

***Introduction to Contemporary Geography (Rubenstein)***  
**Chapter 1 Thinking Geographically**

1.1 Multiple Choice Questions

1) \_\_\_\_\_ concentrates on the distribution of natural features, such as landforms and vegetation.

- A) Environmental Geography
- B) Cultural Geography
- C) Physical Geography
- D) GIS
- E) Remote sensing

Answer: C

Diff: 1

Section: 1.1

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1.1: Define human and physical geography.

2) To explain where things are, one of the most important tools Geographers use is a:

- A) cell phone
- B) GPS
- C) map
- D) textbook
- E) GIS

Answer: C

Diff: 1

Section: 1.1

Bloom's Taxonomy: Comprehension

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3.1: Explain what maps are and what purposes they serve.

3) A \_\_\_\_\_ is an area of Earth distinguished by a unique combination of cultural and physical features.

- A) place
- B) country
- C) society
- D) region
- E) state

Answer: D

Diff: 1

Section: 1.7

Bloom's Taxonomy: Comprehension

Geo Standard: 6

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

4) To explain why different places are interrelated, geographers have three basic concepts. These are:

- A) scale, space, and connection
- B) country, region, and town
- C) railroads, shops and markets
- D) distance, area and location
- E) maps, GPS and GIS

Answer: A

Diff: 2

Section: 1.1

Bloom's Taxonomy: Analysis

Geo Standard: 4

Glob Sci Outcome: 4. Demonstrate the quantitative skills needed to succeed in Introductory Geography.

5) \_\_\_\_\_ refers to relationships among people and objects across the barrier of space.

- A) Connection
- B) Interrelationship
- C) Situation
- D) Space
- E) Globalization

Answer: A

Diff: 1

Section: 1.1

Bloom's Taxonomy: Comprehension

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

6) In map projections, which of the following is NOT one of the possible distortions that can result?

- A) location
- B) shape
- C) distance
- D) relative size
- E) direction

Answer: A

Diff: 2

Section: 1.3

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3.2: Describe the role of map scale and projections in making maps.

7) The level of detail and the amount of area covered on a map depends on the \_\_\_\_\_, which is the relationship of a feature's size on a map to its actual size on Earth.

- A) map shape
- B) map scale
- C) map projection
- D) map legend
- E) none of the above

Answer: B

Diff: 2

Section: 1.3

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3.2: Describe the role of map scale and projections in making maps.

8) This was one of the first maps to show the considerable extent of the Western Hemisphere.

- A) Ptolemy's map
- B) Ortelius' map
- C) Mercator's map
- D) ibn Batuta's map
- E) al-Idrisi's map

Answer: B

Diff: 2

Section: 1.2

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.2.1: Summarize the development of geography in the ancient world and in the Middle Ages.

9) In order to find a location on Earth, one could use coordinates of

- A) longitude and latitude
- B) distance and direction
- C) north/south and east/west
- D) time zone and contour maps
- E) time zone and distance from the poles

Answer: A

Diff: 1

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.2: Explain how latitude and longitude are used to locate points on Earth's surface.

10) Using standard time zones, if a country is 60 degrees to the east of you, theoretically, it would be:

- A) four hours behind you
- B) four hours ahead of you
- C) three hours ahead of you
- D) three hours behind you
- E) the same time as your location

Answer: B

Diff: 3

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 4. Demonstrate the quantitative skills needed to succeed in Introductory Geography.

Learning Outcome: 1.4.3: Identify time zones.

11) London, UK is on the Prime Meridian. Using the 90 degrees West longitude for Chicago, what is the time in London if Chicago's time is 8 AM?

- A) 3 AM
- B) 2 PM
- C) Noon
- D) Midnight
- E) 5 PM

Answer: B

Diff: 3

Section: 1.4

Bloom's Taxonomy: Comprehension

Geo Standard: 2

Glob Sci Outcome: 4. Demonstrate the quantitative skills needed to succeed in Introductory Geography.

Learning Outcome: 1.4.3: Identify time zones.

12) New York City is on 75 degrees west longitude. Los Angeles, on the other hand, is on 120 degrees west longitude. If the time is 5 PM in Los Angeles, what would the time be in New York City?

- A) 2 PM
- B) 3 PM
- C) 8 PM
- D) 7 PM
- E) 2 AM

Answer: C

Diff: 3

Section: 1.4

Bloom's Taxonomy: Evaluation

Geo Standard: 2

Glob Sci Outcome: 4. Demonstrate the quantitative skills needed to succeed in Introductory Geography.

Learning Outcome: 1.4.3: Identify time zones.

13) By international agreement, Greenwich Mean Time is:

- A) the time in Washington, D.C., which is the master reference time for all points on Earth
- B) the time in New York, which is the master reference time for all points on Earth
- C) the time at the Prime Meridian, which is the master reference time for all points on Earth
- D) the local time where you live and, and which changes based on your location
- E) the local time in Brussels

Answer: C

Diff: 2

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.3: Identify time zones.

14) The acquisition of data about Earth's surface from a satellite orbiting Earth or from other long-distance methods is known as \_\_\_\_\_.

- A) geographic information system
- B) remote sensing
- C) global positioning system
- D) cartography
- E) none of the answer choices are correct.

Answer: B

Diff: 1

Section: 1.5

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5.1: Identify geography's analytic tools including remote sensing, GPS, and GIS.

15) \_\_\_\_\_ enables geographers to calculate whether relationships between objects on a map are significant or merely coincidental.

- A) Remote sensing
- B) GIS
- C) GPS
- D) Cartography
- E) Orthophotos

Answer: B

Diff: 1

Section: 1.5

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5.1: Identify geography's analytic tools including remote sensing, GPS, and GIS.

16) The name given to a place is called a/an:

- A) toponym
- B) topograph
- C) mentifact
- D) placonym
- E) acronym

Answer: A

Diff: 1

Section: 1.6

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

17) In geography, we can describe the location of a place by \_\_\_\_\_, which is the physical character of a place.

- A) location
- B) situation
- C) site
- D) direction
- E) none of the answer choices are correct.

Answer: C

Diff: 1

Section: 1.6

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6.1: Identify geographical characteristics of places including location, place name, situation, and site.

18) Which of the following is NOT one of the types of regions?

- A) formal region
- B) functional region
- C) vernacular region
- D) statutory region

Answer: D

Diff: 1

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

19) A characteristic of a region need not be universal for it to define a \_\_\_\_\_ region.

- A) formal region
- B) vernacular region
- C) functional region
- D) structural region
- E) strategic region

Answer: A

Diff: 1

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

20) Globalization of the world economy has been led primarily by

- A) Transnational corporations
- B) The United Nations
- C) Investment bankers
- D) The United States Government
- E) The International Monetary Fund

Answer: A

Diff: 2

Section: 1.8

Bloom's Taxonomy: Knowledge

Geo Standard: 11

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

21) The extent that a fast food chain is spread over a region would be referred to as its \_\_\_\_\_.

- A) concentration
- B) clustering
- C) dispersal
- D) pattern
- E) diffusion

Answer: A

Diff: 1

Section: 1.9

Bloom's Taxonomy: Knowledge

Geo Standard: 10

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9.1: Define density, concentration, and pattern as properties of distribution across space.

22) In trying to find an unfamiliar place by referring to familiar places when driving, you are using the concept of \_\_\_\_\_.

- A) place
- B) location
- C) situation
- D) distance
- E) GPS

Answer: C

Diff: 1

Section: 1.6

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6.1: Identify geographical characteristics of places including location, place name, situation, and site.



23) The Bible Belt is an example of this type of region:

- A) vernacular region
- B) functional region
- C) formal region
- D) strategic region
- E) none of these answer choices are correct

Answer: A

Diff: 1

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 12

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

24) After Hurricane Katrina, many people moved away from New Orleans. As they settled elsewhere in the U.S., they maintained their ways of doing things. This is an example of

- A) expansion diffusion
- B) relocation diffusion
- C) hierarchical diffusion
- D) contagious diffusion
- E) all of the choices are correct.

Answer: B

Diff: 2

Section: 1.10

Bloom's Taxonomy: Comprehension

Geo Standard: 10

Glob Sci Outcome: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.10.1: Describe how characteristics can spread across space over time through diffusion.

25) The spread of ideas from nodes of power to other places is an example of

- A) expansion diffusion
- B) contagious diffusion
- C) hierarchical diffusion
- D) stimulus
- E) relocation

Answer: C

Diff: 2

Section: 1.10

Bloom's Taxonomy: Knowledge

Geo Standard: 10

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.10.1: Describe how characteristics can spread across space over time through diffusion.

26) Innovative features of Apple's iPhone and iPad operating systems have been adopted by competitors. This is an example of which kind of diffusion?

- A) stimulus
- B) expansion
- C) contagious
- D) relocation
- E) none of the answer choices are correct.

Answer: A

Diff: 2

Section: 1.10

Bloom's Taxonomy: Knowledge

Geo Standard: 10

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.10.1: Describe how characteristics can spread across space over time through diffusion.

27) Which of these is NOT one of the four Earth systems?

- A) ozonosphere
- B) lithosphere
- C) atmosphere
- D) biosphere
- E) hydrosphere

Answer: A

Diff: 2

Section: 1.11

Bloom's Taxonomy: Knowledge

Geo Standard: 8

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11.1: Name the four spheres of the Earth system.

28) The argument that climatic conditions in northwestern Europe led to better human conditions is based on this approach:

- A) possibilism
- B) cultural ecology
- C) environmental determinism
- D) fundamentalism
- E) none of the answer choices are correct.

Answer: C

Diff: 2

Section: 1.12

Bloom's Taxonomy: Comprehension

Geo Standard: 12

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.12.1: Compare and contrast environmental determinism and possibilism.

29) Which of the following statements is NOT true of longitudes?

- A) They are parallels
- B) They are arcs drawn between the North and South poles
- C) All longitudes meet at the poles
- D) The distances between longitudes narrow as one moves away from the equator
- E) The Prime Meridian passes through Greenwich, England

Answer: A

Diff: 2

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 2

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.1: Describe the geographic grid.

30) Which of the following statements is NOT true of latitudes?

- A) Another name for a line of latitude is a parallel
- B) Latitudes never cross paths
- C) The equator is latitude 0 and the North Pole is latitude 90
- D) The North Pole is latitude 0 and the South Pole is Latitude 180
- E) None of the answer choices are correct.

Answer: D

Diff: 2

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 2

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.1: Describe the geographic grid.

31) Which of the following is NOT true of formal regions?

- A) They are also called functional regions
- B) They are also called uniform regions
- C) They are also called homogeneous regions
- D) Countries and local government regions are examples of formal regions
- E) In a formal region, a selected characteristic is present throughout the region

Answer: A

Diff: 2

Section: 1.7

Bloom's Taxonomy: Comprehension

Geo Standard: 10

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

## 1.2 True/False Questions

1) Geography is divided into two broad categories—physical and supernatural.

Answer: FALSE

Diff: 1

Section: 1.1

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1.1: Define human and physical geography.

2) Every place occupies a unique location, or position, on Earth's surface.

Answer: TRUE

Diff: 1

Section: 1.1

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1.2: List the main themes of geographic study.

3) The relationship between the portion of Earth being studied and Earth as a whole is known as scale.

Answer: TRUE

Diff: 1

Section: 1.3

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3.2: Describe the role of map scale and projections in making maps.

4) Geographers observe that no objects are distributed across space in a regular manner, for discernable reasons.

Answer: FALSE

Diff: 1

Section: 1.1

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1.2: List the main themes of geographic study.

5) For as long as we can remember, maps have been used to help explain where things are found.

Answer: TRUE

Diff: 2

Section: 1.2

Bloom's Taxonomy: Application

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3.1: Explain what maps are and what purposes they serve.

6) The Chinese only began making maps after 100 B.C.

Answer: FALSE

Diff: 2

Section: 1.2

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.2.1: Summarize the development of geography in the ancient world and in the Middle Ages.

7) Azimuthal projections are well-suited for smaller areas and are used for most of the city maps.

Answer: FALSE

Diff: 2

Section: 1.3

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3.2: Describe the role of map scale and projections in making maps.

8) If your cousin lives in a country three time zones to your west, then in theory, she lives about 60 degrees of longitude away from you.

Answer: FALSE

Diff: 3

Section: 1.4

Bloom's Taxonomy: Synthesis

Geo Standard: 4

Glob Sci Outcome: 3. Read and Interpret Graphs and Data.

Learning Outcome: 1.4.2: Explain how latitude and longitude are used to locate points on Earth's surface. 1.4.3: Identify time zones.

9) In standard time, every 15 degrees of longitude (east or west) is equivalent to one hour on the clock.

Answer: TRUE

Diff: 3

Section: 1.4

Bloom's Taxonomy: Synthesis

Geo Standard: 4

Glob Sci Outcome: 3. Read and Interpret Graphs and Data.

Learning Outcome: 1.4.2: Explain how latitude and longitude are used to locate points on Earth's surface. 1.4.3: Identify time zones.

10) GIS is another name for GPS.

Answer: FALSE

Diff: 1

Section: 1.5

Bloom's Taxonomy: Knowledge

Geo Standard: 8

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5.1: Identify geography's analytic tools including remote sensing, GPS, and GIS.

11) In a GIS, each layer represents a different piece of human or environmental information.

Answer: TRUE

Diff: 1

Section: 1.5

Bloom's Taxonomy: Knowledge

Geo Standard: 8

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5.1: Identify geography's analytic tools including remote sensing, GPS, and GIS.

12) A toponym is the name given to a place.

Answer: TRUE

Diff: 1

Section: 1.6

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6.1: Identify geographical characteristics of places including location, place name, situation, and site.

13) Another name for a functional region is a nodal region.

Answer: TRUE

Diff: 2

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

14) A formal region is also called a functional region.

Answer: FALSE

Diff: 1

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

15) Geographers often use functional regions to display information about economic areas.

Answer: TRUE

Diff: 2

Section: 1.7

Bloom's Taxonomy: Comprehension

Geo Standard: 6

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

16) Another name for a perceptual region is a functional region.

Answer: FALSE

Diff: 2

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 6

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

17) Another name for a vernacular region is a perceptual region.

Answer: TRUE

Diff: 1

Section: 1.7

Bloom's Taxonomy: Knowledge

Geo Standard: 6

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.

18) Transnational corporations are also called multinational corporations.

Answer: TRUE

Diff: 1

Section: 1.8

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

19) Density of a phenomenon and clustering of the phenomenon are the same.

Answer: FALSE

Diff: 3

Section: 1.9

Bloom's Taxonomy: Knowledge

Geo Standard: 5

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9.1: Define density, concentration, and pattern as properties of distribution across space.

20) The geometric arrangement of objects in space is pattern.

Answer: TRUE

Diff: 1

Section: 1.9

Bloom's Taxonomy: Knowledge

Geo Standard: 5

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.



21) Patterns and concentrations are the same concepts.

Answer: FALSE

Diff: 2

Section: 1.9

Bloom's Taxonomy: Knowledge

Geo Standard: 4

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9.1: Define density, concentration, and pattern as properties of distribution across space.

22) Children learn from very early on the importance of gender in space.

Answer: TRUE

Diff: 2

Section: 1.9

Bloom's Taxonomy: Knowledge

Geo Standard: 5

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9.2: Give examples of how patterns in space can vary according to gender and ethnicity.

23) The places from which ideas and innovation spring forth are referred to as cultural hearths.

Answer: TRUE

Diff: 2

Section: 1.10

Bloom's Taxonomy: Knowledge

Geo Standard: 6

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

24) The biosphere is made up of portions of all the other three Earth systems.

Answer: TRUE

Diff: 2

Section: 1.11

Bloom's Taxonomy: Knowledge

Geo Standard: 7

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11.1: Name the four spheres of the Earth system.

25) Modern geographers tend to reject environmental determinism in favor of possibilism in explaining relationships between human activity and the physical environment.

Answer: TRUE

Diff: 2

Section: 1.12

Bloom's Taxonomy: Knowledge

Geo Standard: 3

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12.1: Compare and contrast environmental determinism and possibilism.

26) Another name for a line of longitude is a parallel.

Answer: FALSE

Diff: 2

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.1: Describe the geographic grid.

27) Latitudes all converge at the poles.

Answer: FALSE

Diff: 2

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.1: Describe the geographic grid.

28) The Prime Meridian and the International Date Line are the same location.

Answer: FALSE

Diff: 2

Section: 1.4

Bloom's Taxonomy: Knowledge

Geo Standard: 1

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4.1: Describe the geographic grid.

29) The process by which a characteristic spreads across space from one place to another over time is diffusion.

Answer: TRUE

Diff: 2

Section: 1.10

Bloom's Taxonomy: Knowledge

Geo Standard: 12

Glob Sci Outcome: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.10.1: Describe how characteristics can spread across space over time through diffusion.

### 1.3 Essay Questions

1) Imagine you are located on the equator at 150 degrees west longitude. Now imagine your cousin's living on the equator at 135 degrees East longitude. Calculate how many miles you are away from your cousin

Answer: This can be calculated depending on which way one travels. The length of a degree of longitude at the equator is approximately 69 miles. If one travels towards the Prime Meridian:  $180 - 135 = 45$ , then  $180 - 150 = 30$ .

Add 45 and 30 = 75 being the difference between you and your cousin's locations.

Then multiply  $75 \times 69$  miles = 5,175.

If one travels towards the Prime Meridian:

$150^\circ + 135^\circ = 285^\circ$  being the difference between you and your cousin's locations.

$285^\circ \times 69$  miles = 19665 miles.

Diff: 3

Section: 1.4

Bloom's Taxonomy: Synthesis

Geo Standard: 2

Glob Sci Outcome: 4. Demonstrate the quantitative skills needed to succeed in Introductory Geography.

Learning Outcome: 1.4.2: Explain how latitude and longitude are used to locate points on Earth's surface. 1.4.3: Identify time zones.

2) What are the differences between meridians and parallels?

Answer: A meridian is an arc drawn between the North and South poles. The location of each meridian (each line of longitude) is identified on Earth's surface according to a numbering system. The meridian that passes through the Royal Observatory at Greenwich, England, is 0° longitude, also called the prime meridian. The meridian on the opposite side of the globe from the prime meridian is 180° longitude.

A parallel, on the other hand, is a circle drawn around the globe parallel to the equator and at right angles to the meridians. The numbering system to indicate the location of a parallel is called latitude. The equator is 0° latitude, the North Pole 90° north latitude, and the South Pole 90° south latitude.

Although both meridians and parallels are imaginary lines, parallels are as the name implies - they run parallel to each other. So, in actual fact, the distance between one parallel and the next will never change. Meridians, on the other hand, are not even parallel along the equator, because as one moves north or south of the equator, the distance between one meridian and the next narrows until they converge at the poles.

Diff: 2

Section: 1.4

Bloom's Taxonomy: Comprehension

Geo Standard: 2

Glob Sci Outcome: 8. Communicate effectively in writing.

Learning Outcome: 1.4.1: Describe the geographic grid.

3) What is a GIS and what are some of its uses?

Answer: A Geographic Information System is a computer- based system that not only captures and stores information, but also is able to execute queries, do analysis, and displays geographic data. Geographic Information Systems can be used to produce maps that are more accurate and attractive than those drawn by hand. With GIS, the position of any object on Earth can be measured and recorded with mathematical precision and then stored in a computer. A map can be created by asking the computer to retrieve a number of stored objects and combine them to form an image, with each information type stored as a layer.

There are many uses to which GIS can be put. GIS enables geographers to calculate whether relationships between objects on a map are significant or merely coincidental. Layers can be compared to show relationships among different kinds of information. To protect hillsides from development, for example, a geographer may wish to compare a layer of recently built houses with a layer of steep slopes.

Diff: 3

Section: 1.5

Bloom's Taxonomy: Evaluation

Geo Standard: 4

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.5.1: Identify geography's analytic tools including remote sensing, GPS, and GIS.

4) What is the difference between Environmental Determinism and Possibilism?

Answer: Environmental determinism holds that the physical environment causes social development. The proponents of this theory drew a direct link, for example, between the temperate climate of Northwestern Europe and human efficiency (better health conditions, lower death rates, higher living standards, etc).

Modern geographers have largely rejected environmental determinism in favor of possibilism to explain the relationship between human activities and the physical environment. According to possibilism the physical environment may place some limits on human actions, but ultimately, people have the ability to adjust to their environment. People can choose a course of action from many alternatives in the physical environment. For example, people learn that different crops thrive in different climates; wheat is more likely than rice to be grown successfully in colder climates. Thus, under geography's possibilism approach, people choose the crops they grow in part by considering their environment.

Diff: 3

Section: 1.12

Bloom's Taxonomy: Evaluation

Geo Standard: 6

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.12.1: Compare and contrast environmental determinism and possibilism.

5) Identify and describe the four Earth systems.

Answer: Earth's four systems are the atmosphere, the hydrosphere, the lithosphere and the biosphere. The names of these four spheres are derived from the Greek words for stone (litho), air (atmo), water (hydro), and life (bio).

Three of the four systems are abiotic. These are:

1. The atmosphere which is a thin layer of gases surrounding Earth.
2. The hydrosphere includes all of the water on and near Earth's surface.
3. The lithosphere is made up of the Earth's crust and a portion of upper mantle directly below the crust.

One of the four systems is biotic. This is the biosphere, or all living organisms on Earth, including plants and animals, as well as microorganisms.

Diff: 2

Section: 1.11

Bloom's Taxonomy: Application

Geo Standard: 8

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.11.1: Name the four spheres of the Earth system.

6) Explain in simple terms what the different types of diffusion are.

Answer: Diffusion is simply the process by which a characteristic spreads across space from one place to another over time. Something originates at a hearth or node and diffuses from there to other places. Diffusion occurs through cultural interaction involving persons, objects, or ideas.

Geographers observe two basic types of diffusion: **relocation diffusion** and **expansion diffusion**.

**Relocation diffusion** is the spread of an idea through physical movement of people from one place to another. When people move, they carry with them their culture, including language, religion, and ethnicity.

**Expansion diffusion**, on the other hand, is the spread of a feature from one place to another in a snowballing process. This expansion may result from one of three processes: hierarchical diffusion, contagious diffusion or stimulus diffusion.

**Hierarchical diffusion** is the spread of an idea from persons or nodes of authority or power to other persons or places. This may result from the spread of ideas from political leaders, socially elite people, or other important persons to others in the community.

**Contagious diffusion** is the rapid, widespread diffusion of a characteristic throughout the population. As the term implies, this form of diffusion is analogous to the spread of a contagious disease, such as influenza.

**Stimulus diffusion** is the spread of an underlying principle. For example, innovative features of Apple's iPhone and iPad operating systems have been adopted by competitors.

All three types of expansion diffusion occur much more rapidly in the contemporary world than in the past, because of widespread access to modern communications systems. Ideas are able to diffuse from one place to another, even if people are not actually relocating.

Diff: 2

Section: 1.10

Bloom's Taxonomy: Application

Geo Standard: 5

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.10.1: Describe how characteristics can spread across space over time through diffusion.

7) Explain how density differs from patterns and concentration.

Answer: All the three terms (density, concentration and pattern) are used by geographers to identify the distribution of properties across space.

**Density** is the frequency with which something occurs in space. The feature being measured could be people, houses, cars, volcanoes, or anything. The area could be measured in square kilometers, square miles, hectares, acres, or any other unit of area. It should be noted that a large population does not necessarily lead to a high density. Canada has a much larger population than the Netherlands, but the Netherlands has a much higher density because its land area is much smaller.

**Concentration** is the extent of a feature's spread over space. If the objects in an area are close together, they are clustered; if relatively far apart, they are dispersed. To compare the level of concentration most clearly, two areas need to have the same number of objects and the same size area. Concentration is not the same as density. Two neighborhoods could have the same density of housing but different concentrations. In a dispersed neighborhood each house has a large private yard, whereas in a clustered neighborhood the houses are close together and the open space is shared as a community park.

**Pattern** refers to the geometric arrangement of objects in space is pattern. Some features are organized in a geometric pattern, whereas others are distributed irregularly.

Diff: 2

Section: 1.9

Bloom's Taxonomy: Analysis

Geo Standard: 3

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.9.1: Define density, concentration, and pattern as properties of distribution across space.

8) What are transnational corporations and what role do they play in globalizing the world economy?

Answer: Transnational corporations (also called multinational corporations) are companies or entities that do business in several different countries. A transnational corporation may conduct research, operates factories, and sells products in many countries, not just where its headquarters and principal shareholders are located. Transnational corporations assess the particular economic assets of each place and take advantage of the particular strengths of each location. With increasing modern technology and communications, it has become easier to move money, materials, products, technology, and other economic assets around the world. Thanks to the electronic superhighway, companies can now organize economic activities at a global scale.

Diff: 2

Section: 1.8

Bloom's Taxonomy: Analysis

Geo Standard: 10

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.8.1: Give examples of changes in economy and culture occurring at global and local scales.

9) Describe the three main types of regions, providing examples of each type.

Answer: A region is an area of Earth with a unique combination of features. A region derives its character through the cultural landscape, which is the combination of cultural features such as religion, language and economic livelihoods, as well as through physical characteristics of the area, including climate and vegetation.

Three types of regions are **functional**, **formal**, and **vernacular**.

A **functional region** is also called a nodal region. It is an area organized around a node or focal point. The characteristics chosen to define a functional region dominate at a central focus or node and diminish in importance outward. The region is tied to the central point by transportation or communications systems or by economic or functional associations. Geographers often use functional regions to display information about economic areas. The region's node may be a shop or service, and the boundaries of the region mark the limits of the trading area of the activity. People and activities may be attracted to the node, and information may flow from the node to the surrounding area. Examples of functional regions include the reception area of a television station, the circulation area of a newspaper, and the trading area of a department store.

A **formal region** is also called a uniform region or a homogeneous region. This is an area within which everyone shares in common one or more distinctive characteristics. The shared feature could be a cultural value such as a common language, an economic activity such as production of a particular crop, or an environmental property such as climate. In a formal region the selected characteristic is present throughout. Geographers typically identify formal regions to help explain broad global or national patterns, such as variations in religions and levels of economic development. The characteristic selected to distinguish a formal region often illustrates a general concept rather than a precise mathematical distribution. Some formal regions are easy to identify, such as countries or local government units. Wisconsin is an example of a formal region, characterized by a government that passes laws, collects taxes, and issues license plates with equal intensity throughout the state.

A **vernacular region**, or perceptual region, is a place that people believe exists as part of their cultural identity. Such regions emerge from people's informal sense of place rather than from scientific models developed through geographic thought. As an example of a vernacular region, Americans frequently refer to the South as a place with environmental, cultural, and economic features perceived to be quite distinct from the rest of the United States.

Diff: 2

Section: 1.7

Bloom's Taxonomy: Analysis

Geo Standard: 4

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.7.1: Classify regions as functional, formal, or vernacular.



10) Explain the difference between GIS and GPS.

Answer: A Geographic Information System is a computer-based system that not only captures and stores information, but also is able to execute queries, do analysis, and display geographic data. Geographic Information Systems can be used to produce maps that are more accurate and attractive than those drawn by hand. With GIS, the position of any object on Earth can be measured and recorded with mathematical precision and then stored in a computer. A map can be created by asking the computer to retrieve a number of stored objects and combine them to form an image, with each information type stored as a layer.

A GPS, or Global Positioning System is a system that accurately determines the precise position of something on Earth. The GPS system in use in the United States includes two dozen satellites placed in predetermined orbits, a series of tracking stations to monitor and control the satellites, and receivers that compute position, velocity, and time from the satellite signals.

Both GIS and GPS are high-tech systems that provide excellent tools for information gathering and manipulation. But the two are very different. GPS is used to locate places on Earth whereas GIS is used to organize information to make sense of it.

Diff: 3

Section: 1.5

Bloom's Taxonomy: Analysis

Geo Standard: 3

Glob Sci Outcome: 5. Demonstrate an understanding of the impact of science on society.

Learning Outcome: 1.5.1: Identify geography's analytic tools including remote sensing, GPS, and GIS.