

LESSON 10: GEOCACHING

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: 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)

Embedded Outcome

Rules & etiquette: Exhibits proper etiquette, respect for others and teamwork while engaging in physical activity and/or social dance. (S4.H2.L1)

Lesson Objectives

The learner will:

- create a mark in a GPS unit.
- apply the “go to” function to find a specific cache.
- use geocaching terminology correctly.

Equipment and Materials

- Global positioning system (GPS)
- Cache (small mint container)
- Colored paper clips
- Index card
- Pencil

Introduction

To reinforce etiquette, begin with a personal story of a geocaching experience related to a cache not being put back appropriately.

Today, you will learn some new GPS skills and then use the GPS to locate caches on campus.

Instructional Task: Using a GPS Unit

■ PRACTICE TASK

Review how to find the longitude and latitude of a specific point on the planet from the previous class. Provide instructions on how to use the GPS to find a cache using the given longitude and latitude of a specific point on the planet. Students follow along on their devices.

Extension

Lead students through the following:

- Creating a mark
- Finding the mark on the GPS
- Selecting the mark
- Using the compass on the GPS to find the cache

Students practice creating a mark and finding the mark on the GPS.

Guiding questions for students:

- How might this skill contribute to the safety of a hiker?
- How would moving a cache affect another student's experience?

EMBEDDED OUTCOME: S4.H2.I.1. Use the discussion questions and the introductory story to reinforce the importance of observing proper etiquette to ensure a good geocaching experience for everyone.

Student Choices/Differentiation

Students could use an app on their phones.

What to Look For

- Students are engaged.
- Students are asking good questions.

Instructional Task: Finding Caches and Proof of Find

■ PRACTICE TASK

Students work with a partner to find as many caches as they can in the time permitted. Assign a specific starting spot for each group, and students choose the subsequent caches.

Students take a colored paper clip from each cache they find and write the location on the card next to the number of the cache (proof of find).

Student Choices/Differentiation

- Students choose their partners.
- Students choose caches to locate.

What to Look For

- Students are on task and making good decisions as they maneuver around campus.
- Students are locating the caches efficiently.
- Students are replacing the containers correctly.
- Students are confident in their use of the GPS unit.

Instructional Task: Debrief

■ PRACTICE TASK

Use questioning to help students process their experience.

Guiding questions for students:

- How was today's experience with a GPS different from last class?
- Why is it important to put the cache back exactly as it was found?
- What strategies did you and your partner use to find as many caches as possible?
- How do activities such as geocaching and orienteering contribute to fitness and to a physically active lifestyle?

What to Look For

- Students are enthusiastic about geocaching.
 - Students are articulating the importance of etiquette to the experience.
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Formal and Informal Assessments

Student cards with cache locations

Closure

- Which cache was placed in the most creative way?
- What made a particular cache fun or interesting to find?
- As you think about hiking, how might a GPS come in handy?
- How can a GPS be considered an 11th essential? Why?
- Next class, we'll be doing some trail maintenance to give back to the environment. Come prepared to work outside.

Reflection

- Were students engaged in the activity?
- Did they act appropriately around campus and return the geocaches to the correct locations?
- Were they observing proper etiquette?

Homework

- Choose a dream destination, and find one geocache you would like to locate on that visit.
- Provide the name of the cache, the coordinates, and what item you would leave in the cache and why. Turn this in next class.
- Continue to track your physical activity outside of school.

Resources

Geocaching: www.geocaching.com