

Name/Date:

Geography 12

1A: What is Geography? Themes and Perspectives



Photo source: Nasa website, Visible Earth Gallery
http://veimages.gsfc.nasa.gov//2429/globe_west_540.jpg

Summary

Geography is the study of the earth and atmosphere, the study of humans as they affect and are affected by their environments, and the study of spatial variation. In this unit we will learn about themes in Geography, the various spheres which are used to understand earth systems, the earth as a planet in orbit, and various features of the globe. We will also examine the kinds of maps which will be important to our course.

Main text reference

- *This Earth, Introduction*, p. 2-4.
[Vanzant, P. et al, *This Earth: Physical Geography and the Environment*. Toronto: Emond Montgomery]

Additional text references (copies available in the classroom)

- *Planet Earth*, Ch. 1-3, p. 1-48 (for the unit), specifically p. 3-9, 12-14.
[Birchall, G., McCutcheon, J. (1993). *Planet earth: a physical geography*. Toronto: John Wiley & Sons]
- *Physical Geography*, introduction p. x (plus parts of Ch. 1-3, p. 2-63 for the unit).
[Smythe., J., Brown., C., Fors, E., Lord., R. (1980). *Physical Geography*. Toronto: Gage]
- *Geography*. Preface, p. 1-4, p. 234-235, Appendix 1 & 2,
[Knapp, B., Worrall, D. (1989). *Geography: Our Physical and Human Resources*. Toronto: Irwin Publishing]
- Understanding Our Environment [Knapp & Worrall], Ch. 1, p. 2-4
- Vocab as needed
[Whittow, J. (1984), *Dictionary of physical geography*. London: Penguin Books]

Further reading

- Chatwin, *The songlines*.
fascinating Human & Physical Geography of Australian Aboriginals; the author tries to uncover the relations between creation stories and the landscape
- Diamond, J. (1999) *Guns, germs, and steel: the fates of human societies*. NY: W.W. Norton
geographic reasons for the history of almost everything (particularly the differences between world cultures and societies); a T.V. series has been made based on the book
- Hurren, *Line dancing: an atlas of geography curriculum and poetic possibilities*.
- Lilburn, *Living in the world as if it were home*
interesting collections of thoughts about how geography shapes us
- Tuan, *Topophilia: a study of environmental perception, attitudes, and values*.
- Gregory, *Geographical Imaginations*, see also <http://www.geog.ubc.ca/persons/derek-gregory/>
a classic dealing with theories on the nature of human-place interaction

Websites

Language & Landscape Program blog: <http://landspeak.blogspot.ca>
CIA Facts on Canada: <http://www.cia.gov/cia/publications/factbook/geos/ca.html>
Google Earth (software): <http://earth.google.com> -- put this on all of your devices!
Wikipedia article on Geography: <http://en.wikipedia.org/wiki/Geography>
Wikipedia article on the Gaia Hypothesis http://en.wikipedia.org/wiki/Gaia_theory

Notes on References

Use the main references as sources for questions and completing notes. The additional references should be used to provide details, a fresh perspective, or to get information or find content missing from main sources. Further reading could be used to provide background to topics, or to explore (in depth) a topic which is of interest to the student. The websites are current as I type this, but you can always do a search with some of the key words from a lesson or unit and come up with equally (or more) engaging sites on relevant topics.

The Lesson! Defining Geography

Skills in this lesson:

- reading text for key ideas
- applying theory to real world examples
- interpreting maps
- collaborating in a group around a common task
- developing powers of observation
- taking photographs as evidence to answer a question

Vocabulary (some to complete with teacher)

physical geography - the study of the earth and earth processes:

geomorphology - the scientific study of landform and landscape shaping processes.

human geography - the study of people-place relationships, human adaptation to environments

topophilia - the love of place (Yi-Fu Tuan); special connections that people have with particular places.

Questions

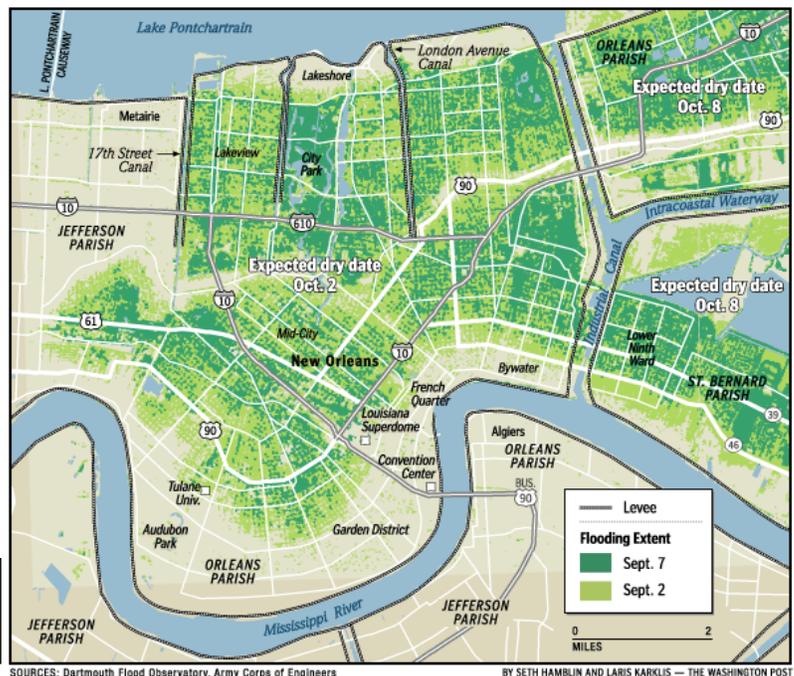
1. What do you understand is meant by "geography?"

2. How do the authors of *This Earth* explain geography? (see p. 2, 1st 3 paragraphs)

3. What is the difference between physical and human geography? Why do you think it is necessary to make this distinction?

4. Why might it be important to study geography?

5. What role do maps play in the study of geography? Think about the uses of the map on the right.



6. Which physical processes (e.g. volcanoes, glaciers, wind erosion) do you think have produced the landscapes around Prince George?

7. Which are most important environmental issues for the world? for Canada? for Prince George?

8. What place is important to you (try to pick something other than your house)? Describe its location. What physical features help make it special?

9. Careers which use Geography (and benefit from or require courses in Geography) ...can you think of any more? What "geographic" skills would these people use (pick a few and list a skill)

Geographer	Soil Scientist
Remote sensing analyst	Land surveyor
Ecologist	Engineer
City/town/urban planner	Waste management
Conservation officer	Silviculturalist or forester
Wildlife manager	Horticulturist
Cartographer / map maker	Transportation planner
Parks ranger	Adventure guide / outfitter
Fisheries protection officer	Meteorologist or climatologist
Geographic information systems (GIS) specialist	Parks planner
Hydrologist	Educator
Ecotourism consultant or planner	Location-based data manager
Architect	Coding/computer programmer
Environmental Protection/Disaster Recovery technician	Archaeologist
Solid/liquid waste planner or plant manager	Professional Forester
Recycling manager	
Landscape Architect	
Geomatics (data analyst)	
Industrial Development planner	
Global Finance	
Travel consultant	
Transportation planner	
Lawyer (environmental law)	
Seismologist	
Tree nursery biologist	
RCMP / Police	

Five Themes of Geography (with discussion questions) - highlight key ideas

Adapted from **The Five Themes of Geography** by Lisa Keys-Mathews (University of North Alabama): <http://www2.una.edu/geography/statedepted/themes.html> and connected to a 1994 publication <http://ericdigests.org/1996-1/geography.htm>

1. LOCATION

"Where are we?" is the question that the theme *Location* answers. Location may be absolute or it may be relative. These locations, whether relative or absolute, may be of people or places.

An **absolute location** is a latitude and longitude (a global location) or a street address (local location).

- Paris, France is 48°51' North latitude and 2°20' East longitude
- Marshall Islands are 10°00' North latitude and 165°00' East longitude

Relative locations are described by landmarks, time, direction or distance from one place to another and may associate a particular place with another.

- What is a way to give the relative location for our school?

- **Describe an absolute and relevant location for where you are right now**

2. NATURE OF PLACE

What kind of place is it? What do you think of when you imagine China? Japan? Russia? Saudi Arabia? Places have both **human** and **physical** characteristics, as well as images.

Physical characteristics include mountains, rivers, soil, beaches, wildlife. Places have **human** characteristics also. These characteristics are derived from the ideas and actions of people that result in changes to the environment, such as buildings, roads, clothing, and food habits. The image people have of a place is based on their experiences, both intellectual and emotional. People's descriptions of a place reveal their values, attitudes, and perceptions. How is your hometown connected to other places? How do these connections shape our lives?

- **List two physical characteristics of the Prince George region:**

- **List two human characteristics of the Prince George region:**

3. RELATIONSHIP BETWEEN PLACES (HUMAN/ENVIRONMENTAL INTERACTION)

How do humans and the environment affect each other? We change the environment and then sometime "Mother Nature" changes it back. Think about hurricanes, wildfires, and earthquakes. There are three key concepts to human/environmental interaction:

- **Humans adapt to the environment.**
- **Humans modify the environment.**
- **Humans depend on the environment.**

People depend on rivers for water and transportation. People modify our environment by heating and cooling buildings for comfort. People adapt to the environment by wearing clothing that is suitable for summer and winter; rain and shine. All places on Earth have advantages and disadvantages for human settlement. Some like the excitement of large cities whereas others prefer remoteness.

Given the choice, where would you live? Why? What is the environment? How do people interact with the environment? How do the physical features affect us? How have we adapted to or changed our landscape?

For example, in the Sudan even though everything is seemingly barren, the land sustains farmers and nomadic herders. People and animals have adapted to a hot, dry climate.

- **What is one way Prince George residents have adapted to our local environment?**
- **What is one way the local (Prince George) environment has been modified by humans?**
- **What is one way Prince George residents depend on the local environment?**
- **What is a major environmental concern in our area?**

4. REGIONS

A region is the basic unit of study in geography. A region is an area that displays a coherent unity in terms of the government, language, or possibly the landform or situation. Regions are human constructs that can be mapped and analyzed.

There are three basic types of regions.

Formal regions are those defined by governmental or administrative boundaries (i. e., United States, Birmingham, Brazil). These regional boundaries are not open to dispute, therefore physical regions fall under this category (i. e., The Rockies, the Great Lakes States).

Functional regions are those defined by a function (i. e., TVA, United Airlines Service area or a newspaper service area). If the function ceases to exist, the region no longer exists.

Vernacular or perceptual regions are those loosely defined by people's perception (i. e., The South, The Middle East).

- **What region do we live in? What type of region is it? Think of a perceptual or vernacular region in or around Prince George?**

5. MOVEMENT

The movement of **people**, the import and export of **goods**, and mass communication (e.g. travel of **ideas**) have all played major roles in shaping our world. People everywhere interact. They travel from place to place and they communicate. We live in a global village and global economy.

People interact with each other through movement. Humans occupy places unevenly on Earth because of the environment but also because we are social beings. We interact with each other through travel, trade, information flows (E-Mail) and political events.

Not only do humans move but also ideas move; fashions move; fads move. Think about... what is an example of an idea that moves? Fashion? Fad? How do we depend on people in other places? How would our lives change if our movement options changed? What would happen if we travelled by camel or horse? How do we move from place to place? How do we actually get food?

- **Where does our garbage and sewage go?**
- **Where do local products end up?**
- **Trace some common components in our local food supply. Where does our food come from? How does it get here from the source?**

Group activity:

1. Start with a conversation about what you've read, heard, and talked about in the lesson so far. Try to ensure that all members of the group understand the topic.
2. Next, talk about how you will take on this task using the chart paper provided:

Inventory of the Place Where You Live

- create a rough map that lists the natural (physical) characteristics of Prince George
- mention major landforms, vegetation, waterbodies (be descriptive and use names if you know them)
- add cultural (human-built) features and characteristics as well
- be thorough - try to work through all possibilities carefully

3. Now do it... part of this activity is learning more about how your group process works.

Assignment (individual or group):

Over the next few days, take **5 pictures** to show the **5 themes of geography**. They can be from around the school or community. Be prepared to submit them to the class for viewing and possibly explanation (hopefully the pictures will speak for themselves). Try to make the pictures great, but don't manipulate the context (change the setting to match the theme) -- look for existing examples.

The Spheres

Physical geography focuses on process occurring in the spheres. The main five are atmosphere, lithosphere, hydrosphere, biosphere and ecosphere. Some geographers suggest that the earth is a single living system capable of regulating itself, other view the earth as a collection of interrelated systems. Most agree that there are many serious environmental issues facing our planet which deserve the attention of experts.

	Example of an environmental issue in this Sphere

The Gaia Hypothesis

Some geographers, ecologists, and philosophers argue that earth acts like a single self-regulating organism. The Gaia hypothesis (first developed by Dr. James Lovelock) suggests that life (as a whole) in the ecosphere manages conditions on earth to sustain its own survival. A conservative interpretation of this theory is that the earth's composition has been altered by organic life. A little more daring approach is that the earth has self-organizing systems in place to ensure a long-term stable environment for life to flourish. A more radical interpretation is that all lifeforms are part of a great being that could be called Mother Earth or Gaia. Regardless as to whether the Gaia hypothesis is a real **model** (can be used scientifically to make predictions), or just a **metaphor** (imaginative way of describing or experiencing what people believe), it is useful way for geographers to see how life is interconnected and how life in the biosphere depends on the other spheres. The Gaia concept is also a valuable way to see how humans are responsible to and for the earth.

The sphere of rock on which we live coalesced from the dust of ancient stars. Orbiting round the huge hydrogen furnace of the sun, bathed by radiant energy and the solar wind, the globe is white hot and molten beneath the crust: continents ride in a slow dance across its face, ocean floors spread. And between its dynamic surface and the vacuum of space, in a film as thin and vibrant as a spider's web, lies the miracle we call the biosphere.

Source: Myers (1993) *Gaia: An Atlas of Planet Management*, p. 10

What the modern cultural environment has required of us is an enormous extroversion of attention and energy for the purpose of reshaping the Earth into a global industrial economy. For two centuries we have been subordinating the planet and our deepest personal needs to that project. This great act of collective alienation, I have suggested, lies at the root of both the environmental crisis and individual neurosis. In some way, at some point, a change of direction, a therapeutic turning inward, had to take place within a culture as maniacally driven as ours has been by the need to achieve and conquer.

Source: Roszak (1992) *The Voice of the Earth: An Exploration of Ecopsychology*

For each of our actions there are only consequences.

Source: Lovelock (1979) *Gaia: a new look at life on earth*, p. 140

Read the quotes above. What do you think about the Gaia hypothesis? Does it have a use in our modern world?