

MAPPING & ORIENTEERING



INTRODUCTION

The Gunflint Trail is large, wild space. Many people use maps to navigate the woods and lakes of the Gunflint Trail. On the Gunflint Trail, people use maps to determine distance between places; routes of roads or trails; locations of hills, valleys, houses, and businesses; and much more.

A map is a drawing that represents a real place. A map rarely shows an area of land that's actually visible. Instead, a map uses a system of symbols to represent the land. Rather than drawing something that really looks like a road or a trail on maps, mapmakers instead draw a line on the map to represent the path of that road or trail.

Mapmakers use many different symbols to represent real things. They might also use different colors to represent the different types of things. For example, mapmaker might use the color blue to represent water and the color brown to represent land. Mapmakers always include a guide, called a key or legend, to the symbols they use on their map.

Mapmakers work carefully to accurately represent the distance between places on the map. A mapmaker's job is to shrink an area of the world onto a piece of paper.

ACTIVITY

Pull the sample map out of the pack. Look at the map carefully; now see if you can answer these questions:

What color is water on the map?

What color is land on the map?

How do roads and trails look different on the map?

Where is the key on the map?



WHAT'S IN THE MAPPING & ORIENTEERING ACTIVITY BIN:

- 2 Compasses
- Chik-Wauk Hiking Trail Map
- Inflatable World Globe
- Colored pencils, markers, and pens
- Drawing Paper
- 3 Clipboards
- 2 Drawstring Backpacks

NOTES FOR MAP ACTIVITIES:

- Length of activity depends on how long of a hike you take!
- Please do not remove this bin from Chik-Wauk grounds
- You may use the backpacks to bring items for the "Make Your Own Map" activity with you on the Chik-Wauk nature trails.
- If using the bin outside on Chik-Wauk grounds, check out pack at museum front desk.

IT'S ABOUT PERSPECTIVE

You've probably noticed that maps don't really look like the world you see. Instead, maps show us the way the world appears if you look down from the sky. This perspective is known as a "bird's eye view" because it shows how the earth appears to a flying bird.

The world looks very different when you're looking down at it. It's easier to see the outlines of roads, buildings, trails, and lakes. You only see the tops of things, making it difficult to see the locations of hills and valleys. Because maps make the world look flat, mapmakers use squiggles known as "topography lines" to show where land goes up, or down.

ACTIVITY

Find a small area outside that you want to draw. We suggest sitting at picnic bench in front of the museum for this activity. Pretend you're a flying bird. What would you see if you flew over the place you've chosen to draw? What would trees, picnic benches, and buildings look like when you looked down at them?

Use the supplies in the pack to draw the place as though you were looking down at it. If you prefer, draw a different place that you're familiar with – like your bedroom – using a bird's eye view.

WHICH WAY?

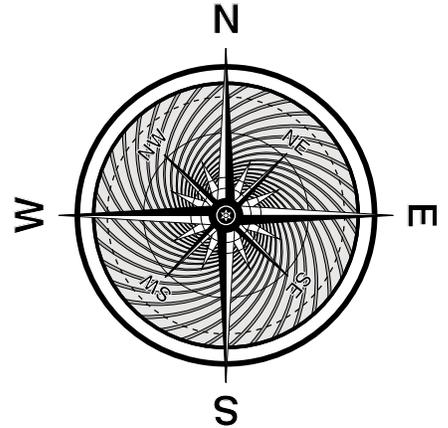
*We use four main directions to understand where we are and where we're traveling:
north, east, south, and west.*

The symbol on this page is called a compass rose. It shows how these four directions are laid out in relationship to each other. By looking at the compass rose you can tell that if two people were standing next to each other and one person started walking north and the other person started walking south, those people would be going opposite directions. They would also be headed opposite directions if one walked to the east and other headed west.

On a globe of the world, north is the direction you'd travel to reach the top of the globe, while you'd travel south to reach the bottom of the globe. To circle the middle of the globe, you'd travel either east or west.

Here's a funny saying that will help you remember which way each direction is: "**N**ever **E**at **S**limy **W**orms." When you start at the top of the compass rose and work around clockwise (think of which way clock hands move around a clock when telling time), the first letter of each word in the saying is the same as the first letter of next direction you'll find as you move around the compass rose. **N**ever = **N**orth, **E**at = **E**ast, **S**limy = **S**outh, and **W**orms = **W**est.

To use a map properly, it's important to identify each direction. If you think you're facing south, but you're actually facing north, you'd be using your map upside. You might end up lost!



ACTIVITY

(Find an activity on the other side of this page!)

ACTIVITY

Take out the compass and Chik-Wauk hiking trails map out of the pack. A compass is a special tool that tells you where north is.

The red arrow floating in the center of the compass always points north. When you line up the floating arrow with the red arrow outline, the compass shows where each direction is in relationship to your current location.

Hold the compass flat in your hand and twist the compass so the red arrow outline lines up with the floating red arrow. Move so you're facing north.

Now open the Chik-Wauk hiking trail map. Make sure that the north arrow on the map's compass rose is pointing straight in front of you.

Look at the map and determine your location on the Chik-Wauk grounds. From where you are now, which direction would you walk to reach the Amikwiish Hiking Trail? How about if you wanted to reach the Moccasin Hiking Trail? Depending on your location, you might have to go more than one direction before you reach these trail heads!

DID YOU KNOW: You don't always need a compass to judge direction. Sometimes you can use the sun.

Because the sun always rises in the east and sets in the west, on sunny days, especially in the early morning and late afternoon, you can use the sun's location in the sky to know where east and west are. However, at noon, when the sun is the middle of the sky, it's tricky to use the sun as a guide. That's why most people depend on compasses.

MAKE YOUR OWN MAP!

It's time to put your new mapmaking skills to work.

ACTIVITY

Grab the activity pack and take a hike on one of Chik-Wauk's hiking trails. Once you're on the trail, try not to look at the Chik-Wauk hiking trail map. As you hike, observe the trail carefully – you'll make your own map of the trail when you finish hiking. As you walk, make some notes, such as what direction you're facing at the start of the hike, interesting things you see along the way, or any big hills or valleys you hike up or down.

Now sit down in a quiet spot and use the supplies in the pack to draw your own map of the trail. You decide what's important for people to know about the trail if they used your map to guide their hike. Remember, most people pick up hiking maps because they want to know where the path goes and how long the hike takes. Don't forget to draw a key to all of your symbols so other people will know what your map represents.

Now pull out the map of the Chik-Wauk hiking trails. How does your map differ from the Chik-Wauk map? Are there things from the Chik-Wauk map that you wish you'd put on your map. (Psst . . . it's not too late to add them!) Are there things from your map that you think should be on the Chik-Wauk map? One of the great things about maps is that they can show the exact same thing but look completely different!

WE HOPE YOU ENJOYED USING THIS ACTIVITY PACK!

You can keep the drawings you made using the activity bin, but please put everything else back into bin and return the bin to the museum front desk. Thank you!