

Junior Geocacher Badge



STEPS

- 1. Prepare for your adventure**
- 2. Learn to use a GPS receiver**
- 3. Make a trade item**
- 4. Go on a geocaching adventure**
- 5. Take part in a bug's travels!**

**When you've earned this badge, you'll know how to have a
geocaching adventure.**



Geocaching is your chance to be part global explorer, part detective. You'll search for treasure chests, known as "geocaches," using a device called a GPS receiver to find each chest's secret hiding place. Get ready for a thrilling adventure!

STEP 1: PREPARE FOR YOUR ADVENTURE

The goal of a geocaching adventure is to find a geocache, or hidden treasure box. You'll use GPS "clues" to uncover treasures that most people don't know exist. There are over one million hidden geocaches all over the world! Before you get started, get expert information.

What is Geocaching?

Geocaching is a high-tech treasure hunting game played throughout the world by adventure seekers equipped with GPS devices. The basic idea is to locate hidden containers, called geocaches, outdoors and then share your experiences online. Geocaching is enjoyed by people from all age groups with a strong sense of community and support for the environment.

Geocaching.com is the world's largest location-based gaming portal. Started in September 2000, by GPS enthusiast and web developer Jeremy Irish, the site now hosts more than 5 million geocachers and more than 1.3 million active caches. Geocaching.com offers an array of features for both new and experienced geocachers. If someone is new to this worldwide activity, www.geocaching.com will lead them through all the necessary steps for their geocaching experience. The site provides an in-depth tutorial for getting started, as well as instructions on finding geocaches through their app.

What is a Geocache?

There are many different types of geocaches, or caches for short. The four main types that you may come across on a typical geocaching trip are:

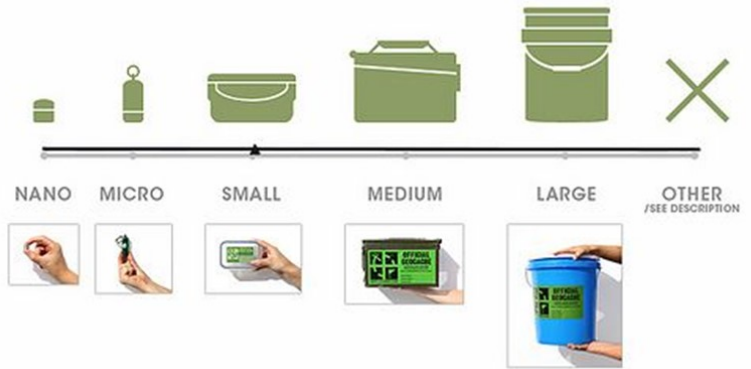
- **TRADITIONAL:** This is the original type of geocache and the most straightforward. These geocaches will be a container at the given coordinates. The size may vary, but at minimum all of these geocaches will have a logbook. Larger containers may contain items for trade and trackables.
- **MULTICACHE:** These geocaches involve two or more locations, with the final location being a physical container with a logbook inside. There are many variations, but typically once you're at the first stage, you will receive a clue to the whereabouts of the second stage. The second stage will have a clue for the third, and so on.
- **MYSTERY OR PUZZLE CACHE:** The "catch-all" of geocache types, this type may involve complicated puzzles that you will first need to solve to determine the correct coordinates. Mystery/Puzzle Caches often become the staging ground for new and unique geocaches that do not fit in another category.
- **EARTHCACHE:** An EarthCache is a special geological location people can visit to learn about a unique feature of the Earth. EarthCache pages include a set of educational notes along with coordinates. Visitors to EarthCaches can see how our planet has been shaped by geological processes, how we manage its resources and how scientists gather evidence. Typically, to log an Earth Cache you will have to provide answers to questions by observing the geological location. For more information about EarthCaches visit: <http://www.eartcache.org>

What Are The Different Sizes of Geocaches?

There are also many different sizes of geocaches. The chart below shows the different words used to describe the different sizes of geocaches:

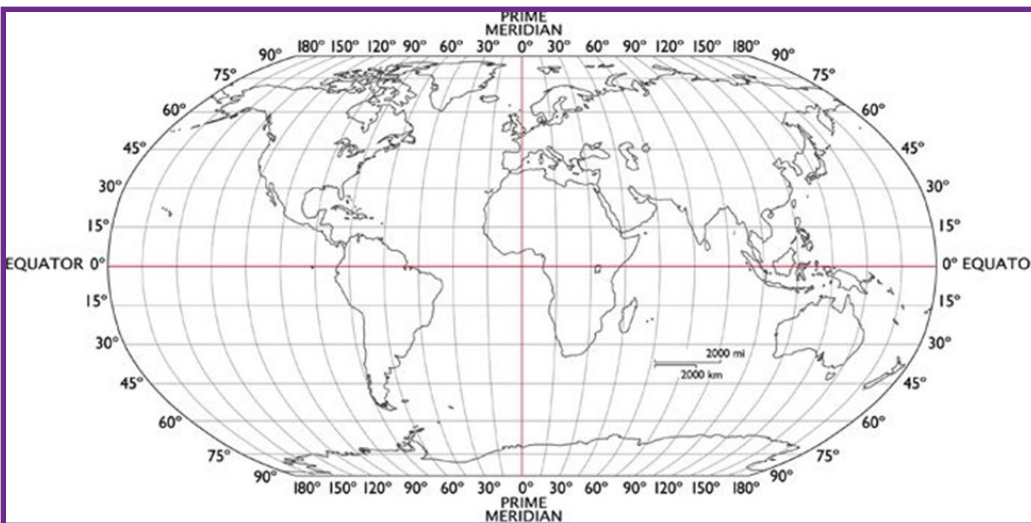
Photo credit: <http://www.creatingmycambridge.com/songs-creative/resources/geocaching-on-coldhams-common/>

What size is your geocache container?



STEP 2: LEARN TO USE A GPS RECEIVER

To find your way to a hidden geocache, you need to zero in on its “coordinates.” Coordinates are measurements called longitude and latitude. Longitude is where something is on earth east to west. Latitude is where it is between the North Pole and South Pole. Where these two meet gives an exact location. Practice!



First, we have to understand what a GPS Receiver is measuring! When you look at the maps in your classrooms, have you ever noticed lines that make little squares on the map? These lines are called Longitude and Latitude.

Photo credit: <http://germadnik.net/map-world-latitude-longitude-lines/>

LATITUDE: The lines that stretch horizontally across the globe. The middle Latitude is called the Equator, and all points of latitude are measured North and South from that line.

LONGITUDE: The lines that stretch vertically across the globe. The middle line of longitude is called the Prime Meridian, and all points of longitude are measured East and West from that line.

When trying to find a point or position on the Earth, you will need both a line of latitude and a line of longitude. The place where these two lines intersect is your position on Earth.

Find the GPS coordinates of three things. They could be a neighborhood stop sign, a mark on the sidewalk, and your favorite tree.

As you're learning to use your GPS receiver, learn how to do these useful things:

- Mark where you are
- View the coordinates of a location that's already entered
- View a set of coordinates on the map

STEP 3: MAKE A TRADE ITEM

Before you start out on an adventure, you need to carry an item that you'll leave at the geocache. This item has to be small enough to fit inside the box and should not be expensive. Some common items are sports trading cards and small toys.

As Girl Scouts we make something that can be traded all the time! SWAPS! So make a SWAP to put in the geocache! Here are some ideas:



STEP 4: GO ON A GEOCACHING ADVENTURE

Now it's time to get out there and find a geocache! With an adult, log on to a geocaching website and create a screen name for yourself. Find out how many geocaches are within a 25-mile radius of where you are.

Make it a hiking adventure. Get out of your community and into the wild. Track down a cache that is a little bit off the beaten trail. Maybe you can explore a new place you have always wanted to visit, and pack a picnic!

STEP 5: TAKE PART IN A BUG'S TRAVELS!

A Travel Bug® travels from cache to cache—sometimes all across the world. Each bug wears a “tag” with a special number. When you enter the number on geocaching.com, you can see everywhere the bug has gone. Whoever hides the bug decides where they want it to travel, called a goal. When a geocacher finds the bug in a cache, they move the bug to help it reach the goal.

Make a bug go around the world. Get a Travel Bug® and make its goal international travel. You could write “Please take me to the Great Wall of China” or “This bug would like to take a tour of London.”

- Inexpensive bugs can be purchased here: shop.groundspeak.com
- Log onto www.geocaching.com/track/howto.aspx and follow the instructions for “Dropping off a Travel Bug®”
- Answer to common questions can be found here: www.geocaching.com/track/faq.aspx