NAVIGATION TOOLS: Know and Communicate Where You Are

**ASK**

Have you ever been lost? Maybe you know someone who has been lost. It can be scary and even frustrating to not know where you are. There are many important reasons you need to know your location. How can you know where you are? How can you communicate where you are? In this section, you will learn about geographic positions along with ways to determine and communicate where you are.

**WHERE YOU ARE**

There are a lot of reasons you need to know your location. When you are lost in travel, you need to be able to figure out your current location. When you encounter danger, one of the first things you need to communicate to rescue workers is where you are. There are probably many times when you need to tell your parents, teachers, and friends where you are and where you are going.

We often use the name of the place to answer the WHERE question. For example, one could answer: ‘I am in Champaign, Illinois’. If one needs to be more specific, then she/he might use the street address such as the intersection of Sixth and Green streets in Champaign. Yet, there might be circumstances, when the name of a place or street address may not be available. In such circumstances, you may need to communicate your current location using landmarks, compass directions, or geographic positions.

**INVESTIGATE: HOW TO KNOW WHERE YOU ARE**

Besides the name of the place or street address of your location, how can you know where you are?

**Maps:** Thanks to a famous Greek astronomer named Ptolemy, we now have maps to help us find where we are and how to get to other places. (See “Roadmap Reader” to learn about different kinds of maps.)

**Compass:** A magnetic compass can help you determine your general location and direction. A compass reveals cardinal directions which include North, South, East, and West.

**Geographic Position:** Geographic position is a location on Earth’s surface given by a standard measurement system such as latitude and longitude. Everything you see on the Earth’s surface is a geographic object that has a geographic position. A geographic object can be as small as a blade of grass or as large as a whole continent. GPS and GIS technology are used to determine geographic position. (See “What is GPS?” and “Intro to GPS”.)

**Landmarks:** Landmarks are prominent objects or features of the land that help identify its location. These might be manmade, such as a historic marker or a natural feature, such as a noticeable hill.

**Senses:** Your senses can help determine where you are. Use them to describe what you see, hear, smell, etc. By using your senses, you will be able to notice important landmarks, sounds, and smells which can establish your location.

**Sun, Moon, Stars, and Planets:** History tells us that people have used the sun, moon, stars, and planets to determine their location and direction for traveling. This is called celestial navigation.
CREATE: COMMUNICATE WHERE YOU ARE

Choose a place in your community that you would like to explore for this activity.

Go to that location and spend some time looking around. How would you describe this place? Use any method listed above to describe where you are.

Take notes to describe this location. Without saying the name of the place or the address, use your notes to describe this location to another person.

DISCUSS

- What method or methods did you use to describe the location?
- Was the other person able to identify the location you were describing? Explain.
- Why is it important to know where you are?
- Why is it important to be able to communicate where you are?

REFLECT

- What did you assume when you were describing the location to someone else?
- Would your description need to change if you were talking to someone who doesn’t live in your community?
- What other methods can be used to know where you are?
- What method or information would you like to study further, for example, celestial navigation, Ptolemy, cardinal directions, or how a compass works?