



Mapping Your Nearby Nature

Welcome cartographers! A cartographer is a person who makes maps. You are going to be a cartographer too, and you are going to make a map of your natural area. Your area can be a grassy spot, a backyard, or a nearby park.

This activity guide consists of the following parts:

1. Main Activity (pages 1 - 6)

Instructions on how to do the main activity in the video as well as some fun **challenges** for mapping your nature area.

2. Extras Ideas and Resources (page 7)

If you like exploring maps, there are **extra activities and challenges** you can try to take your map making further!

Main Activity: Mapping your Nature Area

Step 1: Pick your nature area

You are going to use a map to explore a nature area, so first you need to find a nature area that you can visit easily. Your nature area does not need to be deep in the woods or on a wild river. You can easily find nature in a yard, on a sidewalk, or even in a parking lot!

Once you pick the area that you are going to study, you can grab the tools that you need.

- **Paper**
 - Last week we made a journal which you can use for your map. Check out that activity here - <https://imagoeearth.org/video-lessons-2/>
- **Pencil**
- Clipboard or book (optional) - this is not necessary but it makes drawing your map easier.
- Ruler (optional) - this is also not necessary but it's nice to have if you want to draw straight lines.

Now that you have your nature area and your tools you are ready for step 2.

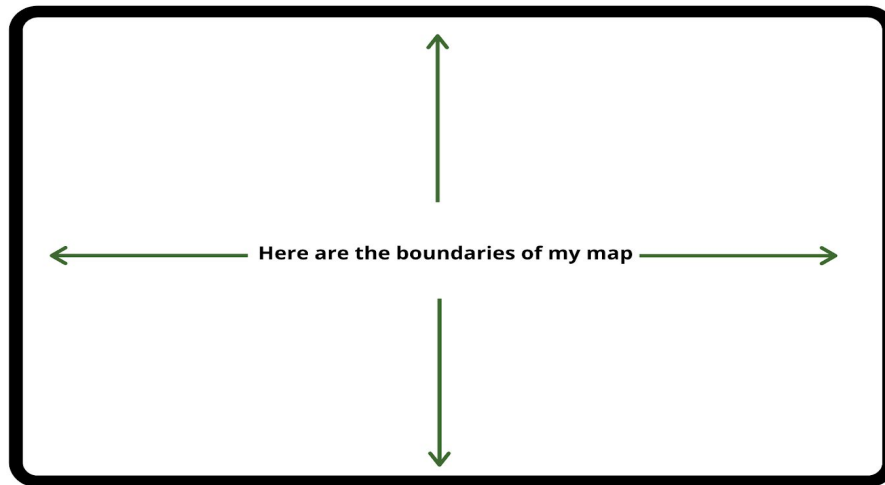


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Step 2: Draw your boundaries

Take a look at your nature area, pretend that you are a bird flying high above it. What shape is it? Is it a rectangle like a parking lot? Or is it more of an oval? Pick that shape to be your boundaries. In the video, I picked a rectangle.

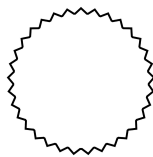
Now draw that shape on your paper, that will be the edge of your map



Step 3: Map out the main landmarks

To use your map, you want to be able to find the main features in your nature area. These are things that really stand out and won't move, like a tree, a telephone pole, or a sidewalk. They should be relatively large and easy to identify.

Now make a symbol for each one. For example, in the video I had 5 trees that stood out in my nature area. I made a bushy symbol for my trees like this:

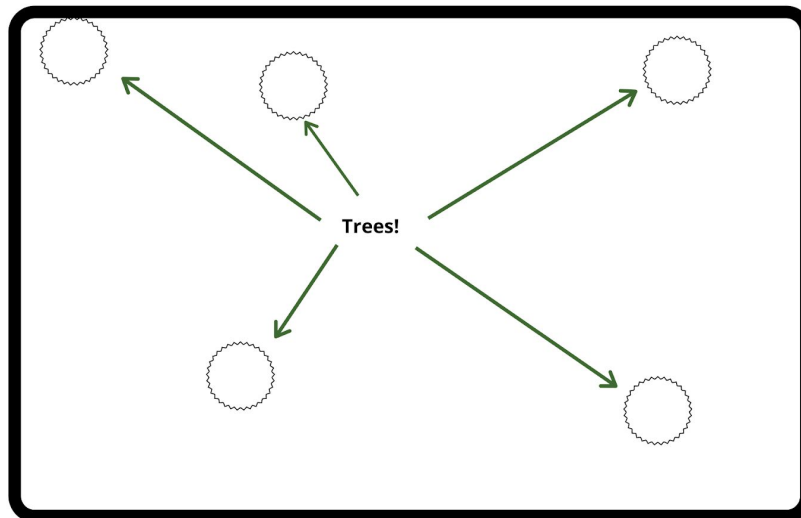


Tree symbol

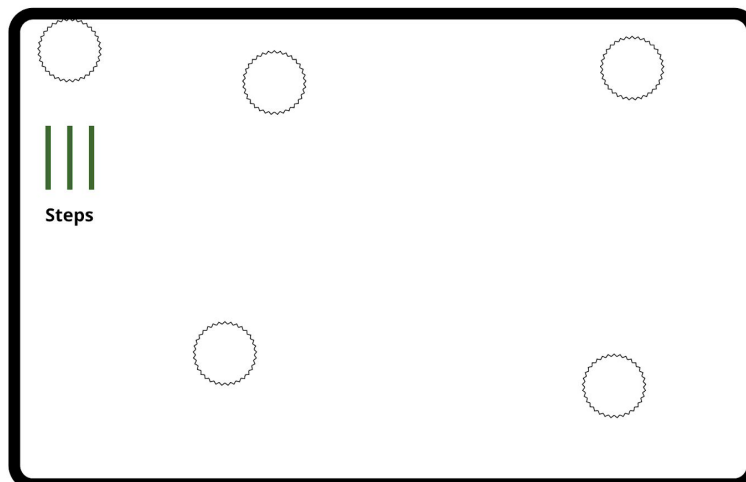


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Now that I have a symbol for a tree, I can add that symbol on my map everywhere there is a tree.



You can use as many landmarks and symbols as you want. In the video I had trees and steps as my main landmarks. For the steps, I used three lines that looked like steps.



Step 3 continued: Time to add your legend

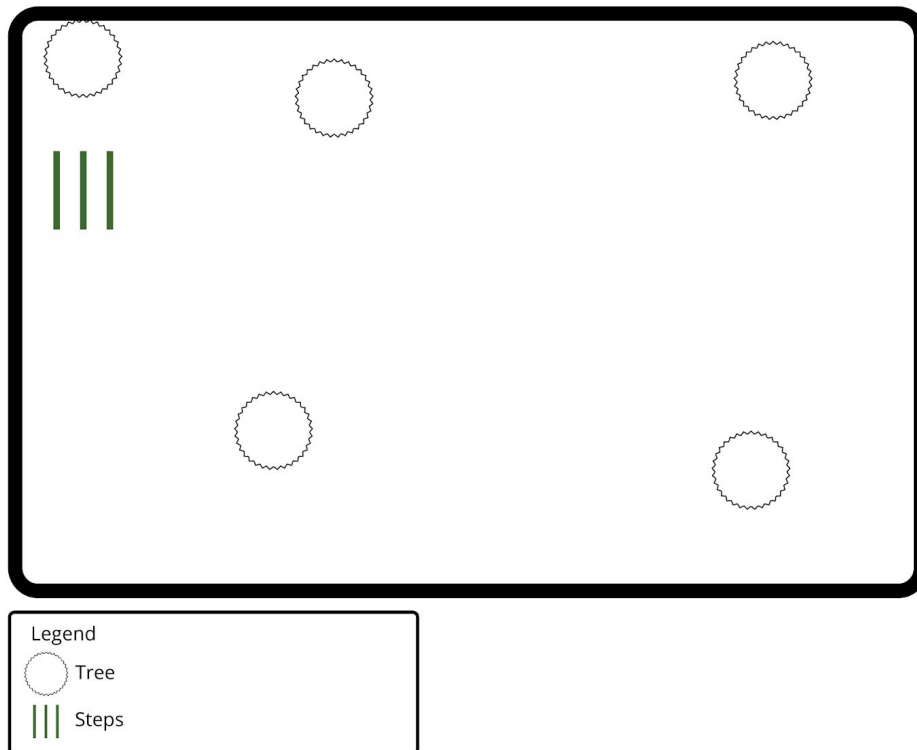
Ok, so you have your main landmarks and you made symbols for them on your map. Now you need to be able to show what those symbols mean.



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To help with that, we make a **legend**. The legend is a spot on your map, usually off to the side, that explains what each symbol on your map represents.

Here's my map, with a legend



Step 4: Explore!

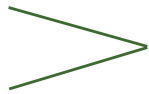
Now that you have your map, your landmarks and your legend, you are ready to explore your nature area. We have some fun challenges you can try with your map below.

Let's start with a simple one, a **sound map**. For the sound map you are going to pick a quiet spot in your nature area and you are going to be still and listen for one minute (or more). When you hear a sound, add that sound to your map with a symbol. Put that symbol where you think the sound came from.



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You can make your symbol anything you want. Here are a couple of examples.

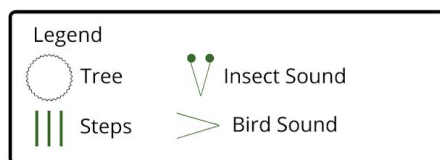
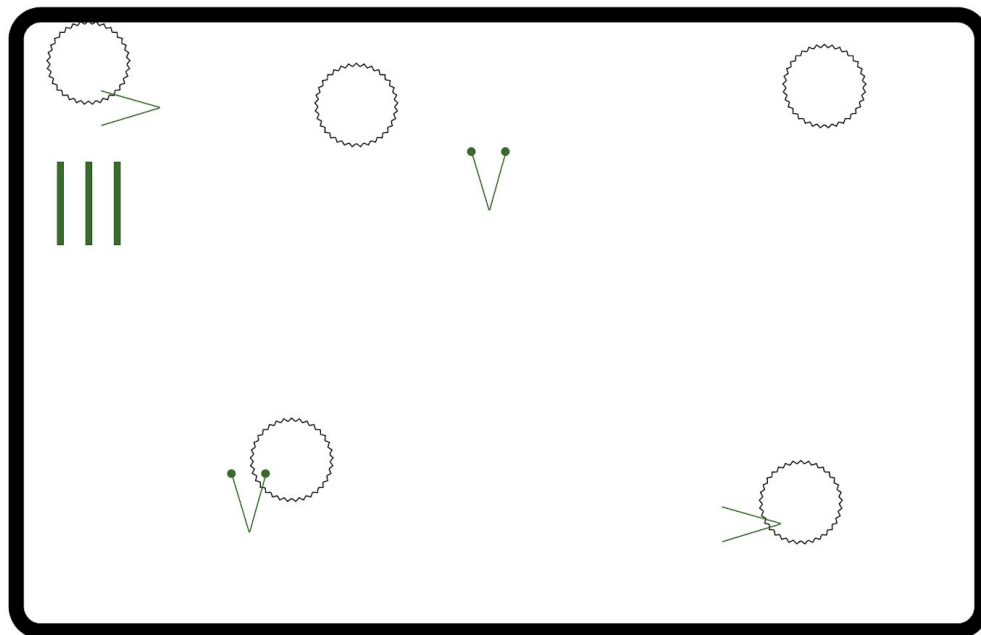


Bird Sound Symbol



Insect Sound Symbol

And here's my map with my sound symbols on them. I used the symbols to mark where I heard the sound on my map. I also added the symbols to my legend.





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That's it! You made a sound map of your nature area. Go to the **challenges** section below to see other challenges you can do with your map.

Challenges

Here is a list of fun challenges and explorations you can look for in your nature area. Grab your map and a pencil and get ready to explore.

Challenge 1: Map your Senses

Use your map to mark what you HEAR, what you SEE, what you FEEL, and what you SMELL. You can have a different color for each sense. Go back the next day and see if those areas on your map have changed? If they've changed, think about what changed about them and why?

Challenge 2: Make a Mini Map for an Ant

Now pretend to shrink yourself waaaayyyy down to the size of an ant. You can map an ant-sized nature area. The landmarks on your map will probably change. Maybe instead of mapping a tree, you are mapping a twig on the ground, a tall flower. Landmarks can be pebbles, sticks, plants and other things that would look huge to an ant.

Now pretend that you are giving your map to an ant. Could she find her way around?

Challenge 3: Treasure Map

Hide something fun in your nature area and then mark it on your map with an "X". Give your map to another person and see if they can find it! You can take turns hiding things on the map so that each person can have a chance to hide and find.



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Extras

Ocean Animal Map - In the video, we showed a map of shark locations in the Atlantic Ocean. You can check this website to see scientists tracking sharks, dolphins, turtles and other ocean animals. <https://www.ocearch.org/tracker/?list>

Scale - We use scale on a map to show how the sizes of things on our map relate to their sizes in the real world. This video does a great job of introducing this sometimes confusing concept. <https://www.youtube.com/watch?v=hyEb12jpQbw>

Google Earth - Google Earth is a free world map that you can use to explore any spot in the world. To check it out

1. Go to google.com/earth
2. Click on the "Launch Earth" button
3. After a few seconds you'll see your first map.
4. For fun explorations click on the "Voyager" button on the left hand side of the screen and you can see different explorations that have been created on Google Earth.

Also on Google Earth - Google Earth has a fun mystery caper featuring Carmen Sandiego. You use clues to explore places on the map and see if you can capture a master thief. To check it out

1. Go to google.com/earth/education
2. Scroll down to "Where on Earth is Carmen Sandiego"
3. Click on the "Good Luck Gumshoe" to get started