

## LESSON 6: GEOCACHING AROUND CAMPUS

### Grade-Level Outcomes

#### Primary Outcome

**Outdoor pursuits:** Demonstrates correct technique for a variety of skills in 1 self-selected outdoor activity. (S1.M22.7)

#### Embedded Outcomes

**Challenge:** Develops a plan of action and makes appropriate decisions based on that plan when faced with an individual challenge. (S5.M3.7)

**Safety:** Independently uses physical activity and exercise equipment properly and safely. (S4.M7.7)

### Equipment and Materials

- GPS trackers or devices with apps
- Cache supplies, which could include stamps, stickers, pompon balls, coins, plastic animals, army men, you name it! Don't use anything that's perishable or that would melt or attract animal attention.

### Lesson Objective

The learner will:

- demonstrate understanding and ability to use the functions of a GPS unit effectively.
- demonstrate the ability to geocache correctly.

### Introduction

*In the previous class, you honed your geocaching skills by creating artwork with GPS points and searching for caches. Today, you will continue to build your knowledge of geocaching and challenge classmates to find caches that you have set out.*

## Instructional Task:

### Organize Team Caches and Let Students Explore

#### ■ PRACTICE TASK

Students organize in teams and set out caches for other teams to find. Teams create their caches in the classroom, then place them on the school campus in areas that you have designated. Each team then sets a waypoint for the cache on its GPS.

Have teams set waypoints within 50 feet (15 m) of their caches so that the team seeking cache must use strategy and search to find the cache.

#### Refinement

Students draw a picture of their team's cache and what the surrounding area looks like to help the seeking team locate it.

#### Extension

**EMBEDDED OUTCOME: S5.M3.7.** Help students develop a plan of action and make appropriate decisions based on the plan for this activity.

Once the GPS brings a team close to the cache it is seeking, team members must use inference, reason, and strategy to complete the task.

#### Student Choices/Differentiation

Change the size of the area in play to make the task easier or more difficult, depending on students' skill levels.

## What to Look For

- Students are working together and communicating effectively.
- Groups are organized and efficient in their efforts to hide their caches.
- Students understand the idea of geocaching.
- Students are setting waypoints correctly.

## Instructional Task: Locate Caches Set by Other Teams

### ■ PRACTICE TASK

Students work in small teams or pairs to locate the caches set out by other teams. Each team is expected to locate every other team's cache.

Hand students the rubric and discuss how you will assess them on this activity.

### Extensions

- Teams must complete the task before moving on to look for the next hidden cache. The objective is to find each team's cache during the activity, but you can choose to format it as a team competition by timing each group.
- Have students draw or take pictures of each cache to prove that their team located each cache.

### Guiding questions for students:

- How will you keep from tipping other students off to where the caches are?
- Once you find a cache, where must you place it and why?

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**EMBEDDED OUTCOME: S4.M7.7.** Teach students how to independently use the GPS device properly and safely while locating caches.

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### Student Choices/Differentiation

- Most caches are small (about the size of an old film canister or D battery) and are difficult to find, but for this task, students should create larger cache and set waypoints closer than 50 feet (15 m) apart to make it easier for students who are struggling to find caches.
- Allow students who are excelling to be given waypoints set at 100 feet (30 m) apart to increase the challenge.

## What to Look For

- Are students practicing safety as they navigate around the area?
- Are they compassionate toward one another, using good sportsmanship?

Note: Use the assessment rubric that follows.

## Formal and Informal Assessments

- Assessment rubric
- Exit slips:
  - Test your knowledge of caching.
  - Which team's cache was the hardest to find today and why?
  - Which team's was the easiest?
  - How well did your group work together today?

## Closure

- Can you see yourself geocaching in the future?
- What did you like about this activity? What did you not? Explain.
- What are some characteristics of good teammates while you participate and find caches?

*Geocaching is gaining popularity, with caches being found all over the country and in parks. In our next class, we will explore some of the worldwide geocaching phenomena.*

## Reflection

- Do students understand geocaching?
- Can they set waypoints effectively?
- Is anyone falling behind or needing to be challenged?
- Are students enjoying the geocaching unit?
- Have teamwork skills improved during the unit?

## Homework

*Search the web to find an example of a cache in a park or another state.*

## Resources

Internet keyword search: “geocaching activities,” “geocaching caches”

## ASSESSMENT RUBRIC

Name: \_\_\_\_\_

	Yes	No
Understands how the GPS device works		
Understands how to use and implement the GPS		
Can create coordinates/waypoints using the GPS		
Can find an object using the GPS		
Collaborates and supports others during the lesson		

### Using a GPS

	Skill			
	Not present (1)	Emerging (2)	Maturing (3)	Applying (4)
Understands how the GPS device works				
Understands how to use and implement the GPS				
Can create coordinates/waypoints using the GPS				
Can find an object using the GPS				
Collaborates and supports others during the lesson				

**Total student score:** \_\_\_\_\_