***McKnight's Physical Geography, 11e* (Hess)**

**Chapter 1 Introduction to Earth**

1) The word *geography* comes from the Greek, meaning \_\_\_\_\_\_\_\_.

A) the study of rocks

B) Earth description

C) planet measurement

D) drawing of maps

E) the study of human culture

Answer: B

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: A. Knowledge

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

2) Which of the following is NOT a major topic taught in a course of introductory physical geography?

A) climate

B) plants

C) soil

D) landforms

E) population

Answer: E

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

3) Earth's "life zone" in the atmosphere extends from Earth's surface to an altitude of approximately \_\_\_\_\_\_\_\_ kilometers.

A) 5

B) 50

C) 500

D) 5,000

E) 50,000

Answer: A

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

4) Which of the following is NOT a topic of study in a physical geography course?

A) landforms

B) soil

C) climate

D) plants

E) capital cities

Answer: E

Diff: 2

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

5) Geography is \_\_\_\_\_\_\_\_.

A) a physical science

B) a social science

C) an art, not a science

D) much the same as geology

E) a combination of physical and social sciences

Answer: E

Diff: 2

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: D. Analysis

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

6) Geography has much to offer to the study of globalization because it \_\_\_\_\_\_\_\_.

A) is the best discipline

B) ignores science to focus on understanding

C) is not a narrow discipline

D) has a sharp focus on cultural affairs

E) is the most mathematical of disciplines

Answer: C

Diff: 2

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: D. Analysis

Geog Standards: 18. How to apply geography to interpret the present and plan for the future

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

7) In science, the term "theory" is \_\_\_\_\_\_\_\_.

A) a first guess

B) an unsupported hunch

C) revolution around Earth

D) not relevant

E) the highest order of understanding

Answer: E

Diff: 1

Topic/Section: 1.1 The Process of Science

Bloom's Taxonomy: B. Comprehension

Geog Standards: 18. How to apply geography to interpret the present and plan for the future

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

8) The acceptance of a theory or hypothesis is based on \_\_\_\_\_\_\_\_.

A) a preponderance of evidence

B) a hunch

C) a belief

D) the pronouncements of authorities

E) the Big Bang

Answer: A

Diff: 2

Topic/Section: 1.1 The Process of Science

Bloom's Taxonomy: B. Comprehension

Geog Standards: 18. How to apply geography to interpret the present and plan for the future

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

9) Which of the following is out of order in the ideal application of the scientific method?

A) observe a phenomenon that stimulates a question

B) design an experiment

C) observe the outcome of an experiment

D) formulate a rule

E) make a hypothesis

Answer: E

Diff: 3

Topic/Section: 1.1 The Process of Science

Bloom's Taxonomy: F. Evaluation

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

10) The \_\_\_\_\_\_\_\_ is a basic unit of distance in the Système International (metric system).

A) mole

B) kilogram

C) ampere

D) degree Celsius

E) meter

Answer: E

Diff: 1

Topic/Section: 1.1 Numbers and Measurement Systems

Bloom's Taxonomy: A. Knowledge

Geog Standards: 1. How to use maps

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

11) The \_\_\_\_\_\_\_\_ is a basic Système International (metric system) unit of mass.

A) ton

B) gram

C) ampere

D) mole

E) meter

Answer: B

Diff: 1

Topic/Section: 1.1 Numbers and Measurement Systems

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

12) The solid, inorganic portion of the Earth system is known as the \_\_\_\_\_\_\_\_.

A) Earth

B) lithosphere

C) hydrosphere

D) atmosphere

E) biosphere

Answer: B

Diff: 1

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.3 Identify the four environmental spheres of Earth.

13) Which of the following subsystems includes all living things on Earth?

A) atmosphere

B) biosphere

C) hydrosphere

D) lithosphere

E) stratosphere

Answer: B

Diff: 1

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: A. Knowledge

Geog Standards: 8. The characteristics and spatial distribution of ecosystems and biomes of Earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3 Identify the four environmental spheres of Earth.

14) The Sun is a star in the \_\_\_\_\_\_\_\_ galaxy.

A) Orion

B) Milky Way

C) Proxima Centauri

D) Alpha Centauri

E) Betelgeuse

Answer: B

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

15) A nebula is \_\_\_\_\_\_\_\_.

A) a bright star

B) a black hole

C) a faded star

D) a cloud of gas and dust

E) none of the above

Answer: D

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

16) The surfaces of the inner, terrestrial planets of our solar system are composed of \_\_\_\_\_\_\_\_.

A) gases

B) frozen water

C) frozen carbon dioxide

D) molten lava

E) mineral matter

Answer: E

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

17) The Earth is one of \_\_\_\_\_\_\_\_ planets in the solar system.

A) four

B) eight

C) twenty

D) thirty six

E) over one hundred

Answer: B

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

18) Pluto is now classified as a \_\_\_\_\_\_\_\_.

A) comet

B) moon

C) plutoid

D) meteorite

E) protostar

Answer: C

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

19) Earth is \_\_\_\_\_\_\_\_.

A) one of the biggest planets

B) one of the largest planets

C) the smallest planet

D) one of the inner planets

E) one of the planets having the most gas

Answer: D

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

20) The shape of the Milky Way is similar to a(n) \_\_\_\_\_\_\_\_.

A) circle

B) sphere

C) spiral-shaped disk

D) pancake

E) oblate spheroid

Answer: C

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

21) \_\_\_\_\_\_\_\_ is considered a dwarf planet.

A) Earth

B) Venus

C) Neptune

D) Mars

E) Pluto

Answer: E

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

22) Pluto was long thought to be a planet. New discoveries in the Kuiper Belt have changed its official designation to \_\_\_\_\_\_\_\_.

A) asteroid

B) meteoroid

C) planetesimal

D) nebula

E) plutoid

Answer: E

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

23) The Universe is thought to be on the order of \_\_\_\_\_\_\_\_ billion years old.

A) .37

B) 3.7

C) 13.7

D) 137

E) 1370

Answer: C

Diff: 2

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

24) The birth of the solar system occurred \_\_\_\_\_\_\_\_.

A) about 500 million years ago

B) about 5 billion years ago

C) about 40 billion years ago

D) about 500 billion years ago

E) about 5 million years ago

Answer: B

Diff: 2

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

25) The origin of the universe is incompletely understood and is called \_\_\_\_\_\_\_\_.

A) the "Big Bang"

B) Earth Day

C) the "nebula"

D) primordial solar system

E) the "worm hole"

Answer: A

Diff: 2

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

26) The Milky Way is one of, at least, \_\_\_\_\_\_\_\_ galaxies in the Universe.

A) two thousand

B) two hundred thousand

C) two million

D) two hundred billion

E) two trillion

Answer: D

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

27) The Milky Way is a galaxy some \_\_\_\_\_\_\_\_ light years in diameter.

A) 10

B) 100

C) 1,000

D) 10,000

E) 100,000

Answer: E

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

28) The solar system's Jovian planets are most likely composed of \_\_\_\_\_\_\_\_.

A) gas

B) interstellar dust

C) granite

D) basalt

E) water

Answer: A

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

29) The Moon is some \_\_\_\_\_\_\_\_ kilometers distant from Earth.

A) 3.85

B) 385

C) 3,850

D) 385,000

E) 38,500,000

Answer: D

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

30) The size of the Universe is best described \_\_\_\_\_\_\_\_.

A) as 100,000 light years across

B) as small

C) in terms of the width of 5 galaxies across

D) as 1 astronomical unit across

E) as vast beyond comprehension

Answer: E

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: F. Evaluation

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

31) The Milky Wave is one of over \_\_\_\_\_\_\_\_ galaxies in the universe.

A) one hundred

B) one thousand

C) one hundred thousand

D) one million

E) many billions

Answer: E

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: F. Evaluation

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

32) After it was part of a nebula and before it was the Sun, our Sun was a \_\_\_\_\_\_\_\_.

A) star

B) galaxy

C) asteroid

D) comet

E) protostar

Answer: E

Diff: 3

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

33) Earth's diameter is \_\_\_\_\_\_\_\_ kilometers.

A) 13

B) 130

C) 1,300

D) 13,000

E) 130,000

Answer: D

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

34) The first nearly correct measurement of the Earth's circumference was made by \_\_\_\_\_\_\_\_.

A) Newton

B) Einstein

C) Eratosthenes

D) Columbus

E) Plato

Answer: C

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

35) The response to Earth's rotation is \_\_\_\_\_\_\_\_.

A) wind

B) polar flattening

C) equatorial flattening

D) Death Valley

E) Mt. Everest

Answer: B

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

36) Eratosthenes was the first to accurately measure the Earth's \_\_\_\_\_\_\_\_.

A) radius

B) polarity

C) circumference

D) crust

E) hemisphere

Answer: C

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Science Outcomes: 5. Demonstrate an understanding of science on society.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

37) The best description of the actual shape of the Earth is as a(n) \_\_\_\_\_\_\_\_.

A) circle

B) sphere

C) spheroid

D) oblate spheroid

E) centroid

Answer: D

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

38) \_\_\_\_\_\_\_\_ is the deepest spot in the ocean.

A) The Hudson Canyon

B) The Grand Canyon

C) The Mariana Trench

D) The middle of the Atlantic Ocean

E) Just offshore of California

Answer: C

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

39) The altitudinal difference (relief) between the top of the tallest mountain and the bottom of the deepest ocean trench is \_\_\_\_\_\_\_\_ kilometers.

A) 20

B) 200

C) 2,000

D) 20,000

E) 200,000

Answer: A

Diff: 2

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 15. How physical systems affect human systems

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

40) A cross section of Earth cut from pole to pole would reveal which shape?

A) circle

B) parabola

C) sine curve

D) ellipse

E) crescent

Answer: D

Diff: 2

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

41) Mt. Everest is the tallest mountain on Earth and its altitude is CLOSEST to \_\_\_\_\_\_\_\_ meters.

A) 90

B) 900

C) 9,000

D) 90,000

E) 900,000

Answer: C

Diff: 2

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: F. Evaluation

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

42) The Earth's polar and equatorial diameters vary by \_\_\_\_\_\_\_\_ percent.

A) 0

B) 0.3

C) 7.5

D) 10

E) 27

Answer: B

Diff: 3

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

43) The line connecting the points of maximum flattening on Earth's surface is called the \_\_\_\_\_\_\_\_.

A) radius

B) Plane of the Ecliptic

C) Equator

D) Arctic Circle

E) axis

Answer: E

Diff: 3

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: F. Evaluation

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

44) A \_\_\_\_\_\_\_\_ separates Earth into two hemispheres.

A) solstice

B) great circle

C) small circle

D) perihelion

E) loxodrome

Answer: B

Diff: 1

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

45) Our earthly grid system is also referred to as a \_\_\_\_\_\_\_\_ and consists of lines of latitude and longitude.

A) gnomon

B) meridian

C) plane coordinate system

D) graticule

E) great circle system

Answer: D

Diff: 1

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.10 Explain how latitude and longitude together identify a location on Earth.

46) Of the following, which is a great circle?

A) Tropic of Capricorn

B) Tropic of Cancer

C) Equator

D) Arctic Circle

E) Antarctic Circle

Answer: C

Diff: 2

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

47) Which of the following is also an entire great circle?

A) any line of latitude

B) any parallel

C) the Equator

D) any numbered meridian

E) the Prime Meridian

Answer: C

Diff: 2

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

48) Which of the following best describes the latitude and longitude of North America?

A) northern and southern hemispheres

B) eastern and western hemispheres

C) northern and eastern hemispheres

D) eastern and southern hemispheres

E) northern and western hemispheres

Answer: E

Diff: 3

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: F. Evaluation

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

49) Near the North Pole, one degree of latitude extends \_\_\_\_\_\_\_\_ kilometer(s) on the ground.

A) 1

B) 11

C) 111

D) 1,111

E) 11,111

Answer: C

Diff: 1

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

50) The 0° Meridian is the same line as the \_\_\_\_\_\_\_\_.

A) International Date Line

B) Equator

C) Perihelion

D) Prime Meridian

E) geographic grid

Answer: D

Diff: 1

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 5. Demonstrate an understanding of science on society.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

51) How many degrees of latitude are there between the Tropic of Cancer and the Tropic of Capricorn?

A) 0

B) 23.5

C) 47

D) 90

E) 180

Answer: C

Diff: 2

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

52) The highest numbered latitude used in the geographic grid is \_\_\_\_\_\_\_\_.

A) 90°

B) 100°

C) 180°

D) 360°

E) 365°

Answer: A

Diff: 2

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: D. Analysis

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

53) In angular measurement, a minute contains \_\_\_\_\_\_\_\_ seconds.

A) 0

B) 10

C) 60

D) 360

E) 3,600

Answer: C

Diff: 2

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

54) Which of the following distances is CLOSEST TO the actual distance associated with one degree of latitude?

A) 1 km

B) 10 km

C) 100 km

D) 1,000 km

E) 10,000 km

Answer: C

Diff: 3

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: F. Evaluation

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

55) The Greenwich Meridian is also known as the \_\_\_\_\_\_\_\_.

A) Perihelion

B) Aphelion

C) Prime Meridian

D) Equator

E) Small Circle

Answer: C

Diff: 1

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 5. Demonstrate an understanding of science on society.

Learning Outcome: 1.13 Explain how time zones were established.

56) At the North Pole, one degree of longitude extends \_\_\_\_\_\_\_\_ kilometers on the ground.

A) 0

B) 10

C) 100

D) 1,000

E) 10,000

Answer: A

Diff: 1

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

57) The graticule of the Earth is also known as \_\_\_\_\_\_\_\_.

A) a great circle

B) latitude and longitude

C) the perihelion

D) a standard time zone

E) analemma

Answer: B

Diff: 1

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.10 Explain how latitude and longitude together identify a location on Earth.

58) The geographic grid line 180 degrees of longitude from the Prime Meridian is the \_\_\_\_\_\_\_\_.

A) Tropic of Cancer

B) 90th meridian

C) 180th meridian

D) 320th meridian

E) Tropic of Capricorn

Answer: C

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: C. Application

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

59) One degree of longitude equals 0 miles on the ground at the \_\_\_\_\_\_\_\_.

A) Tropic of Capricorn

B) North Pole

C) Tropic of Cancer

D) Antarctic Circle

E) Arctic Circle

Answer: B

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

60) At the Equator, one degree of latitude is approximately equal to \_\_\_\_\_\_\_\_.

A) one degree of longitude

B) 1,000 kilometers of longitude

C) a great circle

D) the Tropic of Cancer

E) one second of angular arc

Answer: A

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: D. Analysis

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

61) The "natural" baseline which serves as a baseline to measure longitude (such as the Equator, which is used as a baselines for latitude) \_\_\_\_\_\_\_\_.

A) is the Prime Meridian

B) is the International Date Line

C) runs near London, England

D) is at the same latitude as the Equator

E) does not exist

Answer: E

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: A. Knowledge

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

62) Which of the following is NOT contained within Earth's system of latitude and longitude?

A) a longitude of 5°W

B) a longitude of 185°E

C) a latitude of 0°

D) a longitude of 165°W

E) a latitude of 36°N

Answer: B

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.10 Explain how latitude and longitude together identify a location on Earth.

63) Numbered meridians \_\_\_\_\_\_\_\_.

A) are semicircles

B) are east-west lines

C) diverge as they near the poles

D) are the same thing as parallels

E) are numbered from 0-100 in three hemispheres

Answer: A

Diff: 3

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: F. Evaluation

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

64) Which of the following is NOT defined by latitude?

A) parallel

B) Arctic Circle

C) Antarctic Circle

D) North Pole

E) meridian

Answer: E

Diff: 3

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: F. Evaluation

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

65) The speed of Earth's rotation is closest to 1,600 kph at the \_\_\_\_\_\_\_\_.

A) poles

B) Equator

C) Tropic of Cancer

D) Antarctic Circle

E) middle latitudes

Answer: E

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

66) The fact that at any time during the year, the Earth's axis is parallel to its orientation at all other times is called its parallelism, or \_\_\_\_\_\_\_\_.

A) revolution

B) rotation

C) polarity

D) aphelion

E) perihelion

Answer: C

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

67) The closest position taken by the Earth relative to the Sun is \_\_\_\_\_\_\_\_ million kilometers.

A) 10

B) 47

C) 147

D) 1,470

E) 14,700

Answer: C

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

68) The Earth/Sun aphelion occurs once per year during the month of \_\_\_\_\_\_\_\_.

A) January

B) March

C) July

D) December

E) September

Answer: C

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

69) The constant angle between Earth's axis and the Plane of the Ecliptic is called Earth's \_\_\_\_\_\_\_\_.

A) polarity

B) Mean Time

C) perihelion

D) aphelion

E) praxis

Answer: A

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

70) The most important physical effect of the Earth's rotation is \_\_\_\_\_\_\_\_.

A) to cause continents to "drift"

B) seasonal change

C) the alternation of sunlight and darkness

D) Daylight Saving Time

E) the blue appearance of clear sky

Answer: C

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

71) The Earth rotates about its \_\_\_\_\_\_\_\_.

A) great circle

B) revolution

C) inclination

D) axis

E) Equator

Answer: D

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

72) The angular inclination of the Earth's axis with respect to a line perpendicular to the plane of the ecliptic \_\_\_\_\_\_\_\_.

A) varies through the year

B) is 0°

C) is 23.5°

D) is 66.5°

E) is 90°

Answer: C

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

73) The perihelion is during the month of \_\_\_\_\_\_\_\_.

A) January

B) March

C) July

D) September

E) December

Answer: A

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

74) Rotation of the Earth DOES NOT cause \_\_\_\_\_\_\_\_.

A) tides

B) Coriolis effect

C) local variations in temperature

D) day and night

E) seasons

Answer: E

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

75) The cause of Earth's seasons is the \_\_\_\_\_\_\_\_.

A) varying output of the Sun

B) polarity of the axis

C) shape of the Earth

D) varying distance between Earth and Sun

E) cold experienced each wintertime

Answer: B

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

76) The plane of the ecliptic is \_\_\_\_\_\_\_\_.

A) the same as the plane of the Equator

B) not important in physical geography

C) another way of describing the latitude of the vertical sun

D) the same thing as the Tropic of Cancer

E) at an angle from the plane of the Equator

Answer: E

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

77) The shape of Earth's orbit around the Sun is a(n) \_\_\_\_\_\_\_\_.

A) ellipse

B) circle

C) spheroid

D) oblate spheroid

E) parabola

Answer: A

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

78) The \_\_\_\_\_\_\_\_ is the name of the orbital plane on which the Earth revolves.

A) aphelion

B) perihelion

C) ecliptic

D) prime meridian

E) great circle

Answer: C

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

79) The north end of Earth's axis points towards \_\_\_\_\_\_\_\_.

A) the Moon

B) Mars

C) Venus

D) Ork

E) Polaris

Answer: E

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

80) What would happen to seasons if Earth's axis were to change to perpendicular to the Plane of the Ecliptic?

A) Each season would become longer.

B) Each season would become shorter.

C) The perihelion would change seasons.

D) The aphelion would change seasons.

E) Seasons would end.

Answer: E

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: D. Analysis

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

81) Over how many degrees of latitude does the vertical sun migrate between the aphelion and the perihelion?

A) 0

B) 23.5

C) 47

D) 94

E) 180

Answer: C

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: D. Analysis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

82) When the circle of illumination just touches the Arctic Circle and the North Pole is dark, the date is closest to \_\_\_\_\_\_\_\_.

A) March 23

B) June 21

C) September 23

D) December 21

E) July 4

Answer: D

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

83) The distance of 150,000,000 kilometers is CLOSEST to being \_\_\_\_\_\_\_\_.

A) the aphelion

B) the perihelion

C) the circle of illumination

D) a light year

E) the average Earth/Sun distance

Answer: E

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: D. Analysis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

84) At the time of the aphelion, Earth is \_\_\_\_\_\_\_\_ million kilometers from the Sun.

A) 5.2

B) 52

C) 152

D) 1,520

E) 15,200

Answer: C

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

85) The amount of time the Earth takes to revolve around the Sun is most properly known as a(n) \_\_\_\_\_\_\_\_.

A) astronomical unit

B) season

C) tropical year

D) Earth sol

E) great circle period

Answer: C

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

86) Earth rotates around its rotational axis. A plane at a right angle to and bisecting Earth's axis is known as the \_\_\_\_\_\_\_\_.

A) North Pole

B) plane of the Ecliptic

C) plane of the Equator

D) plane of the meridian

E) Arctic Circle

Answer: C

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

87) The Earth is 3.3 percent closer to the Sun during the Northern Hemisphere \_\_\_\_\_\_\_\_ than at the time when it is farthest away.

A) Spring

B) Summer

C) Fall

D) Winter

E) Aphelion

Answer: D

Diff: 3

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

88) Which of the below takes the LONGEST time?

A) a rotation of the Earth

B) an hour

C) a solar day on Earth

D) a revolution of the Earth

E) They all take approximately the same time.

Answer: D

Diff: 3

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: F. Evaluation

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

89) The maximum distance between Earth and Sun occurs in July and is called the \_\_\_\_\_\_\_\_.

A) Coriolis

B) aphelion

C) sidereal

D) ecliptic

E) perihelion

Answer: B

Diff: 1

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

90) On June 21, the Sun's ray are directly over the \_\_\_\_\_\_\_\_.

A) Equator

B) Tropic of Cancer

C) Tropic of Capricorn

D) Arctic Circle

E) Plane of the Ecliptic

Answer: B

Diff: 1

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

91) When the Sun's rays are directly overhead at the Tropic of Capricorn, it is \_\_\_\_\_\_\_\_.

A) March 21

B) June 21

C) September 21

D) December 21

E) October 21

Answer: D

Diff: 1

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

92) The Sun's rays are directly overhead at the \_\_\_\_\_\_\_\_ on or about December 21.

A) Tropic of Capricorn

B) Tropic of Cancer

C) Arctic Circle

D) Antarctic Circle

E) North Pole

Answer: A

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

93) Suppose you are at 36°N. The Sun is directly overhead this many times in a year.

A) once

B) twice

C) three times

D) 365

E) never

Answer: E

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

94) Of the following, which is the first day of spring in the southern hemisphere?

A) June solstice

B) March 1

C) Vernal equinox

D) Equinox

E) Solstice

Answer: C

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

95) The farthest north the vertical rays of the Sun ever reach north of the equator, occurs on or about \_\_\_\_\_\_\_\_.

A) March 23

B) June 21

C) September 23

D) December 21

E) July 4

Answer: B

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

96) On both the Spring and Fall equinoxes in the SOUTHERN HEMISPHERE, the Sun's rays are vertically overhead at the \_\_\_\_\_\_\_\_.

A) Tropic of Cancer

B) Equator

C) Tropic of Capricorn

D) Arctic Circle

E) none of the above

Answer: B

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: D. Analysis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

97) An equinox has the property of \_\_\_\_\_\_\_\_.

A) the Sun at the same angle at all latitudes

B) 12 hours of daylight and 12 hours of night at all latitudes

C) the vertical rays of the Sun at the Tropic of Cancer

D) total darkness north of the Arctic Circle

E) 24 hours of darkness at the Equator

Answer: B

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

98) When the vertical rays of the Sun cross the Equator on their way northward, the date is known as \_\_\_\_\_\_\_\_ in the Northern Hemisphere.

A) the summer solstice

B) the winter solstice

C) the vernal equinox

D) the fall equinox

E) the perihelion

Answer: C

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

99) At New York City, this is the shortest day of the year and the Sun is also lowest in the sky.

A) vernal equinox

B) autumnal equinox

C) December solstice

D) June solstice

E) aphelion

Answer: C

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

100) At times, latitudes higher than \_\_\_\_\_\_\_\_ degrees can have 24 hours or more of continuous darkness.

A) 10

B) 23.5

C) 45

D) 66.5

E) 90

Answer: D

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

101) The \_\_\_\_\_\_\_\_ equinox of the southern hemisphere takes place when the vertical rays of the sun cross the Equator on the journey southward.

A) winter

B) autumnal

C) vernal

D) July

E) December

Answer: C

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

102) The circle of illumination just touches the Antarctic Circle on or about \_\_\_\_\_\_\_\_.

A) March 23

B) June 21

C) September 23

D) December 21

E) January 1

Answer: B

Diff: 3

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: F. Evaluation

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

103) At the June solstice, day length varies from \_\_\_\_\_\_\_\_ hours at the Equator to \_\_\_\_\_\_\_\_ hours at the North Pole.

A) 0, 24

B) 12, 24

C) 12, 0

D) 24, 0

E) 24, 12

Answer: B

Diff: 3

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: F. Evaluation

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

104) "Greenwich Mean Time" is also known as \_\_\_\_\_\_\_\_.

A) Universal Time Coordinated

B) European Time

C) the perihelion

D) Polaris

E) The Plane of the Ecliptic

Answer: A

Diff: 1

Topic/Section: 1.6 Telling Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 5. Demonstrate an understanding of science on society.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

105) In telling time, the term "a.m." \_\_\_\_\_\_\_\_.

A) was first used in the 1880s

B) refers to standard time at Greenwich

C) is no longer used by most of the world

D) means "before solar noon"

E) means "at solar noon"

Answer: D

Diff: 1

Topic/Section: 1.6 Telling Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.13 Explain how time zones were established.

106) Using a gnomon, one can \_\_\_\_\_\_\_\_.

A) calculate the radius of Earth

B) tell local time

C) predict the phases of the moon

D) estimate the exact height of tall mountains

E) theorize about amount of time since the "big bang"

Answer: B

Diff: 2

Topic/Section: 1.6 Telling Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

107) One can tell when it is solar noon by observing \_\_\_\_\_\_\_\_.

A) the time of Sunrise

B) the length of shadows

C) a clock

D) a calendar

E) a graticule

Answer: B

Diff: 2

Topic/Section: 1.6 Telling Time

Bloom's Taxonomy: C. Application

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

108) Before time zones were created in the 1880s, one could encounter \_\_\_\_\_\_\_\_ time standards on a rail trip across the United States.

A) 1

B) 5

C) 7

D) 10

E) more than 20

Answer: E

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 5. Demonstrate an understanding of science on society.

Learning Outcome: 1.13 Explain how time zones were established.

109) The United States spans \_\_\_\_\_\_\_\_ time zones.

A) 3

B) 6

C) 12

D) 24

E) 36

Answer: B

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

110) Universal Time Coordinated is also known as \_\_\_\_\_\_\_\_.

A) Pacific Standard Time

B) Greenwich Mean Time

C) Central Daylight Time

D) Leap Year Time

E) The Solstice

Answer: B

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 5. Demonstrate an understanding of science on society.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

111) Standardization in world time zones dates from \_\_\_\_\_\_\_\_.

A) 1584

B) 1684

C) 1784

D) 1884

E) 1984

Answer: D

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.13 Explain how time zones were established.

112) Any standard time zone extends \_\_\_\_\_\_\_\_ degrees of latitude to the east and west of the central meridian.

A) 5

B) 7.5

C) 15

D) 25

E) 50

Answer: B

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.13 Explain how time zones were established.

113) The world is divided into \_\_\_\_\_\_\_\_ time standard zones.

A) 11

B) 15

C) 24

D) 180

E) 360

Answer: C

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 5. Demonstrate an understanding of science on society.

114) How many time zones are contained within Alaska?

A) 1

B) 2

C) 3

D) 4

E) 5

Answer: A

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: D. Analysis

Geog Standards: 1. How to use maps

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

115) Longitude is divided into multiples of \_\_\_\_\_\_\_\_ degrees for the purpose of delimiting standard time zones.

A) 10

B) 15

C) 25

D) 30

E) 34

Answer: B

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

116) Which of the following is a central meridian in the standardized time system?

A) 5°W

B) 10°W

C) 15°W

D) 20°W

E) 25°W

Answer: C

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: C. Application

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

117) Suppose you are standing on the standard time meridian of 75°W. Which would be the next standard time meridian to your west?

A) 76°W

B) 90°W

C) 180°W

D) 100°W

E) impossible to say

Answer: B

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: C. Application

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

118) Russia is the country containing the most time zones. It contains \_\_\_\_\_\_\_\_ zones.

A) 3

B) 5

C) 9

D) 15

E) 36

Answer: C

Diff: 4

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 15. How physical systems affect human systems

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

119) Any time you cross the International Date Line, there is a change of \_\_\_\_\_\_\_\_.

A) season

B) hour

C) year

D) day

E) day and time zone

Answer: D

Diff: 2

Topic/Section: 1.6 International Date Line

Bloom's Taxonomy: C. Application

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

120) Most of Earth's land surface is classified as "habitable."

Answer: TRUE

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

121) The textbook asserts that human activities have accelerated global change.

Answer: TRUE

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: B. Comprehension

Geog Standards: 14. How human actions modify the physical environment

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

122) Global environmental change seems to be all natural.

Answer: FALSE

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: B. Comprehension

Geog Standards: 14. How human actions modify the physical environment

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

123) The atmosphere, biosphere, lithosphere, and hydrosphere are considered to be discrete and independent subsystems of the Earth.

Answer: FALSE

Diff: 2

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4 Illustrate how the concept of Earth Systems helps us to understand the interrelationships of the four environmental "spheres" of Earth.

124) The "geosphere" is NOT one of the four environmental spheres.

Answer: TRUE

Diff: 2

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.3 Identify the four environmental spheres of Earth.

125) The Sun makes up more than 99% of the mass of our solar system.

Answer: TRUE

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

126) Our solar system is known as the Milky Way.

Answer: FALSE

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

127) The best scientific guess is that there are a few hundred suns in our galaxy.

Answer: FALSE

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

128) The planets in our solar system formed from a cold, rotating disk of gas and dust surrounding the Sun.

Answer: TRUE

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

129) The Earth's circumference is close to 40,000 kilometers.

Answer: TRUE

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

130) The vertical distance between Earth's highest mountain and the deepest ocean trench is close to 20 kilometers.

Answer: TRUE

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

131) The Earth has the shape of a true sphere.

Answer: FALSE

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

132) The Mariana Trench of the Pacific Ocean is the deepest depth of the ocean.

Answer: TRUE

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

133) The fact that the Earth is round has been known for more than 2,000 years.

Answer: TRUE

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

134) At the North Pole, the speed of rotation of the Earth is 0 kilometers per hour.

Answer: TRUE

Diff: 2

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

135) The lowest point of the sea bottom is approximately 11,000 meters below sea level.

Answer: TRUE

Diff: 2

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

136) A great circle route is always the shortest distance between two points on the surface of the Earth.

Answer: TRUE

Diff: 1

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: A. Knowledge

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

137) The Tropic of Cancer is an example of a great circle.

Answer: FALSE

Diff: 2

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

138) The Equator is an example of a great circle in the geographic grid.

Answer: TRUE

Diff: 1

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

139) There are 24 minutes for each degree of latitude.

Answer: FALSE

Diff: 1

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: A. Knowledge

Geog Standards: 1. How to use maps

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

140) There is a parallel or meridian for every degree, minute and second on the globe.

Answer: TRUE

Diff: 2

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

141) Of seconds, degrees, and minutes of latitude, minutes are associated with the shortest distances.

Answer: FALSE

Diff: 2

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 4. Demonstrate the quantitative skills necessary to succeed in Introductory Geography.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

142) On the globe, meridians cross all parallels perpendicularly.

Answer: TRUE

Diff: 1

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

143) The Prime Meridian is, by design, shorter than other meridians.

Answer: FALSE

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

144) Earth revolves around the North Star.

Answer: FALSE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

145) The North Star is also known as Polaris.

Answer: TRUE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

146) The plane of the ecliptic and plane of the Equator are the same plane.

Answer: FALSE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

147) The Earth year's length of 365.25 days is known as the perihelion.

Answer: FALSE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

148) Earth years are based on the rotation of the Moon around the Earth.

Answer: FALSE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

149) The Sun and Moon are the astronomical bodies exerting significant gravitational influence on the tides in Earth's oceans.

Answer: TRUE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

150) One rotation of the Earth takes approximately 24 hours to complete.

Answer: TRUE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

151) The Coriolis effect deflects wind and water currents.

Answer: TRUE

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

152) The plane of the ecliptic is the same thing as the perihelion.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

153) The shortest distance between the Earth and Sun during the year is approximately 147 million kilometers.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

154) The circle of illumination is a small circle.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

155) The apparent motion of the Sun, Moon, and stars is actually an illusion created by the easterly spin of the Earth.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

156) The plane of the Equator and the plane of the Ecliptic are the same plane.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 1. Demonstrate an understanding of the principles of scientific inquiry.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

157) The circle of illumination divides the Earth into a light and a dark hemisphere.

Answer: TRUE

Diff: 1

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

158) The northern hemisphere's shortest day of the year is at the autumnal equinox.

Answer: FALSE

Diff: 1

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

159) The northern hemisphere's vernal equinox occurs on September 23.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

160) In the Northern Hemisphere, the longest day of the year is at the vernal equinox.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

161) At the equator, the Sun's rays at noon strike the Earth at the angle of 90° above the horizon twice each year.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

162) On December 22, all areas inside the Antarctic Circle are in daylight for a full 24 hours.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

163) Larger solar angles concentrate solar energy in smaller areas of Earth's surface.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: B. Comprehension

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

164) In the Northern Hemisphere, days become continually shorter after March 22.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

165) The vertical rays of the Sun are present at the Arctic Circle during the June solstice.

Answer: FALSE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

166) The vertical rays of the Sun migrate between 23.5°N and 23.5°S.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

167) The vertical rays of the Sun take one year to travel from the Tropic of Cancer to the Tropic of Capricorn and return to the Tropic of Cancer.

Answer: TRUE

Diff: 2

Topic/Section: 1.5 Seasonal Transitions

Bloom's Taxonomy: D. Analysis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

168) Almost all countries in the world base their time on UTC.

Answer: TRUE

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

169) Previous to the 1880s, the United States had more than 20 time zones.

Answer: TRUE

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.13 Explain how time zones were established.

170) Time zones are universally divided into zones of 24° longitude.

Answer: FALSE

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

171) Russia occupies 3 time zones.

Answer: FALSE

Diff: 1

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

172) The Prime Meridian was adopted as a result of an international conference in 1884.

Answer: TRUE

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

173) When one crosses the prime meridian, the time zone does not change.

Answer: TRUE

Diff: 2

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: C. Application

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

174) The International Date Line and the 180th meridian are the same line.

Answer: FALSE

Diff: 1

Topic/Section: 1.6 International Date Line

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

175) Magellan's expedition—the first to go around the world—found that their log was incorrect by one day. This was because the world had yet to adopt the International Date Line.

Answer: TRUE

Diff: 1

Topic/Section: 1.6 International Date Line

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

176) The International Date Line follows the Arctic and Antarctic Circle.

Answer: FALSE

Diff: 2

Topic/Section: 1.6 International Date Line

Bloom's Taxonomy: B. Comprehension

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

177) The International Date Line is in the middle of a time zone.

Answer: TRUE

Diff: 3

Topic/Section: 1.6 International Date Line

Bloom's Taxonomy: F. Evaluation

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

178) The International Date Line is not strictly a line of longitude because it has been constructed to avoid land.

Answer: TRUE

Diff: 3

Topic/Section: 1.6 International Date Line

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.15 Discuss the relationship between time zones and the international dateline.

179) The adoption of Daylight Savings Time would be of little value for most nations in the Tropics.

Answer: TRUE

Diff: 1

Topic/Section: 1.6 Daylight-Saving Time

Bloom's Taxonomy: B. Comprehension

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

180) The two major branches of geography are cultural geography and \_\_\_\_\_\_\_\_ geography.

Answer: physical

Diff: 1

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: A. Knowledge

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

181) The \_\_\_\_\_\_\_\_ is the environmental sphere that encompasses water in all its forms and locations.

Answer: hydrosphere

Diff: 1

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4 Illustrate how the concept of Earth Systems helps us to understand the interrelationships of the four environmental "spheres" of Earth.

182) Science understands the solar system to be on the order of \_\_\_\_\_\_\_\_ billion years old.

Answer: 4.5 to 5

Diff: 1

Topic/Section: 1.3 The Solar System

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.5 Describe Earth’s relationships within the solar system.

183) He was first to correctly calculate the circumference of Earth: \_\_\_\_\_\_\_\_.

Answer: Eratosthenes

Diff: 1

Topic/Section: 1.3 The Size and Shape of Earth

Bloom's Taxonomy: A. Knowledge

Geog Standards: 4. The physical and human characteristics of places

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.6 Compare the size of Earth with the size of its surface features.

184) The network of intersecting parallels and meridians over the entire Earth is known as the \_\_\_\_\_\_\_\_.

Answer: geographic grid or graticule

Diff: 1

Topic/Section: 1.4 The Geographic Grid

Bloom's Taxonomy: A. Knowledge

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

185) If you walked along a parallel, in what direction(s) would you be walking?

Answer: east or west

Diff: 2

Topic/Section: 1.4 Latitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

186) If you walked along a meridian, in what direction(s) would you be walking?

Answer: north or south

Diff: 2

Topic/Section: 1.4 Longitude

Bloom's Taxonomy: C. Application

Geog Standards: 1. How to use maps

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.8 Determine the longitude of a location on Earth.

187) Earth's axis is tilted \_\_\_\_\_\_\_\_ degrees from a line perpendicular to the Plane of the Ecliptic.

Answer: 23.5

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

188) The \_\_\_\_\_\_\_\_ points at the star Polaris.

Answer: North Pole or Earth's axis

Diff: 1

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: A. Knowledge

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.7 Determine the latitude of a location on Earth.

189) If the axis of the Earth was not "tilted," Earth would not experience \_\_\_\_\_\_\_\_.

Answer: seasons

Diff: 2

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: D. Analysis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

190) In the Northern Hemisphere in July, day lengths are progressively \_\_\_\_\_\_\_\_ as one travels northward.

Answer: longer

Diff: 2

Topic/Section: 1.5 Seasonal Transitions

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

191) \_\_\_\_\_\_\_\_ is a country which has adopted permanent daylight savings time, with double daylight savings time in the summer.

Answer: Russia

Diff: 1

Topic/Section: 1.6 Daylight-Saving Time

Bloom's Taxonomy: A. Knowledge

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.

192) Use the steps of the scientific method to devise an experiment to test the hypothesis that the Earth is round.

Answer: The ideal answer would use steps (not necessarily in order!) from the process of science. 31.6

Diff: 2

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: F. Evaluation

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 9. Apply the scientific method in lab experiences to interpret information and draw conclusions.

Learning Outcome: 1.2 Analyze how geographers use science to explain and understand the natural environment.

193) Write a paragraph explaining the relationship of geography to other scientific disciplines.

Answer: This should be built around diverse subject matter and interrelationships. Geography borrows to integrate knowledge.

Diff: 3

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: E. Synthesis

Geog Standards: 3. How to analyze the spatial organization of people, places, and environments

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

194) You are doing a course in Physical Geography. Speculate on why physical geographers should be interested in the patterns of globalization.

Answer: Worldwide connections within human geography translate into modifications in the physical environment and vice versa.

Diff: 3

Topic/Section: 1.1 Geography and Science

Bloom's Taxonomy: E. Synthesis

Geog Standards: 18. How to apply geography to interpret the present and plan for the future

Science Outcomes: 7. Demonstrate the ability to make connections across Geography.

Learning Outcome: 1.1 Distinguish the key concerns for geographers who study the world.

195) Define equilibrium and give an example from within the Earth system.

Answer: This could be most anything, but the answer should be couched in systems terms.

Diff: 2

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: C. Application

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.4 Illustrate how the concept of Earth Systems helps us to understand the interrelationships of the four environmental "spheres" of Earth.

196) Write an essay differentiating closed systems from open systems. Give an example of each within the Earth system.

Answer: Any examples will do. Open systems are much more apparent in the Earth system than closed systems.

Diff: 3

Topic/Section: 1.2 Earth's Environmental Spheres

Bloom's Taxonomy: E. Synthesis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 8. Communicate effectively in writing.

Learning Outcome: 1.4 Illustrate how the concept of Earth Systems helps us to understand the interrelationships of the four environmental "spheres" of Earth.

197) Explain why the following lines are crucial to physical geography: North Pole, South Pole, Tropic of Capricorn, International Date Line.

Answer: North and South Poles are the ends of Earth's axis of rotation. Lines of latitude: solar energy distribution. Lines of longitude: time. Plane of the Ecliptic: orbital plane of Earth. Equator: center of the migrating declination of the sun.

Diff: 3

Topic/Section: 1.5 Earth Movements

Bloom's Taxonomy: E. Synthesis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.9 Locate a place given the latitude and longitude coordinates.

198) Describe the Earth/Sun relationships which cause seasonality.

Answer: Revolution, polarity, and tilt of the axis should be mentioned.

Diff: 3

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: E. Synthesis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 2. Demonstrate the ability to think critically and employ critical thinking skills.

Learning Outcome: 1.11 Summarize the factors that cause the annual change of seasons.

199) Suppose you lived on the Falkland Islands at 52 degrees south latitude. Describe the basic changes in the angle of the Sun in the sky and the length of the day as time progresses from January to December.

Answer: An opposite pattern of that in the northern hemisphere. The highest and lowest angles could be mentioned.

Diff: 5

Topic/Section: 1.5 The Annual March of the Seasons

Bloom's Taxonomy: E. Synthesis

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 8. Communicate effectively in writing.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

200) Explain the progression of the dates and latitudes of the declination of the Sun through the calendar year.

Answer: The answer should have a sense of the migration of the vertical Sun with mention of solstices and equinoxes.

Diff: 3

Topic/Section: 1.5 Seasonal Transitions

Bloom's Taxonomy: F. Evaluation

Geog Standards: 7. The physical processes that shape the patterns of earth's surface

Science Outcomes: 3. Read and interpret graphs and data.

Learning Outcome: 1.12 Describe the changes in the patterns of sunlight around Earth during the year.

201) Write a paragraph explaining the physical basis of standard time zones.

Answer: The Earth's rotation makes the highest sun of the day (solar noon) pass westward over 15° of longitude per hour. In 24 hours the sun passes over 360° of longitude (15° per hour times 24 hours equals 360°). Thus there is one theoretical time zone per 15° of longitude.

Diff: 3

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: E. Synthesis

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 8. Communicate effectively in writing.

Learning Outcome: 1.13 Explain how time zones were established.

202) China has one time zone yet is as large as the mainland United States which has four time zones. Speculate on why this is so.

Answer: Each country is free to suit itself and China wants all citizens to be on the same time no matter what the physical solar time. It is a matter of the physical being subservient to the social!

Diff: 3

Topic/Section: 1.6 Standard Time

Bloom's Taxonomy: D. Analysis

Geog Standards: 5. That people create regions to interpret Earth's complexity

Science Outcomes: 9. Apply the scientific method in lab experiences to interpret information and draw conclusions.

Learning Outcome: 1.14 Describe how time zones are used to establish actual times around the world.