**Chapter 1 Learning Guide – Thinking Geographically**

**Key Issue 1 – *How Do Geographers Address Where Things Are?***

Pgs. 2 – 13

1. Define *map:*
2. Define *cartography:*

**Maps**

1. Give an example of early mapmaking and the unusual materials for the map.
2. Who first demonstrated that the Earth was spherical (round)? How?
3. Who was the first to use the term “geography”?
4. List three of his contributions in geography at that time.
5. Provide examples of developments in geography for each of the following:

|  |  |
| --- | --- |
| Chinese |  |
| Muslims |  |
| Age of Discovery  (16th Century) |  |

1. Define *scale:*
2. What is the advantage of a map that shows only a small portion of the Earth’s surface – like a neighborhood?
3. What advantage does a map that shows the entire globe have?
4. When geographers convert the round Earth to a flat map, they use a **projection.** All projections have some distortion (only a globe has none). List the four things that typically become distorted in various projections and explain the distortion.
5. Two important projections are the **Mercator** and the **Robinson.** Complete the chart below to compare their advantages and disadvantages.

|  |  |  |
| --- | --- | --- |
|  | **Robinson** | **Mercator** |
| Advantages |  |  |
| Disadvantages |  |  |

1. With regard to the **Land Ordinance of 1785,** the official survey system for the United States, define the following:

*Township:*

*Sections:*

**Contemporary Tools**

1. Define *remote sensing:*
2. Remotely sensed images consist of pixels. What is the smallest area on the surface of the Earth that can be scanned as a single pixel?
3. Geographers use **GIS** (Geographic Information System) to store “layers” of data. Give four examples of types of data stored in a single layer.

**Chapter 1 Learning Guide – Thinking Geographically**

**Key Issue 2 – *Why is Each Point on Earth Unique?***

Pgs. 13 – 28

**Place: Unique Location of a Feature**

1. Define *toponym:*
2. Identify four ways in which places can receive names.
3. Identify three reasons for which places sometimes change names.
4. Define *site:*
5. List some site characteristics.
6. Complete the following sentence about site: Humans actions can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the characteristics of a site.
7. Define *situation:*
8. What role do familiar places have understanding situation of unfamiliar places?
9. What place is designed as 0 degrees longitude?
10. What is the name for the line drawn at 0 degrees longitude?
11. What is the name for the line drawn at 0 degrees latitude?
12. How is a degree of longitude or latitude further subdivided?
13. Give an example.
14. How many degrees of longitude do you need to travel across to pass through one “hour” of time (or one time zone)?
15. How many time zones are there?
16. Read the information under Figure 1-13. Where and why were standard time zones first adopted?
17. What is the longitude of the International Date Line?
18. Use page 18 to annotate the map below.

Draw the **Prime Meridian** and **International Date Line.**

Shade and label all countries (or regions) that use **non-standard time zones.**

What country forced a 2,000-mile deviation in the International Date Line?



**Regions: Areas of Unique Characteristics**

1. Define *region:*
2. One contemporary (current) approach to studying landscape is called the **regional studies approach.** What do geographers who adopt this view believe regarding regions?
3. Geographers using the regional studies approach argue that the distinctive landscapes of different regions result from what two things?
4. Complete the chart below which details **types of regions** identified by geographers.

|  |  |  |  |
| --- | --- | --- | --- |
|  | FORMAL REGION | FUNCTIONAL REGION | VERNACULAR REGION |
| Also called |  |  |  |
| Definition |  |  |  |
| Example |  |  |  |

1. How does a geographer conclude that two (or more) phenomena are “spatially associated,” meaning that they have some sort of cause and effect relationship?
2. What two meanings of culture do geographers study?
3. Define *Cultural Ecology:*
4. Define *Environmental Determinism:*
5. Define *Possibilism:*
6. What are the types of climates geographers identify (by letter and name)?
7. In what major way does climate influence human activities? (Give an example)
8. List the four major **biomes,** or **major plant communities**, found naturally on Earth.
9. What are the two major problems geographers are concerned with as far as **soil** is concerned?

**Chapter 1 Learning Guide – Thinking Geographically**

**Key Issue 3 – *Why Are Different Places Similar?***

Pgs. 28 – 39

**Scale: From Local to Global**

1. Explain *globalization:*
2. How has **modern technology** played a role in globalization?
3. In what ways is globalization of culture **manifested in the landscape**? Provide an example.
4. In what ways has the **communications revolution** played a role in globalization? Provide an example.
5. Provide an example of a reaction against globalism and globalization.

**Space: Distribution of Features**

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a feature in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is known as its **distribution**.
2. Define *density:*
3. What is *arithmetic density?*
4. What is *physiological density?*
5. What is *agricultural density?*
6. Define *concentration:*
7. In the boxes below draw 10 dots in each so that density is the same in each, but illustrate and label the two different kinds of concentration.

|  |  |
| --- | --- |
|  |  |

1. List the two different types of **pattern** given in the text.
2. What role does **gender** play in geography? (What is the “geography of gender”?)
3. In what way does each of the following play a role in geography?

|  |  |
| --- | --- |
| ETHNICITY | SEXUAL ORIENTATION |
|  |  |

**Connections Between Places**

1. What is *space-time compression?*
2. In the past, most interaction between places required what?
3. How has this changed?
4. Give some examples of things that retard interaction among groups.
5. Describe the phenomenon known as *distance-decay.*
6. With regard to **diffusion**, define and give an example of each of the following.

|  |  |  |
| --- | --- | --- |
|  | **Diffusion – Process by which a characteristic spreads from one place to another over time.** | |
|  | **Hearth** |  |
|  | **Relocation Diffusion** |  |
|  | **Hierarchical Diffusion** |  |
| **Expansion**  **Diffusion** | **Contagious Diffusion** |  |
|  | **Stimulus Diffusion** |  |

**Chapter 1 Learning Guide – Thinking Geographically**

**Key Issue 1 – *How Do Geographers Address Where Things Are?***

Pgs. 2 – 13

1. Define *map:*   
   **two dimensional or flat scale model of the Earth’s surface or portion of it; scale model of the real world**
2. Define *cartography:* **the science of making maps**

**Maps**

1. Give an example of early mapmaking and the unusual materials for the map.

**3-D map called stick charts made of palm tree strips and shells by Polynesians**

1. Who first demonstrated that the Earth was spherical (round)? How?

**Aristotle – that matter falls together toward a common center; Earth’s shadow on the moon is circular during eclipse; stars change as one travels north or south**

1. Who was the first to use the term “geography”?

**Eratosthenes**

1. List three of his contributions in geography at that time.

**Calculated Earth’s circumference; prepared one of the earliest world maps; divided world into 5 climate regions (torrid zone, 2 frigid zones, 2 temperate bands)**

1. Provide examples of developments in geography for each of the following:

|  |  |
| --- | --- |
| Chinese | **5th c B.C. a map portrayed economic resources in each province**  **Phei Hsiu produced elaborate map of China in 267** |
| Muslims | **al-Idrisi created a world map and geography text**  **Ibn-Battutah recorded 120,000 kilometers of travel through Muslim world on N. Africa, S. Europe & Asia** |
| Age of Discovery  (16th Century) | **Cartographers Mercator & Ortelius created maps for explorers who sailed in search of trade routes & resources** |

1. Define *scale:* **relationship between the portion of Earth being studied and Earth as a whole; relationship of a feature’s size on a map to its actual size on Earth**
2. What is the advantage of a map that shows only a small portion of the Earth’s surface – like a neighborhood?   
   **Can provide extensive details about one place**
3. What advantage does a map that shows the entire globe have?   
   **Can communicate processes and trends that affect everyone**
4. When geographers convert the round Earth to a flat map, they use a **projection.** All projections have some distortion (only a globe has none). List the four things that typically become distorted in various projections and explain the distortion.   
   **Shape – can become elongated or squat; Distance – increased or decreased between two points; Relative Size – can appear smaller or larger than reality; Direction – can be distorted from one place to another**
5. Two important projections are the **Mercator** and the **Robinson.** Complete the chart below to compare their advantages and disadvantages.

|  |  |  |
| --- | --- | --- |
|  | **Robinson** | **Mercator** |
| Advantages | **Good for displaying info. across oceans** | **Shape is hardly distorted; direction is consistent; map is rectangular** |
| Disadvantages | **By giving space to oceans, land areas are much smaller** | **Area is distorted at the poles making them look larger or smaller than reality** |

1. With regard to the **Land Ordinance of 1785,** the official survey system for the United States, define the following:

*Township:* **Square typically 6 miles on each side**

*Sections:* **36 sections in a township that is a square typically 1 mile on each side**

**Contemporary Tools**

1. Define *remote sensing:* **Acquisition of data about Earth’s surface from a satellite orbiting Earth or from other long distance methods**
2. Remotely sensed images consist of pixels. What is the smallest area on the surface of the Earth that can be scanned as a single pixel?   
   **1 meter across**
3. Geographers use **GIS** (Geographic Information System) to store “layers” of data. Give four examples of types of data stored in a single layer.   
   **country boundaries; roads; bodies of water; names of places**

**Chapter 1 Learning Guide – Thinking Geographically**

**Key Issue 2 – *Why is Each Point on Earth Unique?***

Pgs. 13 – 28

**Place: Unique Location of a Feature**

1. Define *toponym:* **Name given to a place on Earth**
2. Identify four ways in which places can receive names.   
   **From a person, religion, ancient history, origin of settlers**
3. Identify three reasons for which places sometimes change names.   
   **Honor someone/something, bring publicity, political upheavals**
4. Define *site:* **Physical character of a place**
5. List some site characteristics.   
   **Climate, water sources, topography, soil, vegetation, latitude, elevation, etc.**
6. Complete the following sentence about site: Humans actions can \_\_\_**modify/change\_\_\_\_\_\_\_\_\_\_** the characteristics of a site.
7. Define *situation:* **Location of a place relative to other places**
8. What role do familiar places have understanding situation of unfamiliar places? **Helps people provide direction; we refer to the situation of unfamiliar places by describing the surrounding familiar places (buildings, landmarks, streets)**
9. What place is designed as 0 degrees longitude?   
   **Greenwich, England**
10. What is the name for the line drawn at 0 degrees longitude?   
    **Prime Meridian**
11. What is the name for the line drawn at 0 degrees latitude?   
    **Equator**
12. How is a degree of longitude or latitude further subdivided?   
    **Into 60 minutes (‘) and then into 60 seconds (“)**
13. Give an example.   
    **Capitol Building in Denver, Co 39°42’5” N latitude and 104°59’04” W longitude**
14. How many degrees of longitude do you need to travel across to pass through one “hour” of time (or one time zone)?   
    **15°**
15. How many time zones are there?   
    **24**
16. Read the information under Figure 1-13. Where and why were standard time zones first adopted?   
    **United States 1883 to avoid confusion as railroad traveled through multiple time zones when they became the main source of transportation**
17. What is the longitude of the International Date Line?   
    **180°**
18. Use page 18 to annotate the map below.

Draw the **Prime Meridian** and **International Date Line.**

Shade and label all countries (or regions) that use **non-standard time zones.**

What country forced a 2,000-mile deviation in the International Date Line? **Kiribati**



**Regions: Areas of Unique Characteristics**

1. Define *region:* **An area distinguished by a unique combination of trends or features**
2. One contemporary (current) approach to studying landscape is called the **regional studies approach.** What do geographers who adopt this view believe regarding regions?   
   **Culture is the agent, the natural area is the medium and the cultural landscape is the result**
3. Geographers using the regional studies approach argue that the distinctive landscapes of different regions result from what two things?   
   **Social relationships and physical processes**
4. Complete the chart below which details **types of regions** identified by geographers.

|  |  |  |  |
| --- | --- | --- | --- |
|  | FORMAL REGION | FUNCTIONAL REGION | VERNACULAR REGION |
| Also called | **Uniform or homogeneous region** | **Nodal region** | **Perceptual region** |
| Definition | **Where everyone shares in one or more distinct characteristic** | **An area organized around a focal point** | **A place that people believe exists as a part of their cultural identity** |
| Example | **State of Montana – gov’t passes laws, collects taxes, etc.** | **Reception area of a TV station – signal is strongest at the center and gets weaker as one moves away** | **American South – high cotton production; source of pride for southerners; Confederate states** |

1. How does a geographer conclude that two (or more) phenomena are “spatially associated,” meaning that they have some sort of cause and effect relationship? **Because they have similar spatial distributions based on cultural, economic and environmental factors**
2. What two meanings of culture do geographers study?   
   **What people care about – values, ideas, beliefs, customs and What people take care of – earning money, getting food, clothing & shelter**
3. Define *Cultural Ecology:* **Study of human-environment relationships; how cultural groups modify the natural environment in distinct ways to produce unique regions**
4. Define *Environmental Determinism:* **How the physical environment causes social development**
5. Define *Possibilism:* **Even though the physical environment may limit some human actions, people have the ability to adjust to their environment by choosing a course of action from many alternatives**
6. What are the types of climates geographers identify (by letter and name)?   
   **A – Tropical; B – Dry; C – Warm Mid-Latitude; D – Cold Mid-Latitude; E - Polar**
7. In what major way does climate influence human activities? (Give an example) **Production of food, where people settle, etc.**
8. List the four major **biomes,** or **major plant communities**, found naturally on Earth. **Forest, Savanna, Grassland, Desert**
9. What are the two major problems geographers are concerned with as far as **soil** is concerned?   
   **Erosion and depletion of nutrients**

**Chapter 1 Learning Guide – Thinking Geographically**

**Key Issue 3 – *Why Are Different Places Similar?***

Pgs. 28 – 39

**Scale: From Local to Global**

1. Explain *globalization:* **The scale of the world is shrinking in that there is an ability for a person, object or idea to interact with a person, object or idea in another place**
2. How has **modern technology** played a role in globalization?   
   **Allows for easy movement of money, materials and products around the world**
3. In what ways is globalization of culture **manifested in the landscape**? Provide an example.   
   **Produces a uniform global landscape. Ex. McDonald’s will look the same all around the world**
4. In what ways has the **communications revolution** played a role in globalization? Provide an example.   
   **With regard to TV, people can choose from 100s of channels in more than one language. Ex. Someone in Florida can watch the same show as someone in Italy.**
5. Provide an example of a reaction against globalism and globalization.   
   **al-Qaeda attacks on U.S. Sept. 11, 2001**

**Space: Distribution of Features**

1. The \_\_\_**arrangement**\_\_\_\_\_\_\_\_ of a feature in \_\_\_\_**space**\_\_\_\_\_\_ is known as its **distribution**.
2. Define *density:* **The frequency with which something exists in an area**
3. What is *arithmetic density?* **The total number of people divided by the total land area**
4. What is *physiological density?* **The total number of people per unit of land suitable for agriculture**
5. What is *agricultural density?* **The ratio of farmers to the total amount of land suited for agriculture.**
6. Define *concentration:* **The spread of something over a given area or the way a feature is spread over an area**
7. In the boxes below draw 10 dots in each so that density is the same in each, but illustrate and label the two different kinds of concentration.

|  |  |
| --- | --- |
| **Clustered – dots close together** | **Dispersed – dots farther apart; separated** |

1. List the two different types of **pattern** given in the text.   
   **Geometric and irregular**
2. What role does **gender** play in geography? (What is the “geography of gender”?) **Geographic decisions favor the male, i.e. baseball field, location of home to Dad’s work**
3. In what way does each of the following play a role in geography?

|  |  |
| --- | --- |
| ETHNICITY | SEXUAL ORIENTATION |
| **In most U.S. neighborhoods the residents tend to be of the same ethnic background to reinforce cultural identity and as a result of fear of spatial interaction with the opposite race** | **Homosexuals are attracted to certain locations to reinforce spatial interaction with other gays, i.e. San Francisco** |

**Connections Between Places**

1. What is *space-time compression?* **The reduction in time it takes for something to reach another place. Distant places seem less remote and more accessible**
2. In the past, most interaction between places required what?   
   **Physical movement of people**
3. How has this changed?   
   **Through computers, telecommunications and TV (networks)**
4. Give some examples of things that retard interaction among groups.   
   **Cultural barriers (language/traditions) and Physical barriers (deserts/oceans)**
5. Describe the phenomenon known as *distance-decay.* **The idea that contact diminishes with increasing distance and eventually disappears; the farther away two groups are, the less likely they are to interact**
6. With regard to **diffusion**, define and give an example of each of the following.

|  |  |  |
| --- | --- | --- |
|  | **Diffusion – Process by which a characteristic spreads from one place to another over time.** | |
|  | **Hearth** | **The place an innovation originates and diffuses to other places**  **Ex. Cultural features of U.S. originally came from hearths in Europe** |
|  | **Relocation Diffusion** | **The spread of an idea through physical movement of people from one place to another**  **Ex. Spanish being spoken in N. America as a result of immigrants; new AIDS cases reported in every state during the 1980s and 1990s** |
|  | **Hierarchical Diffusion** | **The spread of an idea from authority, power or large urban center to other persons or places**  **Ex. Hip Hop Music** |
| **Expansion**  **Diffusion** | **Contagious Diffusion** | **Rapid widespread diffusion of a feature or trend throughout a population**  **Ex. Idea on internet (Facebook)** |
|  | **Stimulus Diffusion** | **The spread of an underlying idea even though the specific characteristic is rejected**  **Ex. Apple Computers fail in the 1990s, but the idea of the mouse is successful** |