



## Junior Geocacher Badge Activity Plan 1

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

**Program Essentials Link:** Outdoor Awareness and Environmental Stewardship

**Fun Patch Link:** Geocaching

**Activity Plan Length:** 1.5 hours

**Girls Take the Lead:** While earning this award, there are many ways for girls to be leaders. These can be done by a small group or by individuals.

- Badge Buddies:
  - Before the meeting, talk to girls about the activities. Have buddies decide what they want to try or ask them if they want to try something different.
  - Buddies can assist adults with prep needed for activities.
  - During the meeting, they can help lead other girls through the activities. They should make sure everyone has what they need and feels included.
- Food Friends:
  - Talk to girls about what snack will be and how they can help.

**Customize It:** If your group wants to expand work on this badge or simply try different activities, go for it! There are many ways to earn this award, including: completing the activities as listed in the Junior Skill-Building Badge set for *It's Your Story—Tell It!*, completing two of these activity plans, attending a council-sponsored event or customizing activities. Pick the one(s) that work best for your group. Girls will know they have earned the award if:

- They have learned what is involved in a geocache adventure and are prepared for it
- They have learned to use a GPS receiver
- They have made a trade item—an item to leave at the geocache
- They have gone on a geocaching adventure

### Tips and Tools

- You will need a GPS receiver to do this badge. Many geocachers use a smartphone with a built-in GPS receiver. If you don't have a GPS receiver, and can't find or borrow one, contact River Valleys to see if GPS units are available for check-out.
- Check out ways to stay safe using Safety-Wise at [GirlScoutsRV.org](http://GirlScoutsRV.org).
- Ensure that your activities are accessible to everyone. Ask in advance if any special accommodations need to be made. If you have questions regarding specific adaptations, please contact River Valleys at 800-845-0787.

### Resources

- This lesson plan has been adapted from the Junior Skill-Building Badge set for the *It's Your Story—Tell It!* Geocacher Badge, which can be used for additional information and activities.

## Getting Started

Time Allotment: 15 minutes

Materials Needed:

- Optional: Girl Scout Promise and Law printed out on poster board

Steps:

1. Welcome everyone to the meeting.
2. Recite the Girl Scout Promise and Law. Use repeat-after-me or say it as a group if girls know it by heart.

<b>Girl Scout Promise</b>	<b>Girl Scout Law</b>
<i>On my honor, I will try:</i> To serve God and my country, To help people at all times, And to live by the Girl Scout Law.	<i>I will do my best to be</i> honest and fair, friendly and helpful, considerate and caring, courageous and strong, and responsible for what I say and do, <i>and to</i> respect myself and others, respect authority, use resources wisely, make the world a better place, and be a sister to every Girl Scout.

3. Play a game so girls get to know each other better. Use the example below, if needed.
  - Pile Up: Girls sit on chairs in a circle. Choose a leader who will have a list of “yes” or “no” questions, such as “Do you have on brown shoes?”, “Are you wearing a ring?”, “Is your favorite color purple?” As the questions are asked, those that can answer “yes” move one chair to the right. Those that answer “no” don’t move. Girls will end up “piled-up” on chairs.

## Activity #1: Geocache Word Challenge

Badge Connection: Step 1—Prepare for your adventure

Time Allotment: 15 minutes

Prep needed:

- Make copies of the word challenge header cards, terms and answer cards listed at the end of the activity plan. Cut out to separate cards. Keep a copy of the overall answers for yourself. Or have a small group of girls make one or more of these categories in advance, decorated however they’d 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.

Materials needed:

- Word challenge game cards

Steps:

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

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

Time Allotment: 30 Minutes

Prep Needed:

- Gather materials and supplies.

Materials Needed:

- GPS receiver(s)

Steps:

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.

1. 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).
2. 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:
    - Turn on your GPS
    - Allow time for it to acquire satellite coverage
    - 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.
    - 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.
3. 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.
4. 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.
5. Using the GPS units, girls should save the locations so that they (or someone else) can navigate to them again.
6. 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 hidings!
7. Treasure hidings should hide their geocache, save the coordinates of the location and provide the treasure hunters with that information (and a clue, if desired).
8. Treasure hunters should use the GPS unit and saved coordinates to locate the hidden geocache.
9. Have groups switch roles.

### Activity #3: Trade Items

Badge Connection: Step 3—Make a trade item

Time Allotment: 15 Minutes

Prep Needed:

- Gather materials and supplies.

Materials Needed:

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

Steps:

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

Badge Connection: Questions link to multiple badge steps

Time Allotment: 10 minutes

Steps:

1. 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 Allotment: 15 minutes

Materials Needed:

- Optional: Make New Friends printed on poster board

Steps:

1. Instruct girls to get into a Friendship Circle. Have girls stand in a circle and cross their right arms over their left, holding hands with the person on each side of them.
2. Sing "Make New Friends."

Make New Friends		
Verse One	Verse Two	Verse Three
Make new friends, but keep the old. One is silver, the other is gold.	A circle is round, it has no end. That's how long, I will be your friend.	You have one hand, I have the other. Put them together, We have each other.

3. After the song, ask everyone to be quiet.
4. One of today's Badge Buddies should start the friendship squeeze by gently squeezing her neighbor's hand with her right hand. Then, that girl squeezes with her right hand. One by one, each girl passes the

squeeze until it travels around the circle. When the squeeze returns to the Badge Buddy who started, she says “Goodbye Sister Girl Scouts” and the girls unwrap and face outward instead of inward.

5. Optional: Have girls make a wish after their hand has been squeezed and before they pass the squeeze along. Girls can also put their right foot out into the circle when they receive the friendship squeeze, so that everyone can see it travel along the 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 geocaches 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.

### **Suggestions**

Do you have any suggestions to improve this activity plan? Do you have ideas for other possible badge-earning activities? Please email [GirlProgram@girlscoutsrv.org](mailto:GirlProgram@girlscoutsrv.org).

### **Family Follow Up Email**

Use the email below as a template to let families know what girls did at the meeting today. Feel free to add additional information, including:

- When and where you will be meeting next
- What activities you will do at the next meeting
- Family help or assistance that is needed
- Supplies or materials that girls will need to bring to the next meeting
- Reminders about important dates and upcoming activities

Hello Girl Scout Families:

We had a wonderful time today learning about geocaching and are on our way to earning the Geocacher Badge.

We had fun:

- Preparing for a geocaching adventure by learning some geocaching basics and how to use a GPS receiver.
- Making a trade item to leave at a geocache.

Continue the fun at home:

- Let your Girl Scout show you and other family members how to use a GPS receiver.
- Create a photo hunt with your Girl Scout and kids in your neighborhood.
- Look through the *Girl’s Guide to Girl Scouting* with your Junior to find other activities you can try at home.

Thank you for bringing your Junior to Girl Scouts!

## **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**

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

**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	