensions

- Have students explore a different style of bicycle, such as road or unicycle.
- Have students compare and contrast the bicycles in the room.

EMBEDDED OUTCOME: S4.M4.7 Help students establish rules and guidelines for resolving conflict while working in small groups.

Refinements

- Make sure the helmet fits snugly around the head before adjusting any straps. Some helmets may be too big regardless of how tight the straps are.
- Adjust the ear straps for a tighter, more comfortable fit.

Student Choices/Differentiation

- Students may choose their own small groups.
- Groups may choose the bike that they explore. If there is conflict, they will decide on how to handle it.
- Students may bring in their own bikes and helmets from home.

What to Look For

- Students demonstrate initiative skills by creating their own groups and selecting a bicycle to explore.
- While in groups, students demonstrate active participation in the task.
- Monitor the small-group discussion in order to assess participation levels of all students.

Instructional Task: Selecting and Mounting a Bike and Adjusting the Seat Height

■ PRACTICE TASK

Demonstrate how to find the appropriately sized bike and how to make adjustments to fit individual riders.

Students return to their small groups and practice fitting and mounting a bike.

Peers can assess these skills using a checklist for appropriately sized bicycles and helmets.

Extensions

- Do a running mount.
- Do a rolling dismount.

Refinement

Make sure students are choosing appropriately sized bicycles and that their helmets are fitted properly.

Guiding questions for students:

- What happens when a classmate wants or needs the same bike as you?
- How can you resolve this issue?

Student Choices/Differentiation

- Students may choose to change groups if needed.
- Students will choose their bicycles.
- Guide students toward an appropriate bike if needed.
- Have experienced students help less experienced students.

What to Look For

- Students demonstrate their ability to resolve conflicts when two students want or need the same bike.
- When selecting a bike, students adjust the seat height as needed so that when the student stands next to the bike, the seat rests at hip level.

Instructional Task: Pedal Stroke, Turning, and Braking**■ PRACTICE TASK**

Students practice pedaling, turning, and braking on your command.

Individually, students ride through an obstacle course that challenges them to use pedaling, turning, and braking all together.

Refinements

- Students should refrain from using the left brake alone.
- The brake finger should be placed toward the end of the lever for maximum leverage.
- When turning, students should have the outside pedal lower than the inside pedal, and shift their weight to the outside.

Extensions

- Students complete the commands while standing out of the saddle.
- Students practice weaving in and out of cones.
- Students practice breaking out of the saddle and balancing as long as possible before dismounting.
- Students practice 90-degree, 180-degree, and 270-degree turns.
- Formative checklist: mounting/dismounting, pedal stroke, turning, and braking

Student Choices/Differentiation

- Students can work in pairs and share a bike.
- Students are allowed to observe before participating.

What to Look For

- Students demonstrate an even pedal stroke while keeping one finger, lightly, over each brake lever.
- Students release from the saddle when needed in order to maintain balance and dismount properly.
- Students are able to pedal, turn, and brake on command without falling off the bike.

Formal and Informal Assessments

- Peer assessment: bike- and helmet-fitting checklist (see *Bikeology* curriculum)
- Formative checklist: students demonstrate the following skills with safety: mounting and unmounting, pedal stroke, turning, and braking

Closure

- What is something you learned about mountain bikes today?
- How do you appropriately size a bike for yourself?
- How do you resolve conflicts, such as needing the same bike as a classmate?
- What should your helmet look like if you are wearing it properly?
- What bike skills did you practice today?

EMBEDDED OUTCOME: S3.M5.6. Throughout the module, have students track their physical activity. Remind students to practice mountain biking at home to improve their riding skills and overall health.

Reflection

- Were students engaged? Was there too much downtime?
- Is there an equipment issue? Is it okay for students to share bikes, or do they each need their own?
- Can students fit a helmet on their own or with help from a classmate?
- Can students size a bike for themselves or with help from a classmate?

Homework

If you have a bike at home, bike for 20-plus minutes. Make sure to follow the safety guidelines that you learned today and practice mounting and unmounting the bike. If you don't have a bike at home, you can use a school bike to ride at recess. If you elect to use a school bike, you will need to accumulate 20-plus minutes of riding over the course of the week.

Resources

American Alliance for Health, Physical Education, Recreation and Dance. (2014). *Bikeology: A middle and high school bicycle safety curriculum for physical education teachers and recreation specialists*. Reston, VA: Author. Available at www.shapeamerica.org. Bicycle Helmet Safety Institute. (2015). How to fit a helmet. Available at www.bhsi.org.

Lopes, B., & McCormack, L. (2010). *Mastering mountain bike skills*. 2nd ed. Champaign, IL: Human Kinetics.

Internet keyword search: "how to fit and adjust a cycle helmet," "mountain bike skills + tips—10 essential things to know"