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Assessing Community Need & Potential Resources
During this activity, students will explore their communities to:
• Learn about the geography, characteristics and features of their local area;
• Witness the interconnected nature of their community for people, animals and the environment;
• Determine areas of need for people, animals and the environment; and
• Identify potential resources that may support efforts to meet community needs.

Find the complete Roots & Shoots Formula and Community Mapping 101 at rootsandshoots.org/educators.

Part One: Investigate Your Community
In advance; discuss the importance of knowing your community. As a group, talk about what they see on the way to school. Imagine looking at the community from a bird’s eye view and discuss the following topics:

1. Are there any major intersections near your school?
2. Notice the cars and people walking outside, imagine where they are going and what they do to have fun, where they work, eat, sleep etc.
3. Do you see animals, wild or domestic? Where do they go during the day? Where do they get their food, where do they play or go when they are sick?
4. Do you see any plants or trees on your way to school? Who waters them and how did they get there? What makes them important to your community?

Part Two: Hand Drawing Your Map
Draw, download or purchase a map of your city. Look at a two to five mile radius around your zip code. Draw the points below onto the paper image of your map! If you want to skip hand drawing your community map and prefer to Go Digital (see below: “Technology Lesson”) then use this document as a guideline for designing your map using Google My Maps.

Start Adding Points!
Map points for People, Animals, and Environment. There are two types of points to map, Characteristics and Resources, below are some suggestions to get you started. Remember you might want to share your map publically so don't mark your home or your classmate's homes.

<table>
<thead>
<tr>
<th>Human Characteristics</th>
<th>Animal Characteristics</th>
<th>Environmental Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mark your school/work</td>
<td>• Are there any endangered species in your area? Mark these and write the name.</td>
<td>• Mark the wild spaces in your community, for example areas of forest, prairie and desert.</td>
</tr>
<tr>
<td>• Highlight major streets that run through your community and routes you commonly take</td>
<td>• Mark important areas for domestic animal use (dog parks, dog friendly hikes etc.)</td>
<td>• Mark any bodies of water, ocean, rivers, lakes, etc.</td>
</tr>
<tr>
<td>• Mark areas of fun and enjoyment</td>
<td>• Mark areas where you have seen wild animals. Next to the mark, list the types of wild animals you have seen.</td>
<td>• Mark major environmental characteristics like mountain ranges, beaches, etc.</td>
</tr>
<tr>
<td>• Mark areas that are important to the human community such as: libraries, community centers and places of worship</td>
<td>• Mark any zoos and aquariums in your area</td>
<td></td>
</tr>
</tbody>
</table>
Look at your map and identify areas of improvement for your community:

- One quality your community could improve to make it a better habitat for people.
- One quality your community could improve to make it a better habitat for animals.
- One quality your community could improve to make it a better environmental habitat.

Use this knowledge to pick one area that you feel you can make the biggest impact! This will be your long-term Roots & Shoots campaign.

You could even use one of the layers in your digital community map to mark all the areas of improvement in your community. This way you can record all the identified issues even though your Roots & Shoots campaign will focus on only one. Find out more at rootsandshoots.org/takeaction.

**Example:** Ms. Gossett led her class of first-grade students in first mapping a major highway and large bodies of water as reference points for mapping the school and other community features such as: a local state park, the YMCA (where many students play ball) and two local wildlife refuges, among others.

Look at your map and identify areas of improvement for your community:

- Mark where you get your food from. (grocery stores, farmer's markets, favorite restaurants, etc.)
- Mark the closest hospital/clinic
- Mark shelters and food banks
- Mark the closest fire station
- Mark the closest police station

**Example:** Ms. Gossett's first grade classroom in Sebring, FL mapped a number of Florida Black Bears coming into areas populated by people in the community. They saw that people don't always know what to do when they see a black bear around and decided to build awareness around black bears and how to safely co-exist with them.
Part Three: Go Digital!

Google My Maps lets you quickly and easily make beautiful maps, and share them with students, teachers and communities. With this tool, you have the ability to:

- import data from a spreadsheet, or simply draw and add points of interest, lines and shapes.
- style the points and shapes on your map, and choose from nine base map styles.
- share and collaborate on your map with colleagues or students and embed it on your website and in your Roots & Shoots project profile.

Technology Lesson

- Open up Google My Maps (google.com/mymaps) to transform your map into a digital masterpiece!
- Here are some helpful videos that you can use as reference for My Maps in addition to this tutorial (note: these videos were made for an earlier version of My Maps, but the basic functions remain the same):
  - Fundamentals of Google Maps Engine Lite
  - Customizing and Sharing Your Map
  - Visualizing Your Data with Google Maps Engine Lite

Tip: Get Organized! We’ve found it to be very helpful to organize and upload any photos or videos prior to starting your map. You will need to upload them to a web photo/video service such as Picasa, Google+, SmugMug, YouTube, etc., you will not be able to upload them directly from your computer, tablet or smart phone into the map.

Before you start: In order to use My Maps, your students will need a Google account. In the United States students must be 13 years old to have an account. If outside the US please check your country’s age requirements. If your students are younger (or if you don't want to require them to create a Google account for security or privacy reasons), you can create a group dummy Google Account with a shared password that they can all use at the same time.

Create a new map

1. Log in to your Google account.
2. Go to Google My Maps: google.com/mymaps

3. In the welcome pop-up, select Create a new map.

4. Click the text “Untitled map” to edit the map title and description. For example:

5. Click Save to see your changes in the left-hand panel
Title your layers

Click the text **Untitled layer** to edit the map layer. You can create up to five layers of data. For the R&S community mapping exercise we recommend titling the first three layers People, Animals and the Environment so they match your existing categories. We have some suggestions for how you can use the remaining two layers when you get to **STEP 3: Take Action**, find these at rootsandshoots.org/takeaction.

![Edit layer name](image)

**Tip:** When adding points/lines/polygons to the map, be sure you have the desired layer selected.

Add your first location to the map

1. You can either use the search bar to search for the location of a place or you can browse the map to find the place yourself. Or if you have already found the location on the map, you can simply add the point by hand.

In this example, let’s search for Happywoods Dr. Using the search bar, type in “Happywoods Dr.” click the magnifying glass icon. If the search result is correct, click it and click “Add to Map”.

![Search bar](image)

![Add to Map](image)
If browsing the map, click the placemark icon under the search bar and then click the map where you want to add the placemark.

To delete unwanted placemarks, click on them, then click on trash icon in the lower right corner of the placemark bubble.

2. Give your placemark a title and description. Click on the placemark, then click the pencil at the bottom right of the infowindow, next to the trash icon, to switch to editing mode. Add a title and describe the location. Then click Save.
Add photos and/or videos to your placemark

Click on the camera icon in the bottom right corner of the infowindow. Then you will be able to choose images from:

- **Google Image Search**: You can simply type in a search into the search box and the window will populate with example images from Google images.
- **URL**: If you find a specific image you would like to use, you can copy and paste the URL of the image you would like to use.
• **Video search**: You can simply type in a search into the search box and the window will populate with example videos to choose from Youtube.

Adding your own photos with a URL:

1. Upload your photos to your favorite web photo service such as Picasa, Google+, Flickr, SmugMug, etc.

2. Make the photos public. Here is an image of what this looks like on Google+, it will be different on different services.

3. Open the picture and right click/ secondary click on the image to open a dialog box and click on Copy Image URL to copy the URL.

4. Return to your My Maps photo info window, click URL and Paste the URL into the box.
Add more locations to the map

You can add points, lines or polygons to illustrate your human, animal and environmental characteristics:

- **Points (or “placemarks”):** represent a very specific place on the map (a city or town, a school, library, etc.)
- **Lines:** represent a path or route (a running path, a drive, a river, an animal trail etc.)
- **Polygons:** present an area (a country, a neighborhood, the grounds of a place, a park, etc.)

Let's try adding a line next!

**Adding a line**

1. Add a line to represent a path or route. Click on the line tool under the search bar in order to start drawing a line. Click on the map to draw the line. Double-click the last point of the line to stop editing.

In this example, let's draw around Lake Josephine to show the animal trail that exists there.
Don't forget to give your line a title and description!

2. Add a polygon to represent a neighborhood, the grounds of a place, a park, etc. To start drawing a polygon, click on the line tool under the search bar. Once you're finished drawing the polygon, click on the first point you drew in order to complete it.

In this example, let's draw a polygon around where “Lake Wales Ridge National Refuge”.

Tip: Navigate to the place you'd like to draw a polygon around in Google Maps using the search or browse options. Make sure you can see the extent of the area in your map view before starting to draw your polygon.

Don’t forget to give it a title and description, and add photos and videos to your lines and polygons!
Style the map

1. To change the icons of a placemark, hover over the bear sighting item in the left hand panel and click on the paint can.

You can change the color or shape of your placemark, or click more icons for more options!

The icon will be updated on the map and in the lefthand panel.
2. Change the color and appearance of your polygons and lines. Hover over the item in the lefthand panel and click the paint icon to edit.

3. Add labels to your map. In the lefthand panel, click on Labels and then select the name column to give your placemarks labels.

Tip: If you add labels to your map, this will override any individual icons you've already set up.

Choose your base map

In the lefthand panel, locate the “Base map” section and click the downward facing area to the right. You will have a choice between nine base maps.

Tip: You can upload your own custom icon to use! Similar to adding a photo, you will need to enter an image URL at the bottom of the more icons info window. If you want to use some fun icons created by Roots & Shoots, visit rootsandshoots.org/mapping. If you are creating your own, an image size of 32x32px works best!
Share your map

Click on the green Share button at the top righthand corner to share your map.

1. Share the map with your teacher, classmates and neigh-BEARs by adding their email addresses.

**Tip:** When you Share your map with other teachers, students or friends you can choose whether they are able to just view the map or if they can also edit the map. This function can be used to let students collaborate in building the map. You can even test their observation skills by having them build the map from memory to start.

2. Share your map link on Social Media by clicking on the Google+, Facebook or Twitter buttons.

3. Share and Embed your map on your Jane Goodall’s Roots & Shoots Project Report.
   a. Change your Privacy Settings to Public.
b. Click on the folder button on the top left right below your description, and choose embed from the dropdown menu.

Sharing settings

Visibility options:
- Public on the web
  Anyone on the internet can find and access. No sign-in required.
- Anyone with the link
  Anyone who has the link can access. No sign-in required.
- Specific people
  Only people explicitly granted permission can access.

Access: Anyone (no sign-in required) Can view

Save Cancel

c. Copy the Embed code and paste onto the Create Project form at rootsandshoots.org/createproject

Embed this map

To embed this map in your own website, copy the following HTML and paste it in the source code for your page:

```
<iframe src="https://mapaengine.google.com/map/embed?mid=zppMymZjvM6Y.kfo90QvU7gIM" width="640" height="480"></iframe>
```

OK
Start Your Campaign

✓ Plan your project! Visit www.rootsandshoots.org/getstarted to get some project planning tips and enter your project idea.

**Example:** Ms. Gossett’s class decided to launch a Be Bear Aware Campaign that includes awareness activities at a local PTO Hoedown like: making bear cupcakes, handing out bear safety brochures and having community members mark bear sightings on the community map. In the future they are hoping to make trash can labels to remind people to keep their trash bear safe.

✓ Be counted! Update your project report www.rootsandshoots.org/createproject with your campaign outcomes.

✓ Visit www.rootsandshoots.org/takeaction for some ideas on how you can use your digital community map throughout your Roots & Shoots campaign.

✓ Celebrate Your Impact! Visit www.rootsandshoots.org/getstarted for some ideas.