Physical Geography 11th edition Petersen Test Bank

SKU: 9781305652644-TEST-BANK

Chapter 02 - Representations of Earth

True / False

1. Longitude is measured in the same units as latitude.
   a. True
   b. False

ANSWER: True
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

2. Remote sensing is the collection of information and data about distant objects or environments.
   a. True
   b. False

ANSWER: True
REFERENCES: Remote Sensing of the Environment
LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.
KEYWORDS: Bloom's: Remember

3. A representative fraction (RF) scale on a map must be expressed in terms of some unit of measurement.
   a. True
   b. False

ANSWER: False
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Understand

4. Earth is perfectly spherical.
   a. True
   b. False

ANSWER: False
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

5. Latitude indicates a point's location north or south of the equator.
   a. True
   b. False

ANSWER: True
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.

Physical Geography 11th edition Petersen Test Bank

KEYWORDS: Bloom's: Remember

6. In the U.S. Public Lands Survey System, townships contain 36 sections.
   a. True
   b. False

ANSWER: True
REFERENCES: The Geographic Grid
LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.
KEYWORDS: Bloom's: Remember

7. A map that shows both area and shape fairly well but that is not exactly correct for either, so that an "accurate looking" global map can be constructed, is called a compromise projection.
   a. True
   b. False

ANSWER: True
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.
KEYWORDS: Bloom's: Remember

8. A compass needle may not point directly to the north geographic pole.
   a. True
   b. False

ANSWER: True
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.
KEYWORDS: Bloom's: Understand

9. The farther apart contour lines are on an isoline map, the steeper the gradient.
   a. True
   b. False

ANSWER: False
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.
KEYWORDS: Bloom's: Understand

10. One characteristic of a great circle is that it must pass through both the north and south poles.
   a. True
   b. False

ANSWER: False
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

Physical Geography 11th edition Petersen Test Bank

KEYWORDS: Bloom's: Remember

11. The global positioning system (GPS) uses a network of satellites to accurately determine one's location on Earth's surface.

a. True

b. False

ANSWER: True

REFERENCES: The Geographic Grid

LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.

KEYWORDS: Bloom's: Remember

12. On a map with a scale of 1:25,000, 1 inch on the map represents 25,000 feet on Earth.

a. True

b. False

ANSWER: False

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Understand

13. Parallels run north and south and intersect meridians at 90° angles.

a. True

b. False

ANSWER: False

REFERENCES: The Geographic Grid

LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.

KEYWORDS: Bloom's: Remember

14. The Mercator projection greatly exaggerates the size of areas in the high latitude regions.

a. True

b. False

ANSWER: True

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.

KEYWORDS: Bloom's: Remember

15. The great circle of the equator has a greater circumference than a great circle running through the poles.

a. True

b. False

ANSWER: True

REFERENCES: Maps and Location on Earth

LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can

Physical Geography 11th edition Petersen Test Bank

be represented on a variety of visual media—maps, aerial photographs, and other imagery.

KEYWORDS: Bloom's: Understand

Multiple Choice

16. A map of the Arctic Ocean and the surrounding polar region is likely to utilize a ____ projection.
    a. cylindrical
    b. hexagonal
    c. planar
    d. conical
    e. Cubic

ANSWER: c

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Remember

17. Lines of longitude are numbered from 0° to ____ (E and W).
    a. 15°
    b. 360°
    c. 270°
    d. 180°
    e. 90°

ANSWER: d

REFERENCES: Maps and Location on Earth

LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.

KEYWORDS: Bloom's: Remember

18. When creating a map, it is impossible to ____.
    a. include the North or South Poles
    b. accurately maintain all a spherical planet's geometric properties
    c. keep lines of latitude parallel
    d. scale the map accurately
    e. represent topography

ANSWER: b

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Understand

19. For a digital elevation model, ____ is the practice of stretching the vertical scale to enhance the relief of an area.
    a. scalar magnification
    b. vertical exaggeration
    c. remote sensing

Physical Geography 11th edition Petersen Test Bank

d. scaling
e. contouring

ANSWER: b
REFERENCES: Modern Mapmaking
LEARNING OBJECTIVES: PHYG.PETR.17.2.5 - Evaluate the advantages and limitations of different kinds of representations of Earth and its areas.
KEYWORDS: Bloom's: Remember

20. The computer-based technology called ____ represents a "marriage" between computer cartography and database management.
a. spectral analysis
b. multi-spectral scanning
c. spatial analysis
d. geographic information system (GIS)
e. conformal projection

ANSWER: d
REFERENCES: Modern Mapmaking
LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.
KEYWORDS: Bloom's: Understand

21. A map capable of showing true directions as straight lines running through a central point is called a(n) ____.
a. Mercator map
b. equal-area map
c. planar map
d. focal map
e. azimuthal map

ANSWER: e
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

22. Which of these is an example of an active remote sensing system?
a. video from unmanned aerial vehicles
b. aerial photography
c. near-infrared (NIR) imaging
d. thermal infrared satellite images
e. radar

ANSWER: e
REFERENCES: Remote Sensing of the Environment
LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.

Physical Geography 11th edition Petersen Test Bank

KEYWORDS: Bloom's: Understand

23. Cartography is the science and profession of ____.
    a. data collection
    b. surveying
    c. navigation
    d. satellite sensor design
    e. mapmaking

ANSWER: e
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

24. A map of soil types is an example of a(n) ____ map.
    a. oblate
    b. gnomonic
    c. conformal
    d. thematic
    e. verbal

ANSWER: d
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Understand

25. The circle of illumination divides Earth into two hemispheres known as ____.
    a. longitude and latitude
    b. east and west
    c. summer and winter
    d. day and night
    e. north and south

ANSWER: d
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

26. The Mercator map projection is actually a(n) ____ projection that has been mathematically adjusted.
    a. conical
    b. interrupted
    c. cylindrical
    d. equal-area
    e. planar

ANSWER: c

Physical Geography 11th edition Petersen Test Bank

REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

27. A map scale of 1:100,000 is an example of a(n) ____.
    a. graphic scale
    b. bar scale
    c. thematic scale
    d. representative fraction scale
    e. verbal scale

ANSWER: d
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

28. Latitude angles ____ as one moves away from the equator.
    a. decrease
    b. increase and then decrease
    c. increase
    d. are constant
    e. change with longitude

ANSWER: c
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

29. Any circle on Earth's surface that does not divide the planet into equal halves is called a(n) ____.
    a. hemisphere
    b. great circle
    c. quadrant
    d. small circle
    e. semicircle

ANSWER: d
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

30. 10°30'N latitude can also be described in decimal degrees as ____.
    a. -10.3
    b. -10.5
    c. 10.5

Physical Geography 11th edition Petersen Test Bank

d. 10.3

e. -80.7

ANSWER: c

REFERENCES: Maps and Location on Earth

LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.

KEYWORDS: Bloom's: Understand

31. Which of these is an example of a verbal scale?

a. a north arrow

b. 1:10, 000

c. contour interval = 20 ft

d. 1 inch to 10 miles

e. 

ANSWER: d

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Remember

32. On a standard near-infrared (false-color) image, the color red represents ____.

a. roads

b. areas of barren land

c. areas that are hot

d. growing vegetation

e. open water

ANSWER: d

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.

KEYWORDS: Bloom's: Remember

33. In the U.S. Public Lands Survey System, one section covers ____.

a. 1 square mile

b. 36 square miles

c. 1 acre

d. 6 acres

e. 6 square miles

ANSWER: a

REFERENCES: The Geographic Grid

LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.

KEYWORDS: Bloom's: Remember

Physical Geography 11th edition Petersen Test Bank

34. Lines on a map that connect points with the same numerical value are called ____.
    a. rhumb lines
    b. great circles
    c. isolines
    d. small circles
    e. base lines

ANSWER: c
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Understand

35. The term "parallels" refers to ____.
    a. rhumb lines
    b. great circle routes
    c. lines of latitude
    d. lines of longitude
    e. lines of meridian

ANSWER: c
REFERENCES: The Geographic Grid
LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.
KEYWORDS: Bloom's: Remember

36. Mercator maps show the greatest amount of distortion in the ____.
    a. Eastern Hemisphere
    b. Atlantic Ocean
    c. middle latitudes
    d. equatorial regions
    e. polar regions

ANSWER: e
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

37. Which remote sensing system is used to measure land surface elevations?
    a. thermal infrared
    b. lidar
    c. aerial photographs
    d. near-infrared
    e. ultraviolet (UV)

ANSWER: b
REFERENCES: Remote Sensing of the Environment

Physical Geography 11th edition Petersen Test Bank

LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.
KEYWORDS: Bloom's: Remember

38. A geographic information system (GIS) can manage multiple datasets for an area by keeping them in separate ____.
    a. gradients
    b. projections
    c. layers
    d. legends
    e. visualization models
ANSWER: c
REFERENCES: Modern Mapmaking
LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.
KEYWORDS: Bloom's: Remember

39. Which instrument could you use to determine your current latitude?
    a. compass
    b. chronometer
    c. pixel
    d. sextant
    e. sonar
ANSWER: d
REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

40. Globally, how many time zones are there?
    a. 4
    b. 24
    c. 10
    d. 40
    e. 180
ANSWER: b
REFERENCES: The Geographic Grid
LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.
KEYWORDS: Bloom's: Remember

Completion

41. The _____ is the arbitrary starting point for longitude measurement. (two words)
ANSWER: prime meridian

Physical Geography 11th edition Petersen Test Bank

REFERENCES: Maps and Location on Earth
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

42. If one topographic contour represents an elevation of 60 feet, and the next contour represents 80 feet, then the _____ is 20 feet. (two words)
ANSWER: contour interval
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Understand

43. The relationship between distances on the ground and the same distance as it appears on the map is called _____.
ANSWER: scale
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

44. A key that explains symbols used on a map is called a(n) _____.
ANSWER: legend
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.1 - Explain the ways that Earth and its regions, places, and locations can be represented on a variety of visual media—maps, aerial photographs, and other imagery.
KEYWORDS: Bloom's: Remember

45. Maps that maintain true shape of areas are said to be _____.
ANSWER: conformal
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

46. The angular difference between true north and magnetic north is called _____. (two words)
ANSWER: magnetic declination
REFERENCES: Maps and Map Projections
LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.
KEYWORDS: Bloom's: Remember

47. An active remote sensing system that uses reflections from emitted sound waves to probe ocean depths is called ____.
ANSWER: sonar
REFERENCES: Remote Sensing of the Environment
LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS),

Physical Geography 11th edition Petersen Test Bank

geographic information systems (GIS), and remote sensing.

KEYWORDS: Bloom's: Remember

48. The _____ system divides compass directions into four quadrant of 90° (N, E, S, W), each numbered by directions in degrees away from either north or south.

ANSWER: bearing

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Remember

49. Phenomena that are each located at a particular place, but do not exist everywhere, can be represented by _____ data.

ANSWER: discrete

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Remember

50. An aerial photograph taken at an acute angle to Earth's surface is known as a(n) _____ image.

ANSWER: oblique

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.

KEYWORDS: Bloom's: Understand

51. The perspective of maps that present a landscape if viewed from directly overhead, looking straight down, is described as _____ view.

ANSWER: plan, planimetric

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Remember

52. The size of the area imaged by each pixel of a satellite image is called the spatial ____.

ANSWER: resolution

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.4 - Demonstrate knowledge of techniques that support geographic investigations, including mapping, spatial analysis, global positioning systems (GPS), geographic information systems (GIS), and remote sensing.

KEYWORDS: Bloom's: Remember

53. Weather _____ systems produce map-like images of precipitation.

ANSWER: radar

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.6 - Understand how the proper techniques, images, and maps can be used

Physical Geography 11th edition Petersen Test Bank

to best advantage in solving geographic problems.

KEYWORDS: Bloom's: Remember

54. Satellites in a(n) _____ orbit stay located over the same spot above Earth.

ANSWER: geostationary, geosynchronous

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.5 - Evaluate the advantages and limitations of different kinds of representations of Earth and its areas.

KEYWORDS: Bloom's: Remember

55. Using and comparing more than one kind of image of the same place (for example, near-infrared and normal color) is called ____ remote sensing.

ANSWER: multispectral

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.5 - Evaluate the advantages and limitations of different kinds of representations of Earth and its areas.

KEYWORDS: Bloom's: Remember

Essay

56. Why is it so difficult to produce maps of the globe that accurately maintain all geometric properties?

ANSWER: It is impossible to present a spherical planet on a flat (two-dimensional) surface and accurately maintain all of its geometric properties.

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.3 - Find and describe the locations of places using coordinate systems, use topographic maps to find elevations, and understand the three types of map scales.

KEYWORDS: Bloom's: Understand

57. Explain conformal, equal-area, and compromise world maps in terms of their advantages and drawbacks. What are some of the applications for each kind?

ANSWER: Conformal maps maintain the correct shapes of areas, but do not preserve size. Equal-area maps maintain size, but distort shapes. Compromise projections are neither conformal nor equal-area, but can produce "accurate looking" maps. Equal-area maps are useful for showing the distributions of features such as earthquakes or hurricanes. Conformal maps represent the globe in an easily recognizable form. Compromise projections are a happy medium that minimizes misleading inaccuracies.

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.2 - Assess the nature and useful applications of maps and map-like presentations of the planet, or parts of Earth, citing some examples.

KEYWORDS: Bloom's: Understand

58. What piece of information do you need to accurately use a compass in a new area, and why?

ANSWER: You need to know the magnetic declination, the angular difference between magnetic north and true geographic north for a location. Having this is necessary because the magnetic north pole and the geographic North Pole are not in exactly the same place.

REFERENCES: Maps and Map Projections

LEARNING OBJECTIVES: PHYG.PETR.17.2.5 - Evaluate the advantages and limitations of different kinds of representations of Earth and its areas.

Physical Geography 11th edition Petersen Test Bank

KEYWORDS: Bloom's: Understand

59. How could you use a geographic information system (GIS) to map out homes at risk from coastal flooding in an area? What sorts of map layers might you need?

ANSWER: Modern Mapmaking

REFERENCES: PHYG.PETR.17.2.6

LEARNING OBJECTIVES: PHYG.PETR.17.2.6 - Understand how the proper techniques, images, and maps can be used to best advantage in solving geographic problems.

KEYWORDS: Bloom's: Apply

60. Explain the difference between active and passive remote sensing systems, giving an example of each.

ANSWER: Passive systems make use of available energy where an image is taken. Active systems emit a form of energy and record its reflected return from a surface. Examples of passive systems include near-infrared and thermal infrared imaging. Examples of active systems include radar, lidar, and sonar.

REFERENCES: Remote Sensing of the Environment

LEARNING OBJECTIVES: PHYG.PETR.17.2.6 - Understand how the proper techniques, images, and maps can be used to best advantage in solving geographic problems.

KEYWORDS: Bloom's: Understand

Physical Geography 11th edition Petersen Test Bank