IR-1: Geographer's Field Work

Complete the first section of the chart below for yourself and four adults, such as your parents and grandparents. In the right column, list reasons the person moved from the birthplace to a new location or why the person stayed in the same place.

Person's Name	Person's Birthplace	Reasons for Moving/Not Moving

You will use the chart below during class. Leave it blank until you receive further directions.

Group Members	Person's Name	Person's Birthplace	Reasons for Moving/Not Moving

Purpose for Reading: Identify and understand the concept of spatial relationships.

Main Ideas	Details
Spatial Analysis	
Patterns	
Processes	

Thinking Spatially

Geography

What is geography? It is much more than the study of maps and locations. Geography influences everything we do, including our language, food, religion, type of home, clothing, and even the type of entertainment we choose.

The word *geography* comes from the ancient Greek word *Geo*, meaning "Earth," and *graphica*, meaning "description of." Therefore, **geography** literally means "the description of Earth." What, then, can you learn from the study of geography?

Geography consists of two major fields of study: physical geography and human geography. Earth is a living planet that consists of many different systems. Plate tectonics, erosion, and climate are all physical processes that affect Earth. **Physical geography** includes the processes in, on, and around Earth that impact the physical environment of Earth, such as mountains, deserts, trees, oceans, lakes, and rivers.

Human geography deals with materials, objects, systems, and processes that human beings have created, which include buildings, roads, food, music, types of government, economic systems, and religious systems.

Spatial Analysis

What separates the study of geography from other social studies courses? Geographers use **spatial analysis** to look at objects and situations. In other words, geographers analyze the relative location of people, places, and events.

Geographers may use a map to see the *spatial relationship* between where people live compared to where they work, where a city is located compared to nearby natural resources, or the location of a restaurant or grocery store compared to where people live. They express this relationship using **cardinal** (north, south, east, and west) or **intermediate** (northeast, southeast, southwest, and northwest) **directions**. Spatial analysis allows geographers to examine the interdependent relationships of physical and human interactions.

The two most important things geographers look at when reviewing data and trying to solve problems are to identify and analyze observable processes that create patterns. A **process** is the continuous action, operation, or change that causes a pattern to emerge. A **pattern** is a repeated regular phenomenon. By interpreting these processes and patterns, geographers can analyze the impact of spatial relationships.

The following examples illustrate the value of studying processes and patterns.

- In regular 2- to 5-year intervals, water in the western Pacific Ocean warms up. As the warm water evaporates and winds blow eastwardly, there are torrential rainstorms that hit the Americas. Additionally, the warmer water affects the Peruvian fishing industry. The fish prefer colder water and swim into deeper water to stay away from the warm water. The global climate system has an impact on both physical and human systems.
- Dead plant and animal remains, compressed and heated for millions of years, become fossil fuels. Deposits of oil today are located where once there was abundant plant and animal life. Petroleum engineers find reservoirs of oil and natural gas and figure out ways to bring those natural resources to the surface.

Once the processes and patterns are identified and analyzed, geographers can provide the information to appropriate groups to initiate action plans. These actions can include correcting a social injustice, assisting those in need, or overcoming a disparity in the physical world.

In most cases, the processes cause patterns to occur. For example, the horizontal patterns of climate regions occur because of the tilt of Earth on its axis. The pattern of fossil fuel deposits today is based upon where there was a climate that supported plant and animal life millions of years ago. It is worth noting also that physical and human processes are sometimes connected. The location of fossil fuel deposits coincided with where population clusters occurred, thus leading to the processes of industrialization and urbanization.