

2018 AP Human Geography Summer Assignment

Welcome to AP Human Geography! Geography can be studied as a physical science and a social science- during this course we will focus our study around the social science perspective BUT will always relate our understanding back to the physical location and science of geography. In order to obtain an in depth understanding of how the physical environment has influenced human behavior you will need a geographic understanding of “where” places are and how they impact human geography.

I am looking forward to an awesome year with you. If you have any questions over the summer – you can email me at rcurry2@bcps.org.

See you in September

Mrs. Curry

Introduction to Human Geography- Nature of Geography

To obtain the assignment please do the following:

1. Go to dulaneyhs.bcps.org
2. Next news
3. Then Summer Assignments 2018
4. Find Social Studies- Then AP Human Geography

The pdf file contains content that will help you identify basic concepts that are needed throughout the year. You will read and take notes. How you want to take notes – is up to you- Cornell Notes are an option but not required. On the first day of class your notes will be checked.

You will have reading checks all year and you can use your notes on each reading check. For the first units reading checks you can use your summer notes and what you add to them when you are assigned a book.

For the first day of class, you will also need to have a notebook organized and ready to get to work. Preferably, you will have a three ring binder- with three sections. 1. Notes 2. Maps 3. Handouts and Models. If you want to use a spiral notebook- make sure you have folders where you can put handouts.

Important Information

You will also be having map quizzes for regions around the world. You will need to label countries and at times capitals as well. At the beginning of each unit will be a map quiz, I will give you a list of countries and capitals prior to you taking the quiz. The following link is the best place to print off maps to practice with- <http://www.eduplace.com/ss/maps/>
It is up to you to obtain the maps for practice and prepare for the quizzes. Below is the schedule for map quizzes (you will be able to re-do map quizzes).

Nature of Geography: United States- ALL 50 states- FIRST DAY OF CLASS

Population and Movement: South and Central America

Culture: Europe

Political Geography: Africa

Economic Development: Central and Southwest Asia

Geography of Agriculture: Central and Northeastern Asia

Geography of Industry: Southeast Asia and the South Pacific

Urban Geography: NONE

CHAPTER OUTLINE

In this chapter we will review the central concepts and tools in human geography that may show up on the AP exam. The first part focuses on the general concepts that encompass all of the six areas (covered in chapters 4–9) that you must know for the test. Then we'll review the necessary information regarding maps, map types, and map scale, as well as geographic technologies. There is also a list of several models that you are required to know for the exam, with information on where to find detailed explanations of them in this book. Finally, we will provide a list of the names of important geographers along with their contributions, and then the key terms for the chapter.

THE CENTRAL CONCEPTS

SPACE AND PLACE

Of the general concepts in geography, *space* and *place* are the two terms that human geographers consider most important. Most other scientific fields do not consider the importance of space and place, or do so only slightly, as opposed to geographers, who consider them central concepts in research and theory.

Space

When geographers talk about **space**, they're not talking about "the final frontier" or anything outside of Earth's atmosphere. Instead, geographers are referring to the geometric surface of the earth. It's best to think about geographic space as an abstract concept. Close your eyes and think of the global surface of the earth as an empty slate. Imagine placing objects on the earth's **spatial** surface that are defined by their location and are separated by some degree of distance from other things. These objects could be people, trees, buildings, or even whole cities—whatever you choose to visualize. Thinking spatially means understanding the pattern and distribution of objects and analyzing their relationships, connectedness, movement, growth, and change across space and over time.

Place

Well, that was deep! The concept of **place** is less abstract, but still important theoretically. It's important to have an open and broad concept of place. Think of place as an area of bounded space of some human importance. People don't have to live there for it to be a place. Instead, you can have a sense of place about somewhere, even in the midst of a desert or an ocean. When human importance is recognized, it is common to assign a place name, or more technically a **toponym**, to that location. Place names often reveal the historical interrelatedness of location places. An area of bounded space could be somewhere small, such as a room, or as large as a continent. **Regions** are a type of place, and there are other categories of places, such as urban places, places of work, resource locations, and transportation nodes. When considering the importance of a location, region, town, or city, it is necessary to consider, why does this place matter?

The attributes of a place change over time. Over the long term, we can consider the concept of **sequent occupancy**, in other words, the succession of groups and cultural influences throughout a place's history. In many places we find that there are several different historical layers that contribute to a **place-specific** culture, society, local politics, and economy. For example, the place specificity of Santa Fe, New Mexico, is a complex mix of multiple Native American, Spanish colonial, and modern American influences based upon the sequence of past and current societal influences.

SCALE

Scale is the relationship of an object or place to the earth as a whole. Scale can be thought about two ways in geography. There is **map scale**, which describes the ratio of distance on a map and distance in the real world in absolute terms (more on map scale later in the chapter). And there is **relative scale**, or what can also be referred to as the **scale of analysis**. This describes the **level of aggregation**, or in other words, the level at which you group things together for examination. Scales can range from the individual or the local, from city to county and state, from regional to national to continental, or to the international and global scales.

Scale modifiers are good to use in the essay section of the exam. Specify whether a company is a transnational corporation or a local business or if you are discussing a local government, a federal regulation, or an international organization. Specifying the scale of the items you're being asked about may earn you points for detail or example material.

Relative scale is important to understand because it is false to compare different scales of analysis or places at different scales. For example, it would be wrong to visit just Atlanta and assume the rest of Georgia had the same characteristics. Likewise, if you examined economic data from Alabama and assumed the rest of the United States had the same median income, types of businesses, or unemployment rates, you would be incorrect.

REGIONS

Let's go over the three categories of regions: **formal**, **functional**, and **vernacular**. Keep in mind that there are many different types of regions, and a single place can exist in several regions simultaneously. For example, the Everglades in Florida exist within the Southern U.S. region and are also considered a wetland region. Regions exist at many different scales and can overlap. Have an open mind about what can be considered a region.

Formal Regions

As a type of place, the spatial definition of the formal region is an area of bounded space that possesses some **homogeneous characteristic** or **uniformity**. This means that across the region there is at least one thing that is the same everywhere within the regional boundary.

The defining homogeneous character can be as simple as a common language. In a **linguistic region**, everyone speaks the same language, but groups in that region can be very different culturally. For example, the United States and Australia are in the same linguistic region, but the two countries share little else in culture, economy, or landscape. Regional concepts can also be very complex. The

American South or “Dixie” is one such region; a multitude of factors define the region, such as dialect, vocabulary, food, architecture, climate, ethnicity, and religion. Reasonable people disagree over whether states like Virginia, West Virginia, and/or Maryland are parts of Dixie.

Regional boundaries differ based upon the type of region. **Culture regions** tend to have fuzzy borders. It’s hard to tell where one region ends and the other begins, such as the border between Dixie and “the North” in the United States. Boundaries between **political regions** are finite and well-defined. Some political boundaries are porous, such as those between Canada and the United States, and other boundaries are protected, such as that between the United States and Mexico. **Environmental region** boundaries are transitional and measurable. The environmental transition zone between two **bioregions**, or **biomes**, is known as an **ecotone**. For example, the space between the Sahara Desert and the tropical savanna of Africa is a dry grassland region known as the Sahel.

Functional Regions

Functional regions or **nodal regions** are areas that have a **central place** or **node** that is a focus or point of origin that expresses some practical purpose. The influence of this point is strongest in the areas close to the center, and the strength of influence diminishes as distance increases from that point.

Market areas are a type of functional region. A professional sports team will have the strongest fan base and intensive media network coverage in areas close to the team’s home city. There are fans and media viewing in the larger region around that city, but they diminish as you get farther and farther away. Eventually you reach a point where the fans transition to another team’s functional region and the media networks are oriented in that direction.

Make the link: See the concept of **distance decay** on page 79.

An outlet mall can have a similar market area affect on consumers. Shoppers will come mostly from the local area and neighboring cities. Because outlets are often placed far apart, there will also be a larger **area of influence** for the mall that will have shoppers travelling from longer distances but making a fewer number of trips. Many outlet shoppers are “just passing through” on the interstate, who see a very brief **intervening opportunity** to do some discount shopping. An intervening opportunity is an attraction at a shorter distance that takes precedence over an attraction that is further away.

Vernacular Regions

The **vernacular region** is based upon the perception or collective **mental map** of the region’s residents. The overall concept can vary within the region due to personal or group variations. Looking again at the American South, or “Dixie,” some residents define it by the location of country music bands or fans, where others recognize the numbers of Southern Baptist church congregations or NASCAR races as the defining statistic. There are those who consider Dixieland only as the states of the Civil War-era Confederacy or the part of the country where it never (or almost never) snows. The author thinks it’s defined by the areas where people have southern accents. He had one growing up in West

Virginia, a union state during the war. No matter what is used to spatially define the regional concept, the reason tends to be a point of pride for residents.

Be careful in your vernacular definitions. There are country music radio stations in all fifty U.S. states and throughout Canada (remember Shania Twain). Some of NASCAR's events with the largest attendance are in decidedly un-Southern states like Wisconsin, California, and New Hampshire.

LOCATION

The concept of location is similar to scale, and we can consider location in both relative and absolute terms. **Absolute location** defines a point or place on the map using coordinates such as latitude and longitude. **Relative location**, by contrast, refers to the location of a place compared to a known place or geographic feature.

Absolute Location

The most common way to fix a point on the earth's surface is using **latitude** and **longitude** coordinates (there are other more technical coordinates systems used in geography, such as Universal Transverse Mercator or UTM). Many students get confused and mix up the definitions of latitude and longitude. Here's an easy way to think about it:

Lines of latitude measure distance, in degrees, north or south of the equator (latitude = ladder).
Lines of longitude measure distance, in degrees, east or west of the Prime Meridian (longitude = how long the ladder is).

Some people remember the difference between the two as the lines of longitude being the longest lines on the globe, going all the way from pole to pole.

Notation is also important to keep in mind. Absolute location is given with latitude first and then longitude with a cardinal direction, separated by a comma. Degrees can be divided up into smaller minutes, and minutes can be divided up into seconds. For instance, the absolute location of the United States' Capitol building is

38° 53' 23" N, 77° 0' 32" W

meaning it lies at the point 38.889722 degrees north of the Equator and 77.008889 degrees west of the Prime Meridian. When decimals are used to divide partial degrees instead of minutes and seconds, the coordinate system used is known as **decimal degrees**.

The **equator** is 0° latitude. The **North and South Poles** are 90° latitude.

The **Prime Meridian** is 0° longitude. On the opposite side of the earth is the 180° line of longitude. Parts of this line compose the **International Date Line** that also meanders around a number of international boundaries.

What's Up with the Prime Meridian?

The Prime Meridian (0° longitude) runs through Great Britain because the means to accurately calculate longitude at sea was developed by the British Royal Navy. With the development of the chronometer, a gear-driven clock, by London jeweler John Harrison in 1785, British ships at sea could accurately determine their longitude. For practical purposes, 0° was fixed on the Royal Naval Observatory at Greenwich in London. This allowed ship captains to know how far they were east or west of their home country. The French, who were the other great naval power at the time, didn't mind so much because the line also runs directly through the center of France. Other nations soon accepted the standardized international system of longitude. The Prime Meridian was officially adopted as 0 degrees longitude at the 1884 International Meridian Conference.

Time Zones

Time zones are divided up in 15-degree-wide longitudinal zones around the world with some exceptions. This is because 360° divided by 24 hours a day equals 15° . One exception to this rule comes from China, where leaders established one time zone for the entire country. For practical purposes, dividing lines between time zones often follow political boundaries, sometimes even along local area divisions. Time zones were created relatively recently, in the era of transcontinental railways, to standardize time across long east-west train lines.

Relative Location

As was said before, relative location is based upon a place's relationship to other known geographic features or places. For instance, when someone from a metropolitan-area suburb is asked where they are from, the response is often relative and will refer to the larger city. A person from Arlington, Virginia, might say they are from Washington, D.C., and someone from Santa Monica, California, might say they are from Los Angeles, or simply L.A. (dude).

You might also put significant value on a place due to its relative location. In the early 1990s, Dublin, Ireland, became an important international business location due to its low-cost economy, English language skills, and close relative location to Great Britain, where the cost of doing business was extremely high (especially in London).

SITE AND SITUATION

Two locational concepts that work together are **site** and **situation**. Site refers to the physical characteristics of a place, such as the fact that New York City is located on a large, deep water harbor, next to the Atlantic Ocean. Situation refers to the place's interrelatedness with other places. How is a place related to other places?

In this case, New York City became the most prominent trade and finance center in the United States during the 1800s, due to its position as a terminal for trade goods on the ship-navigable Hudson River to and from the rest of New England, and as a major port-of-call on the Atlantic Circular Trade Route. As a result, New York City had much greater market potential than Boston, Philadelphia, or Charleston, South Carolina, all of which did not have the benefit of the large inland waterway above the main port location.

DISTANCE

Like scale and location, you should consider distance in both absolute and relative terms. Distance is measured absolutely, or it can be measured relatively in terms of the degree of interaction between places or in units of time traveled. Linear absolute distance is the distance between two places as measured in linear units such as miles or kilometers.

The effect of distance on relationships is important to understand, and geographers often utilize the concept of **distance decay** to explain **relative distance**. Distance decay means that the farther away different places are from a place of origin, the less likely interaction will be with the original place.

Relative distance is also expressed by the principle of **Tobler's law**, which states that all places are interrelated, but closer places are more related than farther ones. This law was developed by American-Swiss geographer and cartographer Waldo Tobler around 1970 and his exact phrasing was, "Everything is related to everything else, but near things are more related to each other." When the length of distance becomes a factor that inhibits the interaction between two points, this is known as the **friction of distance**. This can be seen when the combined time and cost of moving a product prevents it from being sold in far-off locations.

SPACE-TIME COMPRESSION

Decreased time and relative distance between places is referred to as **space-time compression**. Technology can reduce the relative distance between places. Modes of transportation such as airplanes reduce travel time between two distant points, and as a result, increase interaction. Even the Internet can be used as an example of how a whole network of physically distant places can be brought virtually together and increase interaction significantly. So significantly, in fact, that the author is currently ignoring email from at least two continents.

SPATIAL INTERACTIONS

Central Places

Central places can be thought of as any node of human activity. However, they are most often the centers of economic exchange. Markets are often located at transportation nodes, which provide accessibility to and from these points; market centers tend to be centrally located within the larger economic region.

Using this notion of centrality, the school of thought known as **central place theory** was developed in the 1930s by the German geographer Walter Christaller. He saw the economic world as an abstract spatial model. In the model, city location and the level of urban economic exchange could be analyzed using central places within hexagonal market areas, which overlapped each other at different scales. There's much more to this, as you have probably learned. To review, see Chapter 9 for more detail on central place theory, market areas, and the range and threshold of the service.

Core and Periphery

One thing that emerges from central place-type thinking is the idea of **core and periphery**. Many different regional, cultural, economic, political, and environmental phenomena and human activities display some sort of core and periphery relationship. Just as the CBD (central business district) is the core of the urban landscape, a country's capital is the core of its political landscape. Note that the core does not have to be exactly in the center of the peripheral region.

For example, in the Western United States, the core of the Mormon culture region is in the Salt Lake City-Provo-Ogden metropolitan area, also referred to as the Wasatch Front. This is where the highest concentration of members of the Church of Jesus Christ of Latter-Day Saints is located. However, there is a significant LDS population throughout most of the rest of Utah, eastern Nevada, southwestern Wyoming, northern Arizona, southern Idaho, and eastern Oregon. These areas compose the combined peripheral Mormon culture region.

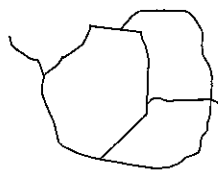
When you analyze a map or a model for an essay question on the exam, explain the core-periphery relationships that you see as part of the larger question. This type of attention to technical detail can earn you additional points.

Pattern

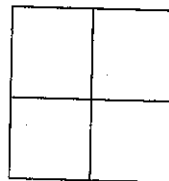
Geographers also use special terms to describe different types of spatial patterns. When things are grouped together on the earth's surface, it is referred to as a **cluster**. When clustering occurs purposefully around a central point or an economic **growth pole**, it is referred to as **agglomeration**. When there is no rhyme or reason to the distribution of a spatial phenomenon, it is referred to as a **random pattern**. Objects that are normally ordered but appear dispersed can be referred to as **scattered**. If a pattern is in a straight line, it is **linear**, and if it's wavy, the pattern is **sinuous**—like the pattern of heartbeats on an EKG.

Land survey patterns have an effect on the property lines and political boundaries of states and provinces. East of central Ohio and Ontario, land surveys until the 1830s used natural landscape features to divide land on a system of **metes and bounds** (see below), which had been developed in Europe centuries earlier. After the 1830s, when new techniques to accurately determine longitude were transferred from sea navigation to land survey, surveyors in the United States and Canada used a rectilinear **township and range** survey system based upon lines of latitude and longitude. This produced the block-shaped property lines and more geometric shape to many western states and provinces. Former French colonial areas such as Québec and Louisiana have **long-lot patterns**. These have a narrow frontage along a road or waterway with a very long lot shape behind.

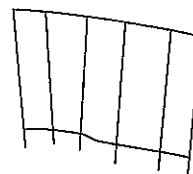
Land Survey Patterns in North America



Metes and Bounds



Township and Range



Long lots

Density

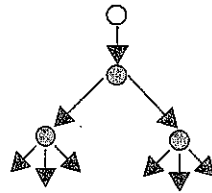
The concept of density is most often calculated by the number of things per square unit of distance. This is called **arithmetic density**. For instance, in the United States there are three Starbucks coffee shops per square mile—okay, not really, but it sometimes seems that way.

Agricultural density refers to the number of people per square unit of land actively used for farming. By comparison, **physiologic density** measures the number of people per square unit of arable land, meaning both the land that is farmed and the land that has the potential to be farmed but is not active.

Diffusion Patterns

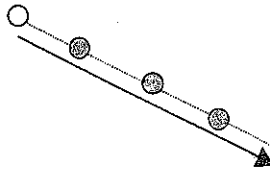
There are a number of different ways and patterns in which human phenomena diffuse spatially or spread across the earth's surface. Most often we examine how culture, ideas, or technology spread from a point of origin to other parts of the world. Sometimes that point of origin or place of innovation is called a **hearth**. Here's a quick rundown of the different types of diffusion. For more details and examples, see Chapter 5. Hierarchical Diffusion, Contagious Diffusion, and Stimulus Diffusion are types of Expansion Diffusion.

Hierarchical Diffusion



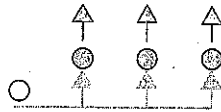
The pattern originates in a first-order location then moves down to second-order locations and from each of these to subordinate locations at increasingly local scales.

Contagious Diffusion



The pattern begins at a point of origin and then moves outward to nearby locations, especially those on adjoining transportation lines. This could be used to describe a disease but can also describe the movement of other things, such as the news in rural regions.

Stimulus Diffusion



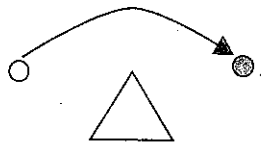
Here a general or underlying principle diffuses and then stimulates the creation of new products or ideas. For example, stimulus diffusion occurs when vegetarian eating habits (principle) influence restaurants to offer more vegetarian dishes (new products).

Expansion Diffusion:



The pattern originates in a central place and then expands outward in all directions to other locations. Note that the distance does not have to be equal in all directions.

Relocation Diffusion



The pattern begins at a point of origin and then crosses a significant physical barrier, such as an ocean, mountain range, or desert, then relocates on the other side. Often the journey can influence and modify the items being diffused.

GEOGRAPHIC TOOLS

MAPS AND MAPPING CONCEPTS

For geographers, maps are important because they are what separate us from other social scientists, like sociologists or political scientists. Maps are not just a graphic art form; they are a science. Many scientific maps are the results of spatial analysis—the mathematical analysis of one or more quantitative geographic patterns.

Map Types

There are many map types, and there are a few specific ones that you should know for the AP Human Geography Exam:

Topographic maps: Show the contour lines of elevation, as well as the urban and vegetation surface with road, building, river, and other natural landscape features. These maps are highly accurate in terms of location and topography. They are used for engineering surveys and land navigation, especially in wilderness regions.

Thematic maps: A number of different map types can be grouped under this heading. Remember that each one expresses a particular subject and does not show land forms for other features. The theme could be something like a dot-density map showing the distribution of population within a country. It could also be very complex, showing multiple related subjects, such as a weather map that shows temperature contour lines (**isotherms**), wind patterns, pressure zones, and areas of precipitation. Here are a few common types of thematic maps:

- **Choropleth maps** express the geographic variability of a particular theme using color variations. These variations can be expressed using colorized symbols, contour areas filled with different colors, or polygons denoting country boundaries filled with different colors to express the variability in the map data.
- **Isoline maps** calculate data values between points across a variable surface. Between point A (with a value of 5) and point B (with a value of 10), a series of contour lines can be drawn to show the change in data between the two points. If the value of each contour line is 1, then we would see four contour lines between point A and point B labeled 5, 6, 7, 8, 9, and 10. Point A would sit inside of the contour line labeled 5, and point B would fall within the area for contour line labeled 10. Each point is then interpolated with the other nearby or neighboring points to create a continuous surface of isoline contours. Weather maps showing temperature contours (isotherms) are the most common isoline maps.
- **Dot density maps** use dots to express the volume and density of a particular geographic feature. The dots can represent the number of people in an area, or can express the number of events or phenomena that occurred in an area. An example would be dots representing the number of people who suffer heart attacks on a state-by-state basis. Each state would have a number of dots inside of its boundary polygon representing the number of heart attacks. Oftentimes, each dot represents a certain number of events; in our example, the map might read, "one dot equals 1,000 heart attacks."

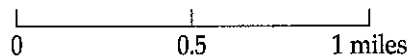
- **Flow-line maps** use lines of varying thickness to show the direction and volume of a particular geographic movement pattern. An example would be a map of flow lines showing the total number of foreign immigrants in the United States. Each line would begin in the immigrants' country of origin and point to the United States, with a thickness based upon the total number of immigrants. In this example, a thin line would be drawn from Portugal to the United States and a much thicker line would be drawn from Ireland to the United States.
- **Cartograms** use simplified geometries to represent real-world places. Political boundaries become polygons, and linear features such as roads become lines with basic angles often at 90° and 135°. Cartograms are more about the data being expressed than they are about landscape. Linear cartograms are often used in subway systems and other transportation maps where the exact geography of the route is less important than the items along the way.

What is a Mental Map?

Everyone has a mental map. It's the cognitive image of landscape in the human mind. What is common about each person's mental map is that we have very accurate geographies of the area around our home, school, and workplace. We also have very good knowledge of the landscape along the transportation corridors that we commonly travel. Elsewhere, our mental maps tends to be pretty much blank. By understanding the science behind location, distance, scale, and different map types, you can improve your mental map from the data that you read on both paper and computerized maps.

Map Scale

As we said earlier in the chapter, there are two different types of geographic scale: map scale and relative scale. Map scale is the "absolute" form of the scale concept. Map scales can be expressed in a couple of ways. Linear map scale expresses distance on the map surface. It can either be found in the legend or in a corner of the map, like so:



The ratio scale of the map will also be expressed on the map legend. This shows the mathematical relationship between the distance on the map compared to the real distance on the earth's surface. It will appear as a 1 separated by a colon from a much larger number, like so:

1:24,000

In this case, 1 inch on the map equals 24,000 inches on the earth's surface, or about two-thirds of a mile. This is the map scale used on topographic maps produced by the United States Geological Survey (USGS). This map scale can also be expressed as the mathematical ratio $\frac{1}{24,000}$.

A large-scale map is one with a ratio that is a comparatively large real number. A small-scale map is one with a ratio that is a comparatively very small real number. Consider the amount of area and level of detail expressed depending upon the type of map scale. Compare the following two map scales and ratios in terms of their size in real numbers to understand which one is the large-scale map and which one is the small-scale map, as well as what purpose each would serve:

Map Scale:	1:50,000	1:1,000,000
Ratio:	$\frac{1}{50,000}$	$\frac{1}{1,000,000}$
Scale Type:	Large Scale	Small Scale
Area Covered:	Small Area	Large Area
Level of Detail:	High Detail	Low Detail
Purpose:	City	State or Province

Although there is no agreed-upon convention as to a dividing line between large- and small-scale maps, think of 1:250,000 as the break point.

Projections

There probably won't be a question that asks you to differentiate between the projections on the AP Human Geography Exam, but they could ask you about the practical issues behind certain projections. Each given projection creates different levels of accuracy in terms of size and shape distortion for different parts of the earth. A map projection's level of accuracy is based upon two concepts: area preservation and shape preservation.

Equal-area projections attempt to maintain the relative spatial science and the areas on the map. However, these can distort the actual shape of polygons, such as the **Lambert projection** bending and squishing the northern Canadian islands to keep them at the same map scale as southern Canada on a flat sheet of paper.

Conformal projections attempt to maintain the shape of polygons on the map. The downside is that conformal projections can distort the relative area from one part of the map to the other. For instance, in the commonly used **Mercator projection**, the shape of Greenland is preserved, but it appears to be much larger than South America, when in reality it is much smaller.

Some map projections try to balance area and form, sacrificing a bit of both to create a more visually practical representation of the earth's surface. Examples would be the **Robinson projection** or the **Goode's homolosine projection**.