

Name: \_\_\_\_\_

### What's in a Name?

Even the name and logo of a sports team may reflect a specific geographic location or feature, major economic activity, or common bird or animal of the place where the team is located. The name and logo become an important part of the team's identity. They encourage local citizens to identify with the team and provide support. In this context, the term place also brings associations and feelings that are important for the team and its fans. Local sporting teams, identified by their name and logo, are often a great source of pride. They bring members of the community together in a common identity and show of support. An example of this is the Winnipeg Goldeyes baseball team named after a common fish found in the Red River. The Thompson King Miners hockey team and the Virden Oilers baseball team are both examples of teams named after the main economic activities in their respective towns. Can you think of names of other sports teams that reflect aspects of local place and identity?



### Learning Activity 1.5

#### Place and Identity



1. Think about communities, towns, and cities that have promoted their identity by creating roadside monuments or catchy sayings. These can be in Manitoba or other familiar places in North America. Try to explain the origin or reason for the choice of monument or saying. Record your examples in a chart similar to the following. Examples are provided to help you get started.

Name of Community	Monument or Saying	Explanation
Brandon	"The Wheat City"	Crop for which Brandon became well-known
Steinbach	Rolls Royce Car and/or "The Automobile City"	Known for its many car dealerships, to attract customers from nearby Winnipeg

*continued*

## Learning Activity 1.5: Place and Identity (continued)

2. Think about sports teams in Manitoba, Canada, or North America, with names and logos that reflect specific geographic locations or features, major economic activities, or common birds and animals. Record your examples and provide an explanation for each. Examples are provided to help you get started.



Name of Sports Team	Town/Community	Explanation
Goldeyes (baseball)	Winnipeg	Named after common fish in local waterways
King Miners (hockey)	Thompson	Named for the main economic activity: mining

## Change over Time

Geographers want to know if features of interest have always been there. They want to know how features change through time and what factors influence these changes. This knowledge is important in order to gain a better understanding of both physical and human elements in our surroundings. Knowing how things change and what causes them to change can help us solve problems and make plans for the future.

### Physical Changes



Physical geographers are interested in changes in the natural environment around us. They may study how the process of **erosion** gradually reduces topsoil, changes slopes, and washes out roads and bridges. This knowledge helps them develop **conservation** practices and ways of improving drainage. As such, physical geographers may study changes in natural vegetation. Cultivation of grasslands or clearing of forests may result in increased erosion and local **climate change**. In recent years, many people have become concerned about climate change. Geographers are interested in learning about the causes and speed of climate change, as well as the possible impacts on the environment and on human life. This knowledge will help society find ways to slow climate change and prepare for life in a future of changing climates.

## Human Changes

Geographers are also interested in changes in the human environment over time. They may be interested in studying the growth of a town or city. This knowledge can help them predict future growth and manage changes through wise urban planning. To that end, geographers may study the development of transportation networks and make recommendations for changes and improvements. Geographers may also be interested in studying the impact of industry on air and water quality. They may develop ways of testing water and air for pollution, and recommend changes to reduce further pollution. They may also study the impact of burning **fossil fuels** on the world climates. Geographers are also interested in studying the impact of human activities in rural and remote regions. Increased tourism and resource development may threaten natural habitats and endanger wildlife. Agricultural practices such as overgrazing and excessive use of chemicals may have a negative impact on the environment.

As a student of geography, you may have observed changes in your community or region such as the construction of a new street or road and the building of a new house or business. Clearing land for cultivation, the demolition of an old farm building, and the changing use of farmland are examples of changes over time in rural areas. If you live in a remote community, you may notice clearing of nearby forests, construction of new homes and roads, or environmental changes brought about by hydro and mining developments. When you begin to see your surroundings from a geographic viewpoint, you will notice many changes over time, in both human and physical elements.

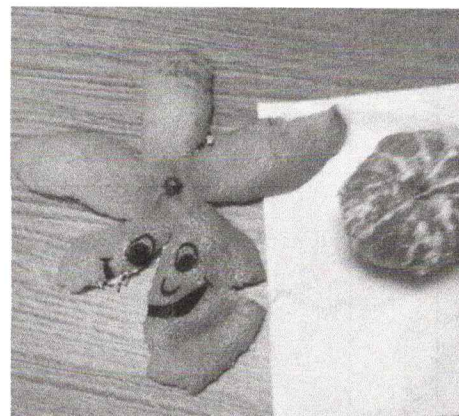
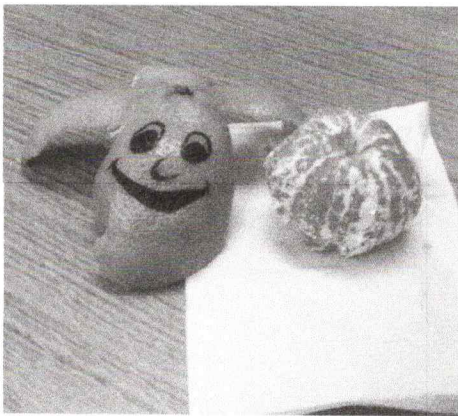
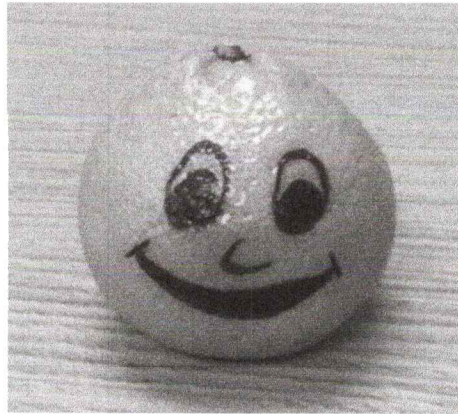
## Map Projections and Perceptions

A **map** is a representation of all or part of Earth drawn on a flat surface to a specific scale. Maps allow us to visualize areas of Earth on a manageably sized sheet of paper. This might be in the form of a road or street map, or an atlas map. It is important that maps be to scale in order to give us an accurate perception of the shape and size of Earth. Globes are also representations of Earth; however, they are not as easy to handle and there is a limit to how large they can be to provide adequate detail. Humans have been creating maps for a very long time. The first maps may have been scratches in the sand or dirt made by prehistoric humans to represent features and locations of places where they lived.





Although maps are very useful to everyone, it is important to be aware of their limitations. Maps are flat, two-dimensional representations of a round, three-dimensional surface. This means that it is not possible to show Earth on a flat surface without some kind of **distortion**. You can see how this happens by peeling large sections of an orange and then trying to flatten out the peel. You cannot do this without the peel splitting apart around the edges. If you draw an outline of a province (or a face) on an orange before you peel it, you will see what happens to its shape when you flatten the peel. In other words, all maps show distortion of some kind. The larger the area of Earth they show, the greater will be the distortion.



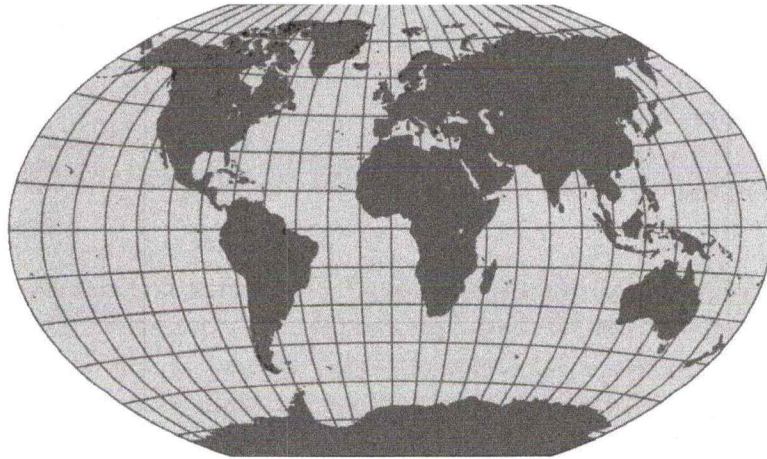
## Map Projections



**Note:** Your atlas should have a page that explains and provides examples of map projections. Refer to this page for visuals as you read through this section. If your atlas does not have this page, go to one of the following websites: [http://atlas.nrcan.gc.ca/site/english/learningresources/cartocorner/map\\_projections.html](http://atlas.nrcan.gc.ca/site/english/learningresources/cartocorner/map_projections.html) or [www.colorado.edu/geography/gcraft/notes/mapproj/mapproj\\_f.html](http://www.colorado.edu/geography/gcraft/notes/mapproj/mapproj_f.html). You can also use a search engine such as [www.google.ca](http://www.google.ca) to find similar websites.



Mapmakers are called **cartographers** and use a variety of methods to represent Earth on a flat surface. Originally, they did this with the use of a light inside a wire globe. The light projected the outlines of the continents and the Earth grid (lines of **latitude** and **longitude**) as shadows onto a flat piece of paper. Although cartographers now use computer models and mathematical calculations, they still refer to the method as **projection**. There are many different map projections in use today. Cartographers select the particular projection that shows the least distortion for the kind of map they want to produce. It is important for you, as a student of geography, to be aware of distortion when you use maps. The following diagram shows a typical projection method for a map of the world.



Clark, Bruce W., and John K. Wallace. *Geographic Issues of the Twenty-first Century*. Don Mills, ON: Pearson Education Canada Inc., 2005. 20.



**Note:** If you are not sure about the terms latitude and longitude, study the section “Reviewing Latitude and Longitude” at the end of this lesson. You can also consult the glossary for definitions of these terms. The terms latitude and longitude have slightly different meanings than the terms lines of latitude and lines of longitude.

### Mercator Projection



Gerhardus **Mercator**, a Dutch geographer, developed this projection in 1569. He wrapped a sheet of paper around a globe like a cylinder. Inside the globe was a light that projected the continents and grid lines as shadows onto the paper. After tracing these lines, he unrolled the paper to create a map. Maps made by this method are **cylindrical** projection maps. Mercator’s map was very useful for ocean navigation because it showed constant compass bearings.



Cartographers still use the Mercator projection when making maps that show the entire world. Look in your atlas or on one of the previously recommended websites for a Mercator projection map. Study the map carefully and try to determine the kind of distortion it shows. An easy clue is to look at the lines of latitude and longitude. On a globe, the lines of latitude circle around Earth. The latitude circles become smaller toward the north and south poles. The lines of **longitude** come together and meet at the poles. In other words, the lines are furthest apart at the equator and converge to meet at the north and south poles.

What pattern do these lines have on the Mercator projection? How do you think this affects the accuracy of the map? How does this affect your perceptions of the size of continents and countries?

You will notice that the lines of latitude become further apart as you move away from the equator. The result is an exaggeration in the north-south distance as you move away from the equator. You will also notice that the lines of longitude are parallel to each other instead of converging as they do on the globe. This results in an increasing exaggeration in the east-west distances as you move toward the poles. In other words, there is great exaggeration in the areas of continents and countries in the mid- and high-latitudes in comparison to those near the equator. For example, in this projection, the island of Greenland appears larger than the continent of South America but, in fact, it is much smaller in area. The Mercator projection does not show the size or area of countries accurately; however, it shows their shapes relatively accurately.

Due to the false perception of the size of mid- and high-latitude countries, many people criticize the Mercator projection. Political leaders of countries near the equator believed that this false perception was unfair to them. It showed the **colonizing** powers, such as England and other European countries in the mid-latitudes, as being much larger than the equatorial areas they colonized. Many of the world's poorest countries are in the equatorial region. Their leaders feel that this map distortion and false perception puts them at a further disadvantage. A number of aid agencies, including the United Nations, are also critical of this projection.

## Peters Projection

The criticisms of the Mercator projection led to the development of the **Peters** projection in 1974 by Dr. Arno Peters. This projection, referred to as an equal area projection, shows the areas of countries and continents accurately. As a compromise, however, it distorts the shapes. This projection is also known as the Gall-Peters projection. Many developmental agencies, including the Canadian International Development Agency, used the Peters projection for a while when it was first developed. Although commonly used in other parts of the world, at present, not many people use the Peters projection in North America.

## Robinson Projection

Cartographers sometimes refer to the projection developed by Dr. Arthur **Robinson** in 1972 as a compromise projection. It tries to show shapes relatively accurately without too much distortion of size or area. The lines of latitude are equally spaced, and the lines of longitude are curved somewhat like they are on a globe. The National Geographic Society used this projection in their magazines and map publications for many years.

## Purpose of Maps

The shape and size distortions described above are most obvious on maps of the entire world. The smaller the area shown on the map, the less distortion is present. This means that maps of a small region, such as a province, will have very little distortion. You would not likely be aware of any distortion if you used such a map. The distortion on maps of the world, however, is obvious and influences the readers' perceptions of the size and importance of countries. It may even give you a false impression of the amount of political or economic power a country may have.

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Aside from determining an appropriate projection, cartographers use a variety of techniques to interest the reader and express the purpose of maps. Prominent titles, colour schemes, selective symbols, and even variation in the scale help attract the readers' attention. For example, a map created to show the location of a new store highlights its immediate location but does not give much detail about other features in the map area. A unique symbol in bright colours may also be used to draw the readers' eyes to the location of the store. Dull colours may be used to show other features to reduce their perceived importance. **Thematic** or special-purpose maps make frequent use of these kinds of techniques. Thematic maps show only one major theme, usually in considerable detail.