

JUNIOR GEOCACHER BADGE – MEETING 1

Badge Purpose: When girls have earned this badge, they will know how to have a geocaching adventure.

Activity Plan Length: 1.5 hours

Time	Activity	Materials Needed
15 minutes	Getting Started <ul style="list-style-type: none"> Girls recite the Girl Scout Promise + Law. 	<input type="checkbox"/> (Optional) Girl Scout Promise and Law poster
15 minutes	Geocache Word Challenge <ul style="list-style-type: none"> Girls prepare for their adventure. 	<input type="checkbox"/> Word challenge game cards
30 minutes	Learning Coordinates <ul style="list-style-type: none"> Girls learn how to use a GPS receiver. 	<input type="checkbox"/> GPS receiver(s)
15 minutes	Trade Items <ul style="list-style-type: none"> Girls make a trade item. 	<input type="checkbox"/> Varies depending upon trade item chosen: string, beads, safety pins, craft foam, tape, glue, cloth/fabric, paper, coloring utensils, etc.
10 minutes	Snack Chat <ul style="list-style-type: none"> Girls enjoy a healthy snack while discussing what they have learned. 	<input type="checkbox"/> Healthy snack
15 minutes	Wrapping Up	<input type="checkbox"/> (Optional) Make New Friends lyrics poster

Getting Started

Time: 15 minutes

Materials Needed: (Optional) Girl Scout Promise and Law poster

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.

Activity #1: Geocache Word Challenge

Time: 15 minutes

Badge Connection: Step 1 — Prepare for your adventure

Materials Needed: Word challenge game cards

Prep Needed:



- Make copies of the word challenge header cards, terms, and answer cards. Cut out to separate cards. Keep a copy of the answers for yourself. Or, have a small group of girls make one or more of these categories in advance, decorated however they like.
 - If desired, use tape to put the term cards up on the wall in your meeting space, grouped under the appropriate heading cards. Otherwise, keep them in stacks on the table, still sorted by heading. Have a separate space to set out the answers.
1. Divide girls into small teams.
 2. If you haven't already, set out terms cards under their categories in one space and answer cards on a table somewhere else.
 3. Explain the rules: each team will take turns picking a category of initials, stuff to bring, stuff to find, or people and stuff to know. One team member will draw a card from that stack (or from the wall).
 4. If the group thinks they know what the answer is, they can answer it right away for two points. Feel free to coach them as much as needed.
 5. If girls aren't certain of their answer, they can go to the answer cards and find the answer they think matches.
 6. If they have it right, they keep both the term and the answer cards and earn one point. If not, the next group can try to answer.
 7. As the moderator, use the overall answer sheet with the longer answers to bring out the details or provide further explanations.

Activity #2: Learning Coordinates

Time: 30 minutes

Badge Connection: Step 2 — Learn to use a GPS receiver

Materials Needed: GPS receiver(s)

1. In order to be able to “geocache,” girls will need to be able to find these hidden locations! For this, they will use a GPS unit. These units work with satellites in the sky to pinpoint specific locations on Earth using coordinates. Coordinates are measurements called longitude and latitude. Longitude is where something is on Earth east to west and latitude is measured based upon the distance between the North and South Pole. These two coordinates will eventually cross (just like on a graph) and that specific location will give you a number that can be located by your GPS.
2. There are two ways to use a GPS unit, depending upon whether girls are “treasure hunting” or “treasure hiding.” The difference will be in how they use the coordinates. If they are treasure hunting, they will already know the coordinates they're seeking and can plug those into the GPS unit. If they are treasure hiding, they will choose their location and use the GPS unit to record the exact coordinates of their position so someone else can go and find it. These can also be saved into the GPS unit and marked as a “waypoint” (location).
3. Treasure Hunting: In order to find the treasure (geocache) girls will need to know the coordinates of the hidden object.
 - If these are not already saved in the GPS, you will need to manually put these in. Each GPS unit will be slightly different and you should follow the instructions provided with the GPS unit, but essentially you will perform the following steps:
 - O Turn on your GPS.
 - O Allow time for it to acquire satellite coverage.
 - O Using the menu options, “mark” the position that you are trying to find. Essentially, this is the same as entering an address into a car GPS except you are using numbers.
 - O Select the option to navigate to the location or “way point” and you will see a compass displaying on the screen pointing you in the right direction.
 - If the coordinates are already in your GPS, you can just jump straight to the navigate option and find your geocache.
4. Treasure Hiding: Hide a geocache and save the coordinates for someone else to find.



- Select the location where girls want to hide their geocache. It should be somewhere that is slightly hidden, yet easily accessible and does not compromise the safety of anyone hiding it or finding it (for example, do not place something where it would require someone to climb up into a tree to place it or retrieve it).
 - On your GPS unit you will want to use the option to “mark” the position you are currently in and save it as a waypoint. You can then navigate back to this with the GPS unit or record the coordinates so that someone else can find them.
 - It is sometimes helpful when you are hiding a geocache to use physical landmarks to help guide your treasure hunters. For example, you can provide the coordinates as well as a clue that the location is somewhere behind the sports field.
5. After reviewing the above GPS unit basics with the girls, ask them to find the GPS coordinates of three things near your meeting location. Items could be a neighborhood stop sign, a mark on the sidewalk or a girl’s favorite tree.
 6. Using the GPS units, girls should save the locations so that they (or someone else) can navigate to them again.
 7. You can also have girls practice hiding and finding geocache boxes in small groups. This will give the girls some great practice at being both treasure hunters and treasure hiders!
 8. Treasure hiders should hide their geocache, save the coordinates of the location and provide the treasure hunters with that information (and a clue, if desired).
 9. Treasure hunters should use the GPS unit and saved coordinates to locate the hidden geocache.
 10. Have groups switch roles.

Activity #3: Trade Items

Time: 15 minutes

Badge Connection: Step 3 — Make a trade item

Materials Needed: Varies depending upon trade item chose. Potential supplies include: string, beads, safety pins, craft foam, tape, glue, cloth/fabric, paper, coloring utensils, etc.

1. Before girls start out on a geocaching adventure, they will need to carry an item that they’ll leave at the geocache. This item should be small enough to fit inside the box and should not be expensive. Some common items are sports trading cards and small toys.
2. Brainstorm as a troop what kind of trade item your group would like to make. Trade items can be things that represent Girl Scouts, like a patch or a SWAP; something that represents the individual members of your troop, like a drawing or collage; or a simple piece of jewelry that someone can wear.
3. The girls will need to make a trade item for each cache they would like to find.
4. Safety tip: When making a trade item, remind girls to never include personal photos or information like names, phone numbers or addresses.

Activity #4: Snack Chat

Time: 10 minutes

Badge Connection: Questions link to multiple badge steps

Materials Needed: Healthy snack

While enjoying snack, here are some things for girls to talk about:

- Can you remember what some geocaching words are and what they mean?
- Where do you think would be a good location to hide a geocache?
- What additional preparation would you need if you were going geocaching in the winter, as opposed to in the summer?



Wrapping Up

Time: 15 minutes

Materials Needed: (Optional) Make New Friends lyrics

Close the meeting by singing Make New Friends and doing a friendship circle.

More to Explore

- Field Trip Ideas:
 - Attend a Geocaching Event and talk to the adventurers themselves. Girls can ask questions about geocachers' adventures and the cool things they have found.
 - Use a geocaching website to locate geocachers in your local area. As a group, head outside and see if you can find them.
- Speaker Ideas:
 - Invite a geocacher to your Girl Scout meeting.



Geocache Word Challenge

Use this sheet to match terms with girls' answers. The cards have very brief answers, so once the group has found the right match, you can give the more detailed answers below.

Initials

GPS—global positioning system: the system of satellites and software that lets us find our position

CITO—cache in trash out: leave no trash behind, and take as much of other people's trash as we can

FTF—first to find: no one has seen this cache besides the owner

TNLN—took nothing left nothing: signed in logbook if you neither took nor left a trade item

TFTC—thanks for the cache: signed in logbook as a thank you to the cache owner

Stuff to Bring

Water—a must for any hike or outdoor item to keep you cool and hydrated

Map and compass—even if you have a GPS unit, you should still have these to keep yourself safe

First aid kit—for taking care of minor cuts or injuries

Trade item—something small left in a cache that can be traded for something else in the cache; basically, what Girl Scouts call SWAPS

Whistle—a loud noisemaker for getting people's attention if you get lost

Stuff to Find

Geocache—a container hidden from view that contains a log book and possibly other items, and which can only be found by getting the coordinates and using a GPS receiver

Microcache—a very small geocache, usually a film canister or similar size

Geobeacon—an obvious marker or hiding place for a geocache. Caches rated as easy will be more likely to have large and clear geobeacons to look for, while difficult caches are much harder to guess where they are

Waypoint—a GPS coordinate saved in the unit so you can find it later. It is always a good idea to start by setting your starting place as a waypoint so you can find your way back again.

Travel bug—a small token found in a geocache and on a mission: once found, it can be taken and moved to a new geocache, hopefully closer to its goal (such as getting to Mexico and back, or visiting as many baseball fields as possible)

People and Stuff to Know

Buddy—what a Girl Scout never leaves without; always tell your leader where you are going and have one of these with you

Muggle—someone who is not “in the know” about geocaching

Coordinate—a set of numbers in latitude and longitude that give your exact position on the Earth



Terrain—what the land is like to walk on; easy terrain might be flat, smooth and dry, while difficult terrain could be hilly, rocky or muddy

Geocaching.com—the largest website of geocache listings. Find a cache on the website, go out and look for the cache, then log back in and record your experience online. Note: caches at Girl Scout sites are never posted on geocaching.com or any other public sites.

Headings

Initials
Stuff to Find
Stuff to Bring
People and Stuff to Know



Terms

GPS	CITO	FTF	TNLN	TFTC
Water	Map and compass	First aid kit	Trade item	Whistle
Geocache	Microcache	Geobeacon	Waypoint	Travel bug
Buddy	Muggle	Coordinate	Terrain	Geocaching. com



Answers—Basic

global positioning system	cache in trash out	first to find
took nothing left nothing	thanks for the cache	to keep you cool and hydrated
keep yourself found and safe	for taking care of minor cuts or injuries	what Girl Scouts call SWAPS
get people's attention if you get lost	a hidden container, found by GPS	a very small geocache
an obvious marker or hiding place	a GPS coordinate saved so you can find it later	a token moved between geocaches
always take one of these with you	someone who doesn't geocache	a set of numbers that give your exact position
what the land is like to walk on	the largest website of geocache listings	

