A Worldwide Game of Hide and Seek

GPS receivers in hand, your team races across the park toward a large picnic pavilion. You know there's a geocache hidden nearby, but your only clue to its precise location is the cryptic statement "You are getting warmer." Suddenly, one of your Scouts runs over and starts examining some nearby barbecue grills. And there on the post of one of them, he finds the thimble-sized cache.

Welcome to geocaching, a sport that combines land navigation using maps and GPS receivers with problem solving and competition. In geocaching, participants navigate to a specific set of GPS coordinates and then attempt to find the geocache (container) hidden at that location. A typical cache is a small waterproof container containing a logbook where the geocacher enters the date they found it and signs it with their established code name. Often, there are tiny trade items you can take away as souvenirs.

Geocaching is often described as a "game of high-tech hide and seek." It's a fun way to spend a day or a weekend and to practice important Scouting skills.

Objectives

This month's activities should:

- Help Scouts understand how GPS technology works.
- Let Scouts practice using a GPS receiver.
- Demonstrate how to properly hide and find a geocache.
- Explain outdoor ethics as they relate to geocaching.
- Show Scouts how to use Geocaching.com.
- Encourage Scouts to work together as a team.

RELATED ADVANCEMENT AND AWARDS

- Tenderfoot requirement 2
- Second Class requirements 1a, 1b, and 3a
- First Class requirements 2, 3, and 10
- Geocaching merit badge
- Orienteering Varsity Scout activity pin
- Ranger: Land Navigation core requirement 5d

Leadership Planning

As a leadership team, you may want to discuss the following items when choosing first aid as your program feature during your planning meetings.

1. What is our unit's current skill level?
2. Who do we know that is a geocaching expert?
3. How many GPS units will we need and where can we get them?
4. What will we do for our main event?
5. What other subtopics would fit well with this feature?
6. How will we get access to Geocaching.com at our meeting?
7. Where will we do our main event?
8. How can we involve parents?
9. To meet our needs, what should we change in the sample meeting plans?

PARENTS CAN HELP WITH THE GEOCACHING PROGRAM FEATURE BY:

1. Lending GPS units
2. Providing transportation for the main event
3. Helping to hide caches
4. Being a geocaching expert
5. Helping with the main event

THE GEOCACHE

For the traditional geocache, a geocacher will place a waterproof container containing a logbook and trade items and will then record the cache's coordinates. These coordinates, along with other details of the location, are posted on Geocaching.com.

Other geocachers obtain the coordinates from that site and seek out the cache using their handled GPS receivers. When they find the cache, they record their discovery in the logbook and online.

The finding geocachers record their exploits in the logbook and online. They are free to take objects from the cache (except the logbook, pencil, or stamp) in return for leaving something of similar or higher value.

GPS Receivers

You can enter the location of a cache into the GPS receiver, and the receiver will calculate how far you are from the point as well as what direction you need to travel to reach your destination. Many GPS receivers have a screen that serves as an electronic map to show the user's location or where is the final destination.

Several things can affect your receiver's accuracy and the value of the information it provides:

- The GPS compass arrow points to your destination, but straight may not be the best route. Look where you are going and what is ahead of you to choose the best way to get there.
- You may lose the signal from the satellites.
- Your unit's accuracy may be very low due to interference.
- Your unit's batteries can be low or die.
- If you input the wrong information, you'll end up in the wrong place.

GEOCACHING INITIATIVE GAMES

Compass Relay

Equipment: You will need something with which to draw a compass on the floor or ground, and cards (to be used as markers).

How to play: Line up the teams in relay formation. Opposite each team is a compass circle drawn on the floor or on the ground. The points are shown, but only north is marked. When the leader calls out a compass point—northeast, for example—the first player on each team places a mark (before the leader counts to six) on the compass circle in front of their team at the point where the leader called. Players who are correct fall in behind the compass circle. Players who are wrong go to the back of the team. The next compass point is called and the next player marks it on the compass circle. (Position a judge at each compass circle and remind players that coaching is not allowed.) The team getting all of its players behind the compass circle first wins.

Note: You could play this game once with eight cards (north, northeast, east, etc.), then go up to 16 (adding north-northeast, east-northeast, etc.). You could also make cards marked 0 degrees, 45 degrees, 90 degrees, etc.

Find What They Hid

Equipment: You will need a GPS receiver for each group and something to hide.

How to play: Groups hide markers noting the GPS coordinates and then give those coordinates to other groups to find. Points are given for not only finding markers, but also for having your markers found.

Decode the Hint

Equipment: You will need pen and paper for each group and copies of coded messages on cards.

How to play: First, each team makes its own code-breaking key. Each group is handed a coded message face down. When told to do so, teams turn over their cards and race to decode the message they find. First to complete a message gets two points; each correct message gets a point.

Make a Cache Relay

Equipment: Enough material (containers, logs, treasure items) to create several caches.

How to play: All the material is placed at one end of the room. Members individually race from the other side of the room to collect pieces, one at a time, to make a cache. The first group to fully assemble a cache wins.

E.D.G.E. Ideas

***E**xplain* how it is done—Tell them.
***D**emonstrate* the steps—Show them.
***G**uide* learners as they practice—Watch them do it.
***E**nable* them to succeed on their own—Have them practice/teach it.

EXPLAIN

- Explain how to use a map and compass.
- Discuss geocaching safety and potential hazards.
- Describe how GPS gets coordinates from satellites.
- Explain how to find and hide geocaches.
- Explain how to decode hints.
- Define terms like "travel bug."
- Explain the Cache In Trash Out ethic.

DEMONSTRATE

- Show how to align a compass and maps.
- Demonstrate how to use a GPS.
- Show how to search for caches on Geocaching.com; if possible, use a projector so everyone can easily see the computer screen.
- Show how to use descriptions and hints.
- Demonstrate using a decoder key.

GUIDE

- Provide materials (containers, logbooks, and trade items) that Scouts can use to create caches.
- Have Scouts enter waypoints as you watch.
- Hide geocaches as a group near your meeting place.
- Practice camouflaging caches.

ENABLE

- Have Scouts teach others to use GPS units.
- Challenge Scouts to create a map and compass course.
- Help Scouts create Geocaching.com accounts so they can list their caches.
- Have teams of Scouts create caches and find each other's caches; rate the caches for fun and difficulty.
- Encourage Scouts to create travel bugs.

MAIN EVENT SUMMARIES

● ESSENTIAL	■ CHALLENGING	◆ ADVANCED
Day Activity	Overnight Activity	Overnight Activity or Longer
Local caching—A day of finding caches in your area	Camp and cache—An overnight campout where you find caches and do other activities	Geocaching instruction course—Spend a weekend setting up and running a geocaching course.

GEOCACHING

Meeting Plan: Map, Compass, GPS

Week 1 Date_____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Play Compass Basketball. Lay out compass points (N, NE, E, SE, etc.) beneath a basketball hoop. Working in teams, players take turns taking shots from compass points called out by a leader. Points are given for baskets made from correct coordinates.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law Uniform inspection		7 p.m.
Group Instruction 15 minutes	Different youth instructions give three- to five-minute overviews on: • Compass: magnetic vs. true north, degree, bearing, heading • Maps: latitude and longitude, orienting a map to north, scale • GPS: satellites, coordinates, selective variability		7:10 p.m.
Skills Instruction 30 minutes ●	Review the buddy system. Practice how to use a compass. Learn how to read a map. Learn how to read GPS coordinates.		7:25 p.m.
■	Review the above skills. Cover the following topics: • Identify potential hazards while geocaching. • Learn how to compensate for magnetic north on a compass. • Using a topo map, draw a slope profile of a given bearing. • Explore the different menu screens of your GPS receiver.		
◆	Review the above skills. Cover the following topics: • Make a list of first-aid supplies you should carry when geocaching. • Learn how to determine a compass bearing without a compass. • Compare and contrast USGS quad maps to orienteering maps. • Learn to change the coordinate settings of your GPS receiver.		
Breakout Groups 15 minutes	• Practice skills covered in skills instruction. • Begin making plans for participation in the main event.		7:55 p.m.
Game 15 minutes	Play Compass Relay (described earlier).		8:10 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
Total 90 minutes of meeting			
After the Meeting 15 minutes	Collect all GPS units and make sure they are turned off. Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.

GEOCACHING
Meeting Plan: Using GPS

Week 2 Date_____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Get a beach ball that is painted like the world and have everyone keep the ball in the air. Count how many times it is hit without hitting the ground. Set and try to break your own records.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law Uniform inspection		7 p.m.
Group Instruction 20 minutes	• An expert guest lectures on using a GPS and how satellites work and the basic coordinate system. • Explain basic menu functions and how to operate specific GPS models. • Introduce different types of geocaching containers.		7:10 p.m.
Skills Instruction 20 minutes	• Learn how to turn on a GPS receiver and navigate menus. • Learn how to check the receiver's battery gauge (if present) and change batteries. • Understand how to read coordinates. • Compare a GPS receiver to a compass and map.		7:30 p.m.
	• Review the above skills. • Learn how to enter, delete, and edit a waypoint. • Explore GPS receiver features such as elevation and weather.		
	As a group, hide a marker and log the coordinates of the location.		
Breakout Groups 15 minutes	• Practice patrol/team/crew skills as needed. • Plan a group duty roster for the upcoming main event. • Assist each other with GPS functions.		7:50 p.m.
Game 20 minutes	Play Find What They Hid (described earlier)		8:05 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
	Total 90 minutes of meeting		
After the Meeting 15 minutes	Collect all GPS units and make sure they are turned off. Leadership team reviews plans for the next meeting and for the main event. Next week's meeting introduces Geocaching.com and is best if you have computer access. Explore ways to have Internet access at the meeting.		

*All times are suggested.

GEOCACHING

Meeting Plan: Geocaching.com

Week 3 Date_____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Create typical geocaching clues for locations around your meeting place. Have arriving Scouts try to solve the clues and find hidden items.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law		7 p.m.
Group Instruction 15 minutes	Introduction to Geocaching.com Show Geocaching.com website and cover these rules: 1. If you take something from the geocache, leave something of equal or greater value. 2. Write about your find in the cache logbook. 3. Log your experience at www.geocaching.com.		7:10 p.m.
Skills Instruction 25 minutes	Log on to Geocaching.com using the facilitator's account. Then with the facilitator's guidance, do the following: • Identify geocaches near your meeting place and in • your community. • Understand coordinates, description, and hint. • Decode a hint. • Learn how to log a find.		7:25 p.m.
	Review the above material. With your parent's permission, create your own Geocaching.com account. Using that account or a leader's account, do the following: • Search for caches around the world. • Write and decode messages using the hint code.		
	Review the above material. With your parent's permission, create a Geocaching.com account if you don't already have one. Using that account or a leader's account, do the following: • Look at Waymarking.com and compare it to Geocaching.com. • Explore travel bugs and make one for your group. • Explore the Groundspeak.com discussion forums.		
Breakout Groups 15 minutes	• Practice patrol/team/crew skills as needed. • Plan a group duty roster for the upcoming main event.		7:50 p.m.
Game 20 minutes	Play Decode the Hint (described earlier).		8:05 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
	Total 90 minutes of meeting		
After the Meeting 15 minutes	Collect all GPS units and make sure they are turned off. Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.

GEOCACHING

Meeting Plan: Hide and Find a Cache

Week 4 Date_____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Play Leave No Trace Card Pick-Up to teach outdoor ethics and organization: • Take two decks of cards and scatter them all over • the room. • Have teams race to pick them up and put them in • numerical and suit order.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law		7 p.m.
Group Instruction 20 minutes	• Discuss different types of caches—regular, micro, nano, multi, virtual. • Explain how geocaches are hidden, including camouflage. • Discuss tracking a cache and what to look for. • Explain the Cache In Trash Out ethic.		7:10 p.m.
Skills Instruction 20 minutes	Examine a sample standard cache. Then do the following: • Make a list of what you would put in a cache. • Practice hiding caches around your meeting area. • Practice Cache In Trash Out.		7:30 p.m.
	• Review the above material. Learn about themed caches: • Examine sample micro and nano caches. • Hide a cache near your meeting place and list it on Geocaching.com.		
	Review the above material. Learn about advanced camouflaged caches. Then make a multi cache or puzzle cache.		
Breakout Groups 15 minutes	Finalize plans for participation in the main event.		7:50 p.m.
Game 20 minutes	Play Make a Cache Relay (described earlier).		8:05 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
	Total 90 minutes of meeting		
After the Meeting 15 minutes	Collect all GPS units and make sure they are turned off. Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.

GEOCACHING

Main Event: Local Caching

Date_____

Logistics

Location: _____

_____

Departure time: _____

Return time: _____

Duration of activity: 4 hours

Budget: Completed _____ Approved _____

Camping: Duty roster_____ Menu _____

Transportation: Group _____ Self_____

Tour and activity plan: Completed_____ Submitted _____

Essential (Tier I)

Day Activity

Spend a day finding caches in your area.

Equipment List	• GPS unit, one per group • Extra batteries for each GPS unit • Geocache information sheets from Geocaching.com • First-aid kit • Lunch (decide on individual or group) • Water • Cell phone (for adults) • Trash bags • Scout Basic Essentials (Review the list and take what you need.)
Activity	• Go to Geocaching.com and identify local caches; try to find a location with several caches within walking distance. • Travel to the starting point and divide into groups. • Have groups head in different directions and find as many caches as they can. • Practice Cache In Trash Out. • Have groups return to the starting point at a designated time. • Give a prize to the group that finds the most caches and collects the most trash.
Safety	Use the buddy system, and have a first-aid kit. Make sure you don't get lost in the dark. Cell phones are a good idea.

Notes

GEOCACHING

Main Event: Camp and Cache

Date_____

Logistics

Location: _____

_____

Departure time: _____

Return time: _____

Duration of activity: Overnight

Budget: Completed _____ Approved _____

Camping: Duty roster_____ Menu _____

Transportation: Group _____ Self_____

Tour and activity plan: Completed_____ Submitted _____

Challenging (Tier II)

An overnight campout where you find caches and do other activities

Equipment List	• GPS unit, one per group • Batteries • Geocache information sheets • Group and personal camping equipment • Food • Scout Basic Essentials (Review the list and take what you need.)
Activity	• Choose your camping site and event location. • Go to Geocaching.com and identify caches near the site. • Plan other activities as desired (hiking, boating, mountain biking, etc.). • Plan a camping duty roster and meal plan. • Spend part of a day searching for the caches identified earlier. • Hide the caches prepared during the last meeting.
Safety	Normal camping safety guidelines apply. Use the buddy system, and have a first-aid kit. Place a waypoint at camp so you can find your way back. Cell phones are a good idea, as appropriate.

Notes

GEOCACHING

Main Event: Geocaching Instruction Course

Date_____

Logistics

Location: _____

_____

Departure time: _____

Return time: _____

Duration of activity: Weekend

Budget: Completed _____ Approved _____

Camping: Duty roster_____ Menu _____

Transportation: Group _____ Self _____

Tour and activity plan: Completed _____ Submitted _____

Advanced (Tier III)

Spend a weekend setting up and running a geocaching course.

Equipment List	• GPS unit, one per group • Batteries • Teaching aids and displays • First-aid kit • Trash bags • Additional program supplies as needed • Group and personal camping equipment • Food • Water • Scout Basic Essentials (Review the list and take what you need.)
Activity	• Choose a location to teach geocaching and identify a group, such as a Cub Scout pack, to participate. • Visit the location in advance and identify cache locations. • Secure enough GPS units to meet the needs of the course. • Create cache markers. • Discuss instructor needs and create a staffing schedule. • Develop an emergency plan. • Place course geocaches or markers. • Provide geocaching instruction. • Teach Cache In Trash Out. • Take down the course as appropriate.
Safety	Normal camping safety guidelines apply. Have a first-aid kit and a plan in case participants need medical assistance. Identify possible risks of the course. Consider using two-way radios on the course.

Notes

RESOURCES AND REFERENCES

Books

Geocaching and *Orienteering* merit badge pamphlets

Boy Scout Handbook

Troop Program Resources

Organizations and Websites

Geocaching.com
Website: www.Geocaching.com

Cache UP NB about Leave No Trace geocaching
Website: www.cacheupnb.com/resources/guides/leave-no-trace-geocaching/

Cache Advance
Website: www.cache-advance.com

Related Program Features

Camping, Hiking, and Orienteering