**THINKING GEOGRAPHICALLY Chp. 1**

(Know and be able to Name:)

<table>
<thead>
<tr>
<th>Definition</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Absolute distance</td>
<td>region</td>
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<tr>
<td>Absolute location</td>
<td>relative location</td>
</tr>
<tr>
<td>Agricultural density</td>
<td>relocation diffusion</td>
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<tr>
<td>Arithmetic density</td>
<td>remote sensing</td>
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<tr>
<td>cartogram</td>
<td>resource</td>
</tr>
<tr>
<td>cartography</td>
<td>Robinson projection</td>
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<tr>
<td>Choropleth map</td>
<td>scale</td>
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<tr>
<td>concentration</td>
<td>section/Township</td>
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<tr>
<td>connections</td>
<td>sequent occupancy (political)</td>
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<tr>
<td>contagious diffusion</td>
<td>site</td>
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<tr>
<td>cultural ecology</td>
<td>situation</td>
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<tr>
<td>cultural landscape</td>
<td>space</td>
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<tr>
<td>culture (save for Chp. 4)</td>
<td>space-time compression</td>
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<tr>
<td>density</td>
<td>stimulation diffusion</td>
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<tr>
<td>diffusion</td>
<td>thematic map</td>
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<tr>
<td>distance-decay</td>
<td>Tobler’s Law</td>
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<tr>
<td>distribution</td>
<td>topographic map</td>
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<tr>
<td>dot distribution map</td>
<td>toponym</td>
</tr>
<tr>
<td>environmental determinism</td>
<td>Transnational corporation</td>
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<tr>
<td>equator</td>
<td>uneven development</td>
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<tr>
<td>expansion diffusion</td>
<td>vernacular region</td>
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<tr>
<td>flow-line maps</td>
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<tr>
<td>formal region (uniform)</td>
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<tr>
<td>friction of distance</td>
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<tr>
<td>functional region (nodal)</td>
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<tr>
<td>GIS</td>
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<tr>
<td>GPS</td>
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<td>hearth</td>
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<tr>
<td>globalization</td>
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<td>Greenwich Mean Time</td>
<td></td>
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<tr>
<td>hearth</td>
<td></td>
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<tr>
<td>hierarchical diffusion</td>
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<tr>
<td>human geography</td>
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<tr>
<td>International Dateline</td>
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<td>Isoline map</td>
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<tr>
<td>Land Ordinance of 1785</td>
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<tr>
<td>latitude</td>
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<tr>
<td>legend</td>
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<td>location</td>
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<td>longitude</td>
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<tr>
<td>map</td>
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<tr>
<td>Mercator projection</td>
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<td>meridian</td>
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<tr>
<td>parallel</td>
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<tr>
<td>pattern</td>
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<tr>
<td>place</td>
<td></td>
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<tr>
<td>physiological density</td>
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<tr>
<td>Possibilism</td>
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<tr>
<td>Prime meridian</td>
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<td>projection</td>
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**BE ABLE TO**

- define *geography* and *human geography* and explain the meaning of the spatial perspective.

- explain how geographers classify each of the following and provide examples of each:
  
  a) distributions
  b) locations
  c) regions

- identify how each of the following plays a role in mapmaking:
  
  a) induction
  b) symbolization
  c) simplification
  d) categorization

- identify types of scale and projections used in mapmaking - identify advantages and disadvantages of different projections.

- list different types (models) of diffusion and provided examples/illustrations of each in the real world.

- distinguish between different types of mapped information (dot distribution, choropleth, etc.) and provide explanations of strengths and weaknesses of each.

- define and discuss cultural ecology, possibilism, and environmental determinism.

**READING ASSIGNMENTS**

1. Rubenstein, Chapter 1: *Thinking Geographically*

2. Rubenstein, Appendix, pp. 478-482

3. Kuby, Chapter 1: *True Maps, False Impressions: Making, Manipulating, and Interpreting Maps*
Chp. 1 Thinking Geographically: Vocabulary Words not Found in the Textbook

**absolute distance:** can be measured on a straight line: distance between point A and point B.

**absolute location:** defines a point or place on the map using coordinates such as latitude and longitude. Ex.: USA’s Capitol Building is 38 degrees north of the Equator and 77 degrees west of the Prime Meridian.

**cartogram:** uses simplified geometries/shapes to represent real-world places. Ex.: In order to show which countries of the world are the most populous, all countries of the world would be shrunk or enlarged according to their population size. India would be huge and bloated in size compared to shrunk Canada. Mexico would be elongated/stretched compared with little Spain.

**choropleth maps:** express the geographic variability of a particular theme using color variations. There is a key/legend explaining what each color represents. Ex.: a political map of USA with blue colored Democratic states versus red colored Republic states.

**dot distribution map:** use dots to express the volume and density of a particular geographic feature. The dots can represent the # of people in an area, or can express the number of events or phenomena that occurred in an area. Ex.: dots representing the # of people who suffered heart attacks on a state-by-state basis. Each state would have a number of dots inside of its boundary polygon/shape representing number of heart attacks.

**equator:** 0 latitude. The north and South Poles are 90 degree latitude.

**friction of distance:** When the length of distances becomes a factor that hinders the interaction between two points, this is known friction of distance. Ex: This can be seen when the combined time and cost of moving a product prevents it from being sold in far-off locations. Ex.: It costs too much money and time to ship or sell Ford cars/trucks in Lithuania.

**flow-line maps:** use lines of varying thickness to show the direction and volume of a particular geographic movement patterns. Ex.: a map of flow lines showing the total number of foreign immigrants in the USA. Each line would begin in the country of origin and point to the USA, with a thickness based upon the total number of immigrants.

**human geography:** study of where and why human activities are located where they are. Ex.: religions, businesses, and cities.

**isoline map:** calculates data values between points across a variable surface. Between point A and point B, a series of contour lines can be drawn to show the change in data between the 2 points.

**legend:** or key explains the symbols or dots or classifications or colors on a map.
Mercator projection: Shape is distorted very little, direction is consistent, and the map is rectangular, flat, and has a grid/graph look. Great disadvantage is the land area is grossly distorted toward the poles -- look much larger than they actually are.

Relative location: refers to the location of a place compared to a known place or geographic feature. Ex: Camas is located east of Vancouver, WA, about 6 miles via Hwy. 14 on the Columbia R.

Robinson projection: is useful for displaying information across the oceans. Its major disadvantage is that by allocating space to the oceans, the land areas are much smaller. The world is presented with rounded look on the edges.

Sequent occupancy: The succession of groups and cultural influences throughout a place’s history. In many places there are several different historical place-specific culture, society, politics, and economy. Ex: England settled by Celts, Normans, Vikings, Romans, etc.

Thematic map: a number of different map types can be group under this heading. Each one expresses a particular subject and does not show land forms for other features: choropleth, isoline, dot distribution, flow-line, and cartograms.

Tabler's Law: all places are interrelated but closer places are more related than further ones. Ex: Camas is interrelated with Washington State, but it is far more related to SW Washington, Vancouver, and Portland, OR.

topographic maps: show the 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 wilderness areas.
Thinking Geographically: **Key Issue 1**

*How Do Geographers Describe Where Things Are?*

Rubenstein, pp. 4-12

1. Define *geo + graphy*:

2. Define *human geography*

3. Define *physical geography*

4. Define *map*:

5. Define *place*:

6. Define *region*:

7. Three basic concepts help geographers explain why these similarities below do not result from coincidence.
   a. *Scale definition*:

   b. *Space definition*:

   c. *Connections definition*:

8. Define *cartography*:

   - MAPS

9. Give two examples of early mapmaking and its (unusual?) materials for the maps.
   (a) 
   (b)
10. Who first demonstrated that the earth was round? How?

11a. Who was the first to use the term “geography.”

11b. List three of his contributions in geography at that time.
   
   (a)
   
   (b)
   
   (c)

12. Provide an example of developments in geography for each of the following:

<table>
<thead>
<tr>
<th>Chinese</th>
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<tbody>
<tr>
<td>Muslims</td>
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<tr>
<td>Age of Discovery (16th Century)</td>
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</table>

13. Map Scale is presented 3 Ways
   a. ratio or fraction: (explain)

   b. written scale: (explain)

   c. graphic scale: (explain)

14a. What is the advantage of a map which shows only a small portion of the earth’s surface – like a neighborhood - that is, a large-scale map?

14b. What advantage does a map which shows the entire globe, a small-scale map, have?
15. 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 types of distortion and define.
   a. 
   c. 
   b. 
   d. 

16. Two important projections are the Mercator and the Robinson. Complete the table below to compare their advantages and disadvantages. p. 481 (Robinson) p. 479 (Mercator)

<table>
<thead>
<tr>
<th></th>
<th>ROBINSON</th>
<th>MERCATOR</th>
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<tbody>
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</table>

17. Explain what a homolosine projection is about p. 480

18. With regard to the Land Ordinance of 1785, which became the official survey system for the United States, define the following: p. 9
   a) Township
   b) principal meridians
   c) base lines
d) *sections*

- **CONTEMPORARY TOOLS p. 9**

19. Geographers use a **GIS** (Geographic Information System) to store “layers” of data. Give three examples of types of data stored in a single layer.

20. Define **remote sensing**: p. 9

21. 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?

22. List several things that geographers can map using remotely sensed data.

23. Complete the following regarding a **Global Positioning System**.

<table>
<thead>
<tr>
<th>Elements/components...</th>
<th>Uses/implementation...</th>
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</thead>
<tbody>
<tr>
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</table>
Thinking Geographically: **Key Issue 2**
*Why Is Each Point On Earth Unique?*
Rubenstein, pp. 13-28

● **PLACE: UNIQUE LOCATION OF A FEATURE**
1. Two basic concepts help geographers to explain why every point on Earth is in some ways unique:
   a. Place is a ____________________.
   b. Region is an ____________________.

2. Define *location*:

3. Define *toponym*:

4. Identify four ways in which places can receive names
   a) ____________________
   b) ____________________
   c) ____________________
   d) ____________________

5. Identify three reasons for which places sometimes change names.
   a) ____________________
   b) ____________________
   c) ____________________

6. Define *site*:

7. List some *site characteristics*.
   a) ____________________
   b) ____________________
   c) ____________________
   d) ____________________
   e) ____________________

8. Complete the following sentence about *site*:
   
   *Human actions have the ability to ________________ the characteristics of a site.*

9. Define *situation*:

10. What role do familiar places have understanding *situation* of unfamiliar places?
11. What place is designated as 0 degrees longitude?

12. What is the name for the line drawn at 0 degrees longitude?

13a. How is a degree of longitude or latitude further subdivided?

13b. 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. Where and why were standard time zones first adopted?

17. What is the longitude of the International Date Line?

18. Use the map on pages 17/18 to annotate the map below.

- Draw the Prime Meridian and International Date Line.
- Shade and label all countries (or regions) which use non-standard time zones.
- Label the country which has forced the 3000 mile deviation of the Prime Meridian.
19. A region derives its unified character through the cultural landscape which is a _____________.

20. A region is “An _____________ of __________ defined by one or more ________________
                                             _________________” according to the textbook.

21. One contemporary (current) approach to studying the cultural landscape is called the regional
studies approach. What do geographers who adopt this view believe regarding regions? (top of pg. 17)

22. Geographers using the regional studies approach argue that distinctive landscapes of different
regions result from what two things?
   a. ____________
   b. ____________

23. Complete the chart below which details types of regions identified by geographers.

<table>
<thead>
<tr>
<th>FORMAL REGION</th>
<th>FUNCTIONAL REGION</th>
<th>VERNACULAR REGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Also called</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td></td>
<td></td>
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<tr>
<td>Example</td>
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</tbody>
</table>

24. How does a geographer conclude that two (or more) phenomena are “spatially associated,” that is,
that they bear some sort of cause and effect relationship?

25. Prepare a bullet chart about the word CULTURE
   - Definition: 3 beliefs:
     a. ____________
     b. ____________
     c. ____________
• Everyday language we think of culture as the

• Culture also refers to

• Origin of culture is “cultus” which means

• To care about: ideas, beliefs, values, customs: list
  a. 
  b. 
  c.

• What people take care of: list
  a. 
  b. 
  c.

26. Very carefully define the following terms: p. 24

  A. Cultural Ecology

  B. Environmental Determinism

  C. Possibilism

27. How many major types of climates do geographers identify?
  a) 
  b) 
  c) 
  d) 
  e)

28. In what major way does climate influence human activities? (Give an example.)

29. List the four major biomes, or major plant communities, found naturally on earth. P. 25
  a) 
  b) 
  c) 
  d)
30. What are the two major problems with which geographers are concerned, as far as soil is concerned? p. 26 Explain each problem in depth.
a) 

b)

31. Define *geomorphology*:

32. Define *topographic maps*:

33. Complete two case studies which describe human modifications of and adaptation to the local environment. To do so, annotate the blank maps and bullet in brief notes to the right of each.

A) THE NETHERLANDS

B) FLORIDA
Thinking Geographically: **Key Issue 3**
*Why Are Different Places Similar?*
Rubenstein, pp. 28-39

- **SCALE: FROM LOCAL TO GLOBAL**

1. Define *globalization*:

2. Define *transnational corporation* p. 30:

3. How has *modern technology* played a role in globalization p. 30 – 3rd paragraph?

4. In what ways is globalization of culture *found in the landscape* p. 31?

5. In what ways has the *communications revolution* played a role in globalization p. 31?
   a)
   b)
   c)

6. Make three bulleted statements about *reactions against globalism* and globalization.
   (a)
   (b)
   (c)

- **SPACE: DISTRIBUTION OF FEATURES** p. 32 – The physiological gap or interval between 2 objects. *Spatial thinking is the most fundamental skill that geographers possess to understand the arrangement of objects across surfaces like the world.*

7. The __________________________ of a feature in __________________________ is known as its *distribution*.

8. Three main properties of *distribution* across the Earth are: a. __________________________
   b. ___________________________ c. ____________________________ (bottom pg. 32)
9. Define *density*:

3 Kinds of density: p. 32-33
   a) Define *arithmetc density*:
   
   b) Define *physiological density*:
   
   c) Define *agricultural density*:

10. The way in which a feature is spread over space is known as *concentration*. What are the opposite ends of the spectrum of concentration? p. 33
   a.
   
   b.
   
   c. The boxes below – draw 10 dots in each so that the density is the same in each, but illustrate and label the two *different kinds* of concentration.

<table>
<thead>
<tr>
<th>dispersed</th>
<th>clustered</th>
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<tbody>
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</table>

11. List the three different types of *pattern* given in the text.
   a.
   b.
   c.

12. What role does *gender* play in geography? (What is the “geography of gender”)?

13. In what way do each of the following play a role in geography p. 34?

<table>
<thead>
<tr>
<th>ETHNICITY</th>
<th>SEXUAL ORIENTATION</th>
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14. What is *space-time compression*?

15a. In the past, most interaction between places required what? p. 36

15b. How has this changed?

16. Give some examples of *things that retard interaction* among groups.

17. Describe the phenomenon known as *distance-decay*.

18. **Diffusion** is defined as the process by which a characteristic spreads across space. With regard to diffusion, define and, where possible, give an example of each of the following:

<table>
<thead>
<tr>
<th>DIFFUSION</th>
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<tbody>
<tr>
<td>hearth</td>
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<tr>
<td>relocation diffusion</td>
</tr>
<tr>
<td>hierarchical diffusion</td>
</tr>
<tr>
<td>contagious diffusion</td>
</tr>
<tr>
<td>expansion diffusion</td>
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<tr>
<td>stimulus diffusion</td>
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</tbody>
</table>
Notes Chp. 1 Basic Concepts