POWER BASICS®

World Geography

Robert Taggart

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Table of Contents

UNIT 1

Geography and Maps

LESSON 1: Geography and Maps

GOAL: To learn the special terms and symbols of geography and to use them to get and understand information from maps

WORDS TO KNOW

climate map	international date line	population
coast	key	population map
compass rose	land use map	prime meridian
continents	landforms	product map
degrees	latitudes	rainfall map
due	legend	resources map
elevation map	longitudes	road map
equator	maps	scale
globe	meridians	sphere
hemisphere	oceans	
hydrographer	parallels	

What Is Geography?

You might say that geography is about places. Or you might answer that geography is about maps. You would be correct in both cases.

Geography is a way of describing the special features of planet Earth. Geography is about places on Earth, both land and water. In some of these places, many people live close together. In other places, people have more living space. Geography tells us what a place is like and how it became that way. It also explains how people's lives are affected by where they live.

Geography is also about maps. Maps are like pictures of Earth. You can take a picture of something from far away, then get closer and closer. Each time you get closer, you see more detail. Maps do that, too. Imagine

yourself as an astronaut in outer space. As your ship circles the planet, you look down on Earth. A globe is a map of what you see might see. A **globe** is a three-dimensional map of Earth that is shaped like a ball.

TIP

As you read this book, it might be helpful to keep a map beside you (or have a globe handy). This will help you see how the terms, symbols, and ideas you are learning are used on maps you use in your own life. It will also help you visualize, or see, what a part of the world looks like.

PRACTICE 1: What Is Geography?

Match each definition below with the correct word from the box. Write the correct word on the line after each definition.

geography	globe	maps

1. flat pictures of Earth _____
2. a three-dimensional map of Earth, shaped like a ball _____
3. a way of describing the planet _____

Maps

You can learn a lot from a map. Maps can tell you where things are, what land looks like, and how far one place is from another. They can also tell you about the population and resources that are found in a certain place. (**Population** is the group of people living in one place.) There are many different types of maps. Each one gives you a different kind of information.

- A **climate map** shows you weather patterns.

- An **elevation map** shows you the height of the land.
- A **land use map** shows you which crops are grown in different areas.
- A **population map** shows you the population of different areas.
- A **product map** shows you what products are manufactured in different areas.
- A **rainfall map** shows you how much rain falls in different areas.
- A **resources map** shows you where to find natural resources, such as iron, coal, and natural gas.
- A **road map** shows you where highways, roads, and bridges are located.

PRACTICE 2: Maps

Read each question that follows. Match each question with the type of map from the box that would provide the answer. Write the name of the correct map on the lines provided.

climate	elevation	land use	population
product	rainfall	resources	road

1. What crops are grown in Idaho? _____
2. What products are manufactured in France? _____
3. What are the weather patterns across Africa? _____
4. How many people live in each state? _____
5. Which highway goes from San Francisco to Los Angeles?

   _____

6. How much rain falls in different parts of South America?

_____

7. Which states produce coal? _____

8. How high are the mountains in Colorado? _____

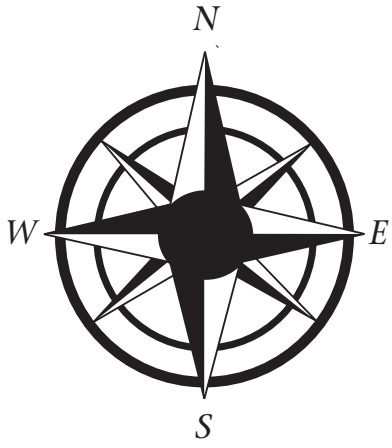
Getting Information from a Map

In order to learn from a map, you must know how to read it. All maps have certain tools to help you. The most basic tools are compass roses, scales, and legends. Learning how to use these tools will help you read the maps in this course and in the world around you.

Using a Compass Rose

One thing you need to know about maps is how to read directions. The key to determining direction on a map is called a **compass rose.** This is a round symbol with an *N* at the top. The *N* stands for *north.* The compass rose shows which way north, south, west, and east lie on the map. Most maps have a compass rose that only shows **due,** or exact, north at the top. All the other directions are implied.

Look at the compass rose on the right. Due north is marked on the top with an *N*. Due east is on the right, marked with an *E*. Due south is on the bottom, marked with an *S*. Due west is on the left, marked with a *W*. The direction northeast is found halfway between north (*N*) and east (*E*). Northwest is found halfway between north (*N*) and west (*W*). Southwest is found halfway between south (*S*) and west (*W*). Southeast is found halfway between south (*S*) and east (*E*).



Using a Scale

A second thing you need to know about maps is how to read distance. Most maps have a **scale** to help you read distance. The scale looks like a ruler. You can use the scale to measure distances on the map. For example, look at the map below of the United States. Suppose you want to know how far it is from Boston to St. Louis. First, use a piece of paper to mark the distance between the two cities. Then, hold the paper against the scale at the bottom of the map.

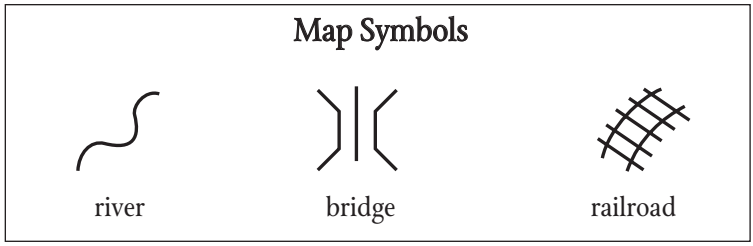
The scale shows you how far 600 miles would be on the map. Your paper should be just about twice that length. This tells you that the distance between the two cities is about 1,200 miles, or about 1,900 kilometers. (Most scales show distance in both miles and kilometers.)

TIP

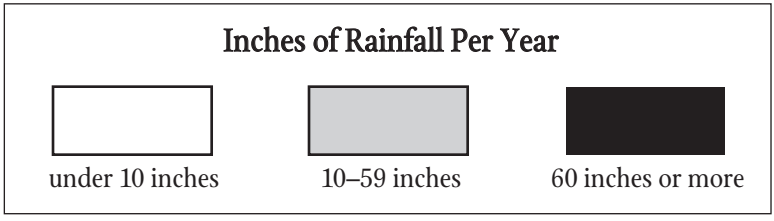
What if the distance you want to measure does not go in a straight line? What if you want to measure the distance around a lake, or a mountain range? If the route you want to measure does not go in a straight line, using a piece of paper will not help. Instead, use a piece of string. Lay the string along the route you want to measure. Follow any curves or bends. Then, cut the string at the end of the route. Hold the piece of string straight against the scale on the map. This will give you the distance of the route.

Using a Legend

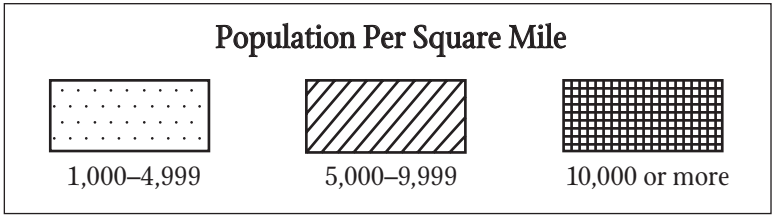
Most maps have a **legend,** or **key,** to help you understand the information on the map. Each symbol in the legend stands for something you find on the map. When you find a symbol on a map, you match it to the same symbol in the legend. The legend will tell you what that symbol means. Here are some common symbols:



A map legend might also use color, or shades of one color, to stand for types or amounts of information. In the example below, the three shades stand for different amounts of rainfall.



A map legend might also use different patterns to stand for types or amounts of information. In the example below, three different patterns are used to stand for population amounts.



TIP

Understanding the background of a name can often help you remember what the name means. *Meridian* means "middle day" and comes from two Latin words, *medius* and *dies. Medius* means "middle." The prime meridian is the middle, or the dividing line, between east and west on Earth.

UNIT 1 REVIEW

Circle the letter of the correct answer to each of the following questions.

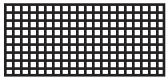
1. What can you use to find direction on a map?
   a. the scale
   b. the compass rose
   c. a ruler
   d. string

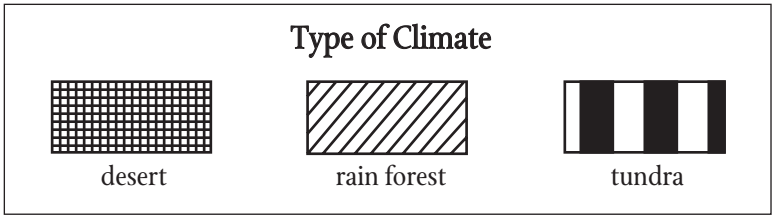
2. What is the definition of a continent?
   a. a large body of water
   b. a symbol on a map
   c. land close to a large body of water
   d. a large mass of land

3. What is the definition of a coast?
   a. half of the planet
   b. a large body of water
   c. land close to a large body of water
   d. a large mass of land

4. Which of the following lists three kinds of landforms?
   a. river, bridge, road
   b. island, river, rainfall
   c. river, island, continent
   d. continent, lake, railroad

5. What is the equator?
   a. a line running horizontally around the middle of the globe
   b. the point where any line of latitude crosses a line of longitude
   c. a line running vertically across the middle of the globe
   d. the farthest point north you can go

6. Look at the legend below. What does the  symbol stand for?



   a. desert
   b. rain forest
   c. tundra
   d. none of the above

UNIT 1 APPLICATION ACTIVITY

Maps in Newspapers

Often, maps are printed in newspapers to accompany important news articles. Maps are visual tools that help readers understand the news they are reading. A map can be used to show readers where events in an article took place. This is especially useful when an article is about events in another part of the world.

Scan a few newspapers for maps. If a map is related to a news article, read the article. Notice how the map is used to show where events in the article took place. Cut out the map and article. Attach them to a separate sheet of paper.

Now, find a newspaper article that does not have a map. The article can be about local, national, or world news. On another sheet of paper, draw a map to accompany the article. Include important information from the article on your map. Use a world atlas for help.