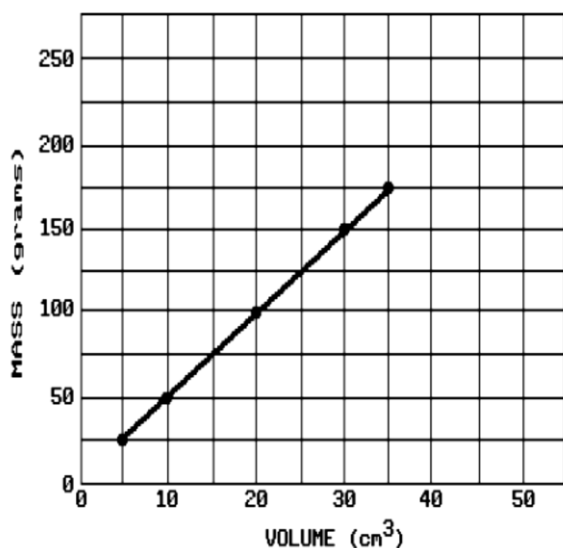


Earth Science Mid-term Practice Regents Questions

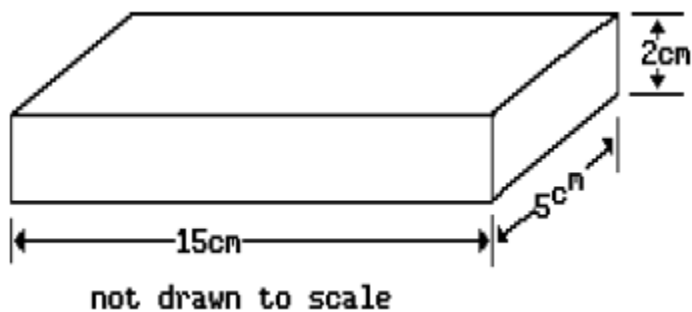
Density Example(s)

1.) The graph below shows the density for five different samples of the mineral pyrite. According the graph above, the density of pyrite is about

- (1) 0.5 g/cm³
- (2) 7.5 g/cm³
- (3) 2.5 g/cm³
- (4) 5.0 g/cm³



2.) The diagram below represents a rectangular object with a mass of 450 grams. According to the *Earth Science Reference Tables*, what is the density of the object?

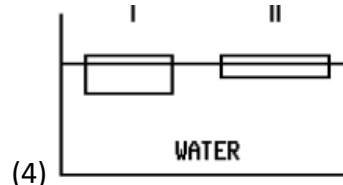
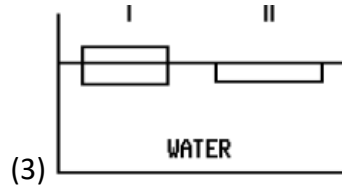
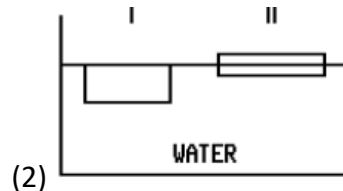
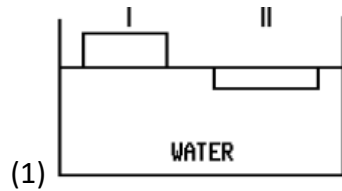


- (1) 2 g/cm³
- (2) 1 g/cm³
- (3) 4 g/cm³
- (4) 3 g/cm³

Density and Water

Water is most dense as a **liquid** at 3.98°C or 4°C , this means that ice floats above water

3.) The diagrams below represent two differently shaped blocks of ice floating in water. Which diagram most accurately shows the blocks of ice as they would actually float in water?



4.) As water cools from 4°C to 0°C , its density:

- 1) increases
- 2) decreases
- 3) remains the same

5.) What always happens when a change occurs?

- | | |
|--|---|
| (1) pollution is produced | (2) the temperature of the system increases |
| (3) the properties of a system are altered | (4) dynamic equilibrium is reached |

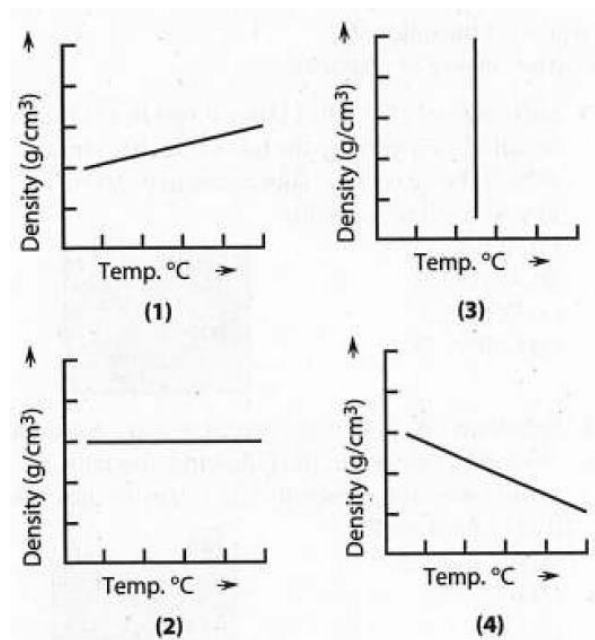
6.) Which statement is true about the environment of most of Earth?

- | | |
|--|--|
| (1) It is usually greatly unbalanced | (2) It is usually in equilibrium and hard to change |
| (3) It is usually in equilibrium but easy to change on a small scale | (4) It is normally heavily polluted by natural occurrences |

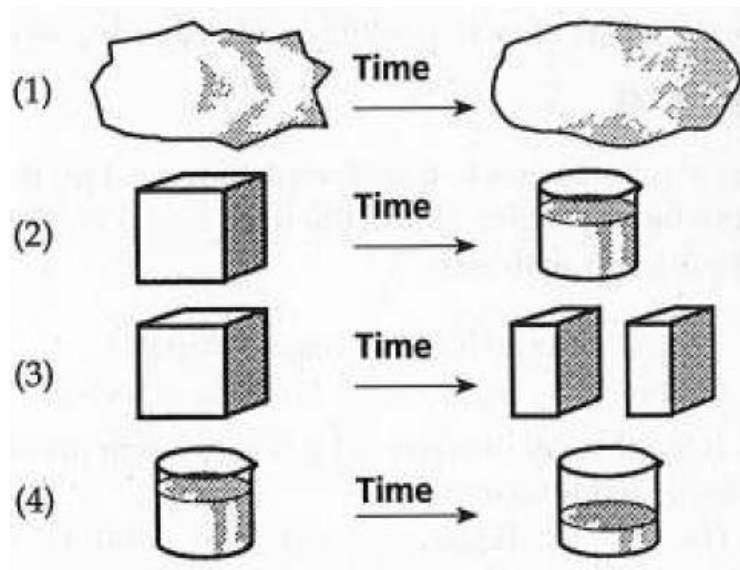
7.) Humans can cause rapid changes in the environment that may result in catastrophic events. Which statement below is the best example of this?

- | | |
|---|---|
| (1) concrete and brick buildings cause a city to absorb more heat than surrounding areas do | (2) A project to straighten out a river causes flooding at a city downstream |
| (3) A new housing development uses well water, causing the water table level to drop | (4) Streetlights make it more difficult to observe stars and planets at night near a city |

8.) Object A expands when it is heated. Which graph best represents the relationship between the temperature and the density of object A?



9.) The following diagrams show physical changes in four materials over time. The chemical composition of each material remains the same. Which material most likely changed in density?



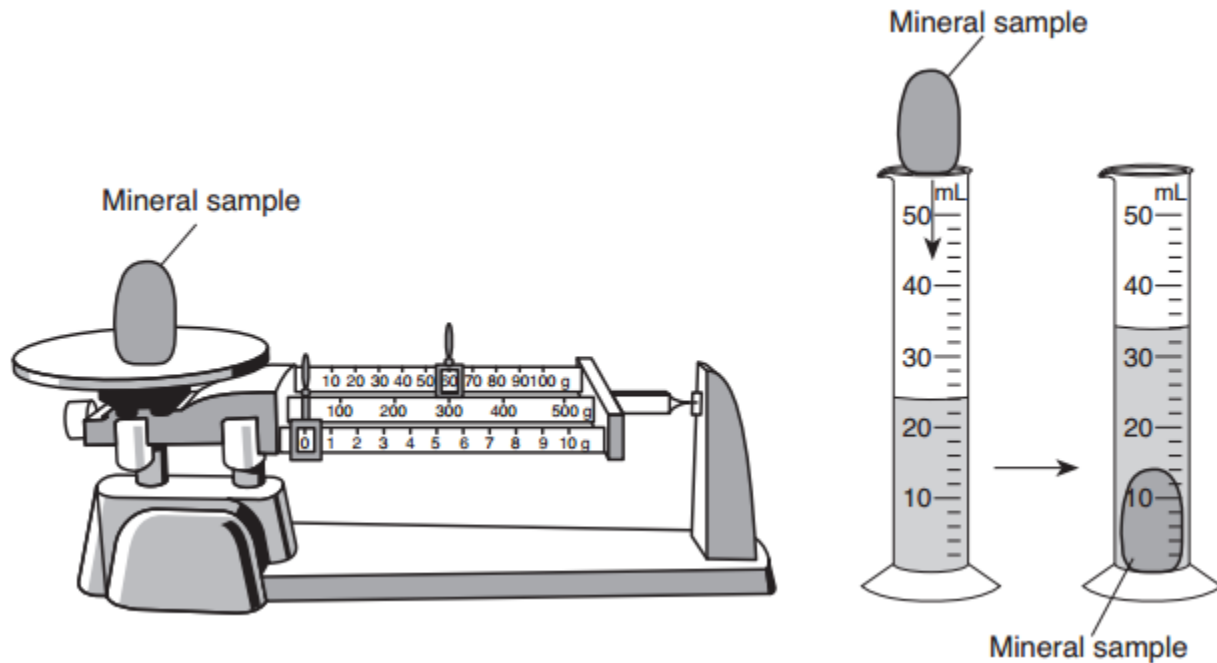
10.) The rising and setting of the sun are examples of

- | | |
|----------------------|-------------------------|
| (1) noncyclic events | (2) predictable changes |
| (3) unrelated events | (4) random motion |

11.) A predication of next winter's weather is an example of

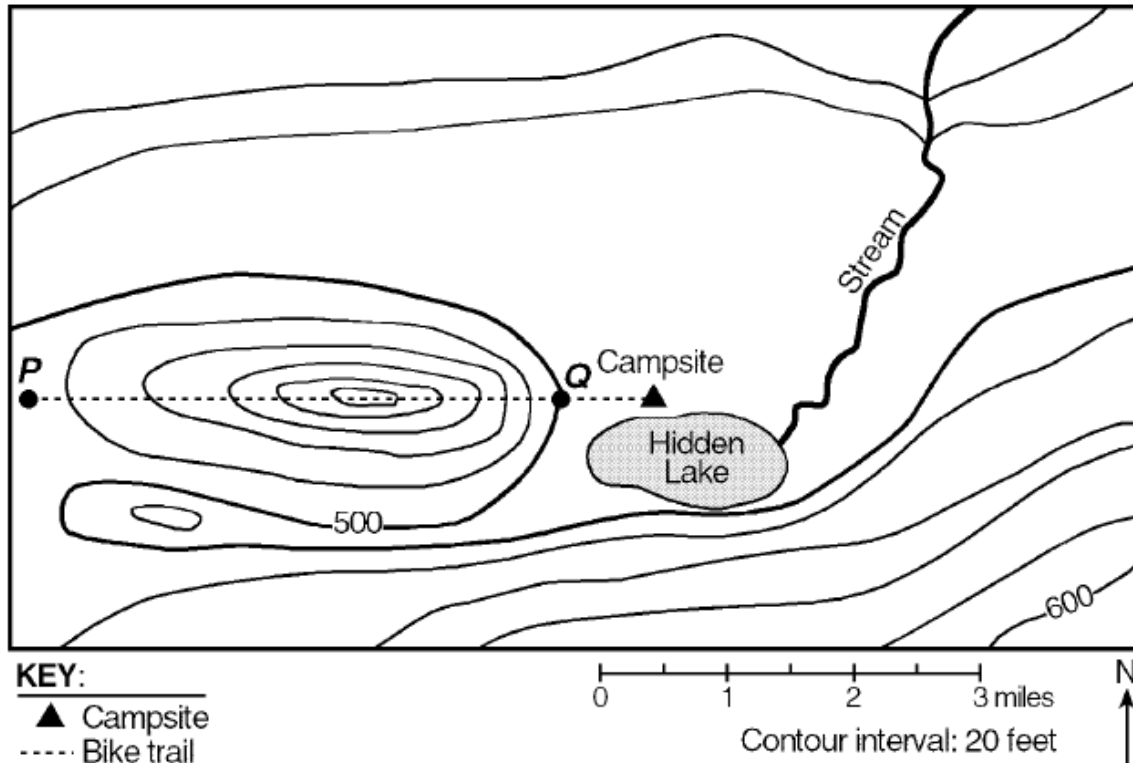
- | | |
|--------------------|----------------------|
| (1) a measurement | (2) a classification |
| (3) an observation | (4) an inference |

12.) The diagram below represents the mass and volume of a mineral sample being measured. These measurements were used to determine the density of the mineral sample.

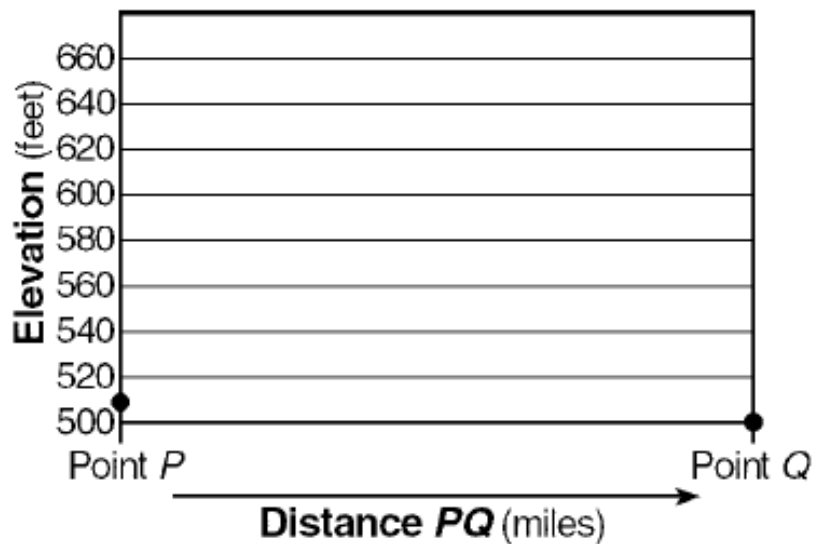


What is the density of this sample?

- | | |
|-------------|-------------|
| (1) 6 g/mL | (2) 24 g/mL |
| (3) 34 g/mL | (4) 60 g/mL |

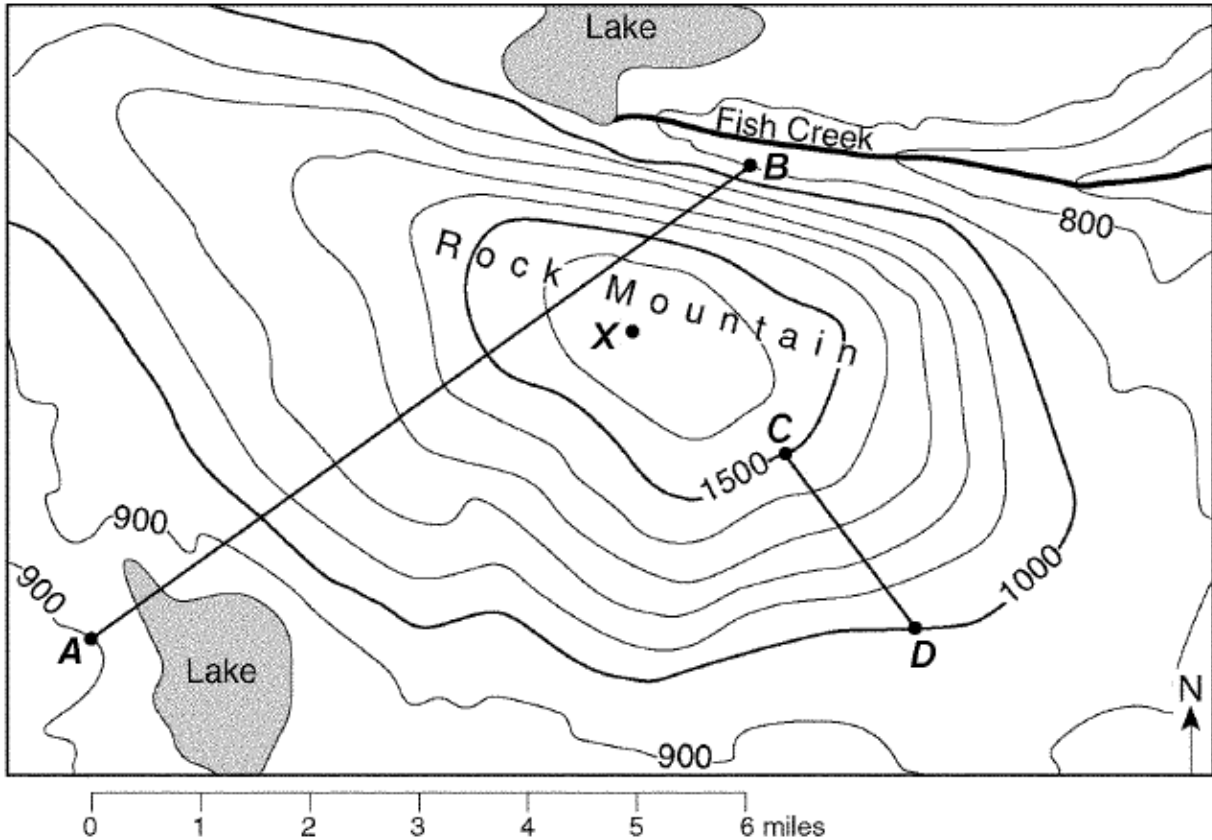


13.) On the grid below, draw a profile of the landscape along the bicycle trail from point P to point Q by following the directions below.



- Plot the elevation along line PQ by marking with a dot each point where a contour line is crossed by line PQ. Point P and point Q have been plotted for you.
- Connect the dots to complete the profile

Points A, B, C, D, and X represent points on a map below. Elevations are measured in feet.



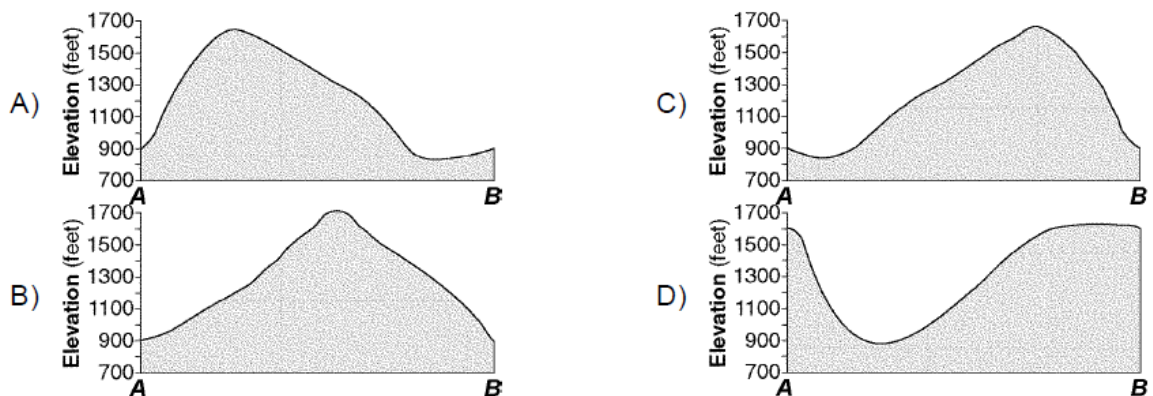
14.) What is the average gradient of the slope along straight line *CD* in the map?

- 500 ft/mi 250 ft/mi 100 ft/mi 1,000 ft/mi

15.) What is the *highest* possible elevation of point X on Rock Mountain in the map?

- 1,601 ft 1,699 ft 1,600 ft 1,599 ft

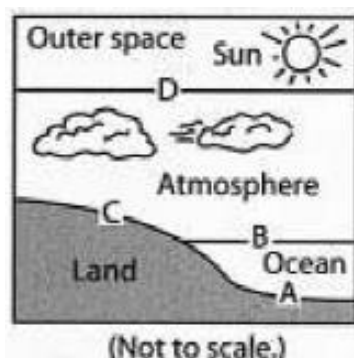
16.) Which cross section *best* represents the profile along straight line *AB* in the map?



17. The ozone layer protects life on Earth by absorbing harmful ultraviolet radiation. The ozone layer is located between 17 kilometers and 35 kilometers above Earth's surface in which atmospheric temperature zone?

- (1) troposphere
- (2) stratosphere
- (3) mesosphere
- (4) thermosphere

18. Which line best identifies the interface of the lithosphere and the troposphere?



- (1) A
- (2) B
- (3) C
- (4) D

19. The following data table shows the altitude of Polaris as recorded by four observers at different locations on Earth.

Observer	Altitude of Polaris
A	90°
B	30°
C	30°
D	20°

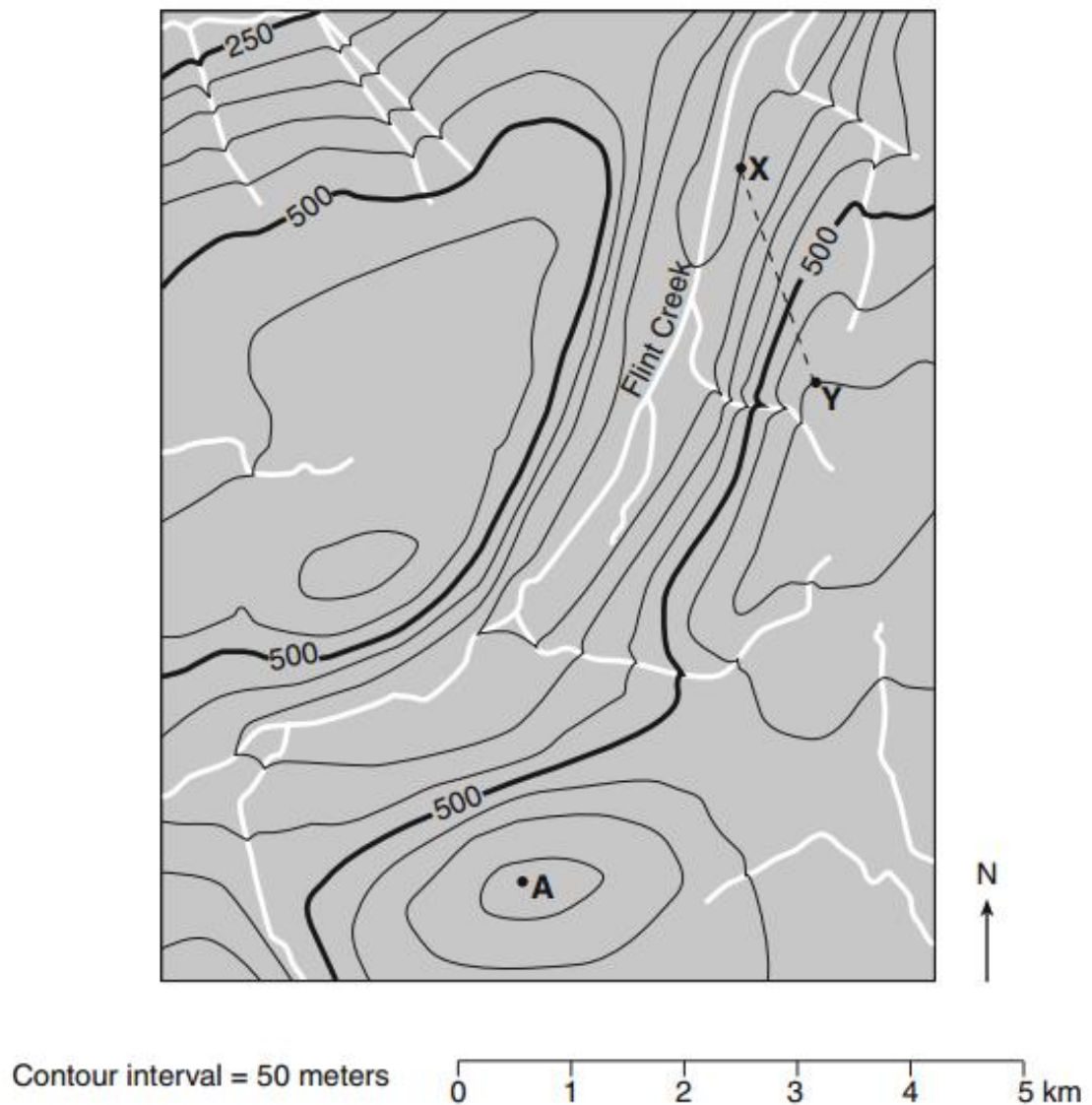
Which statement is best supported by the information in the table?

- (1) Observer A was at the equator
- (2) Observers A and B measured the altitude during daytime hours
- (3) Observers B and C measured the altitude at the same latitude
- (4) Observers B, C, and D were in the Southern Hemisphere

20. Which statement is true about an isoline on an air temperature field map?

- | | |
|---|--|
| (1) It represents an interface of high and low barometric pressures | (2) It indicates the direction of maximum insolation |
| (3) It increases in magnitude as it bends southward | (4) It connects points of equal air temperature |

21. Calculate gradient between points X and Y?



- | | | | |
|-------------|--------------|--------------|--------------|
| (1) 50 m/km | (2) 100 m/km | (3) 150 m/km | (4) 200 m/km |
|-------------|--------------|--------------|--------------|

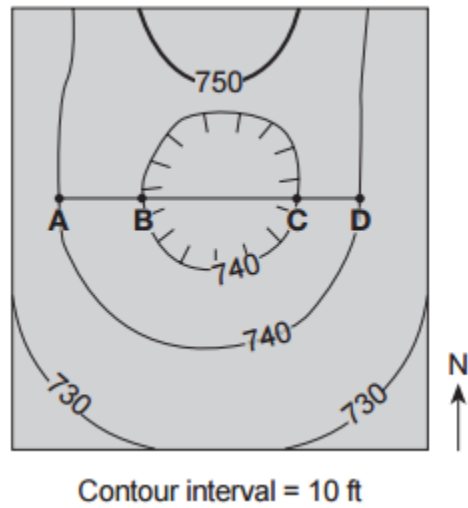
22.) Which statement most accurately describes Earth's atmosphere?

- | | |
|--|--|
| (1) The atmosphere is layered, with each layer possessing distinct characteristics | (2) The atmosphere is a mass of gases surrounding most of Earth |
| (3) The atmosphere's altitude is less than the depth of the ocean | (4) The atmosphere is more dense than the hydrosphere, but less dense than the lithosphere |

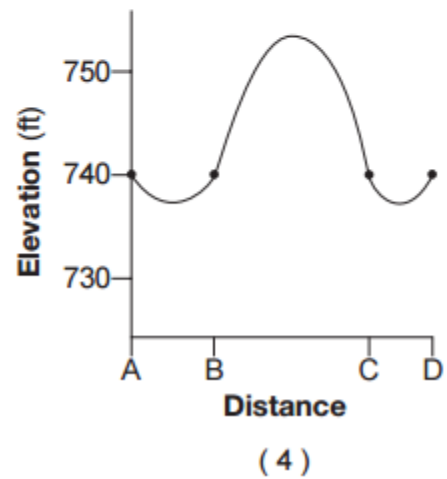
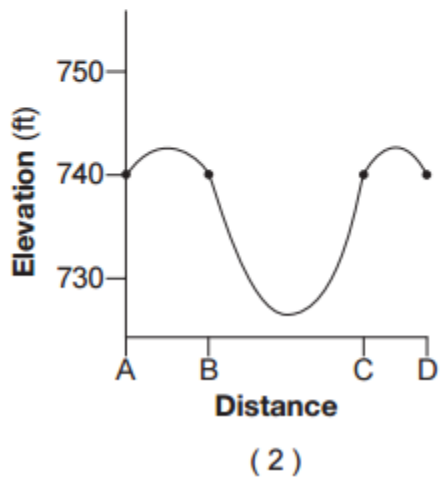
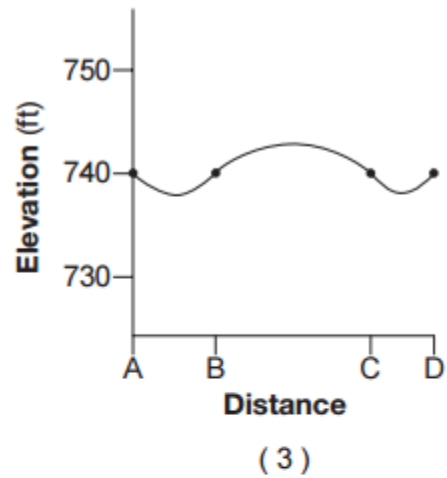
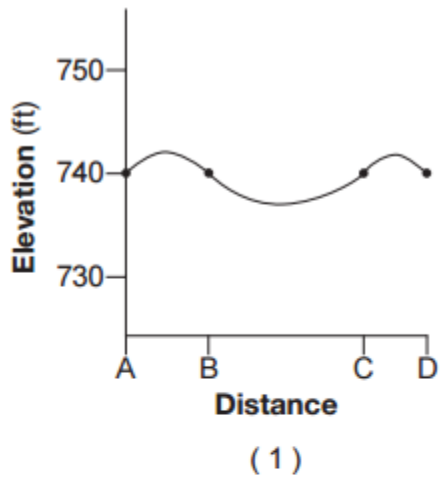
23.) The lower atmosphere and hydrosphere are bound to Earth by

- | | |
|--------------------------|--|
| (1) magnetic fields | (2) atmospheric pressure |
| (3) the force of gravity | (4) a molecular bonding at the interface |

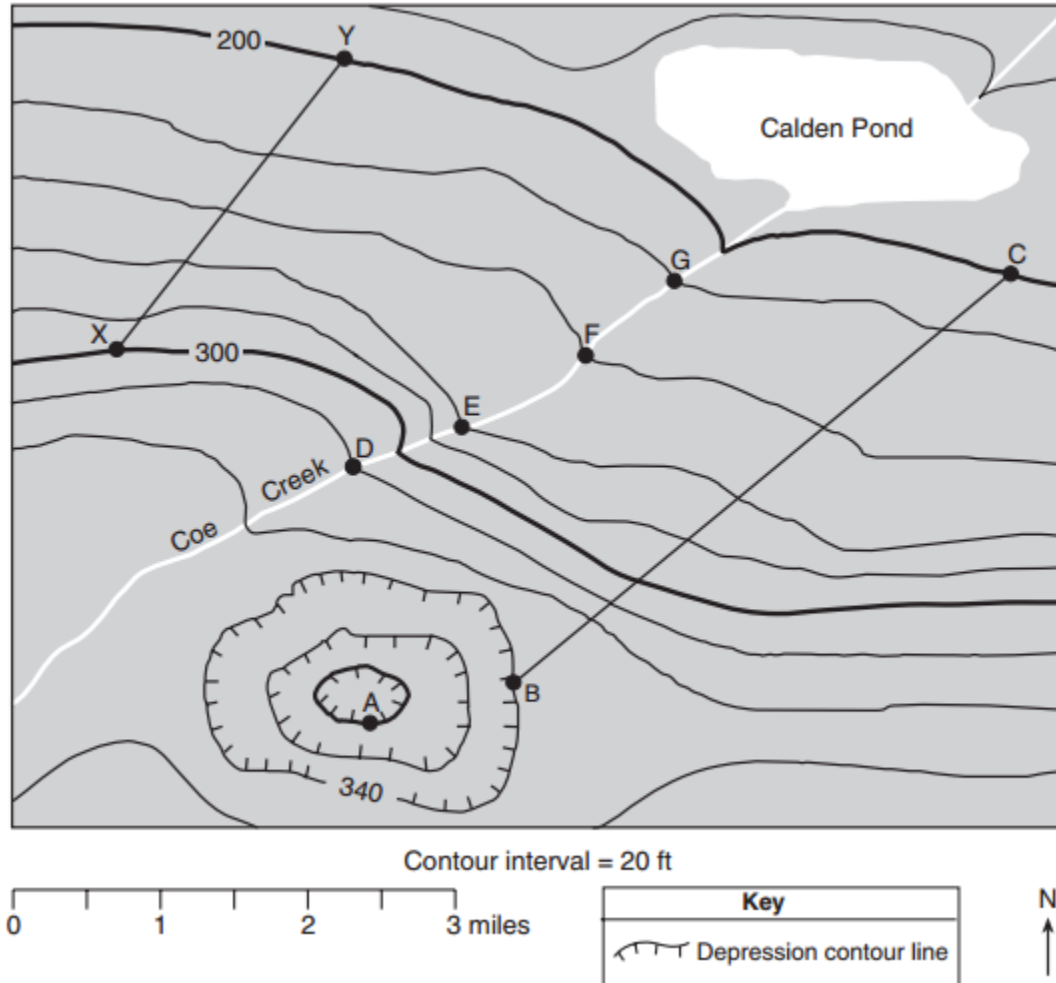
24.) The topographic map below shows a depression contour line (🌀) on Earth's surface. Points A, B, C, and D represents surface locations. Contour line elevations are in feet.



Which profile best shows the topography along line AD?



Base your answers to questions 25 – 27 on the topographic map below and on your knowledge of Earth Science. Point A represents a location on Earth's surface. Lines BC and XY are reference lines on the map. Points D, E, F, and G represent locations along Coe Creek. Elevations are shown in feet.



25.) What is the elevation of location A?

26.) Calculate the gradient along line XY. Label your answer with the correct units.

27.) Construct a topographic profile along line BC, from point B to point C. Plot the elevation of each contour line that crosses line BC. Connect all nine plots with a line to complete the profile.

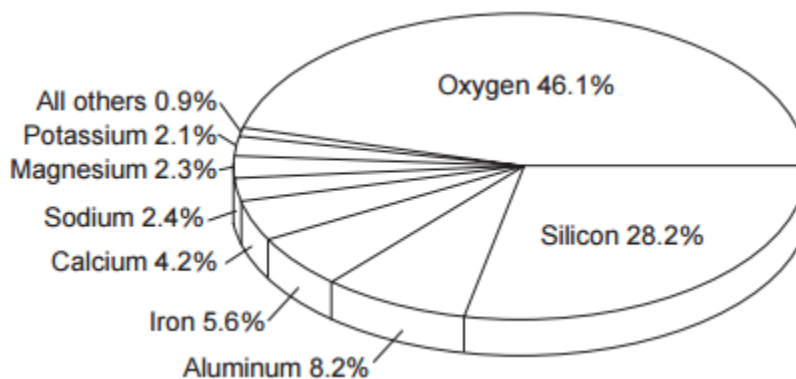


For question 28, use the table from the Earth Science Reference Tables.

**Average Chemical Composition
of Earth's Crust, Hydrosphere, and Troposphere**

ELEMENT (symbol)	CRUST		HYDROSPHERE	TROPOSPHERE
	Percent by mass	Percent by volume	Percent by volume	Percent by volume
Oxygen (O)	46.10	94.04	33.0	21.0
Silicon (Si)	28.20	0.88		
Aluminum (Al)	8.23	0.48		
Iron (Fe)	5.63	0.49		
Calcium (Ca)	4.15	1.18		
Sodium (Na)	2.36	1.11		
Magnesium (Mg)	2.33	0.33		
Potassium (K)	2.09	1.42		
Nitrogen (N)				78.0
Hydrogen (H)			66.0	
Other	0.91	0.07	1.0	1.0

28.) The pie graph below represents the composition, in percent by mass, of the chemical elements found in an Earth layer.



The composition of which Earth layer is represented by the pie graph?

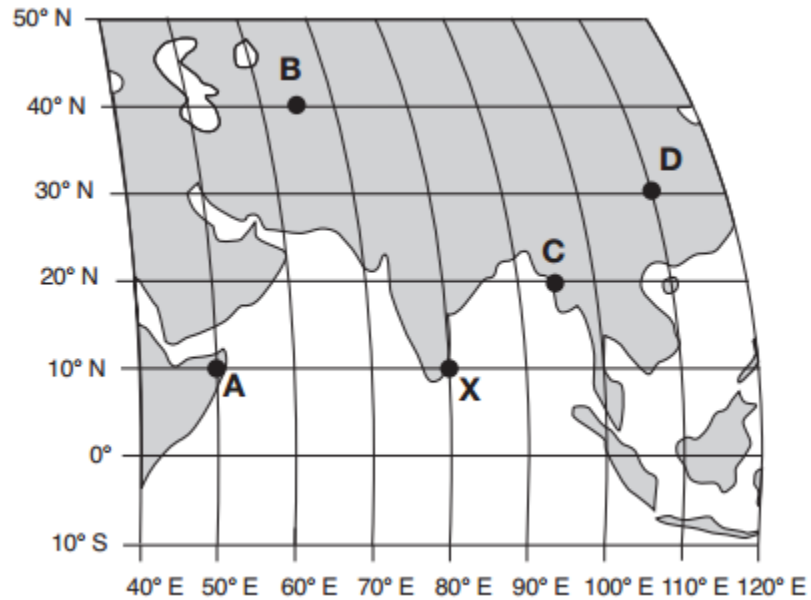
- (1) crust

(2) outer core

(3) troposphere

(4) hydrosphere

29.) The map below shows a portion of Earth's system of latitude and longitude and five locations labeled A, B, C, D, & X.



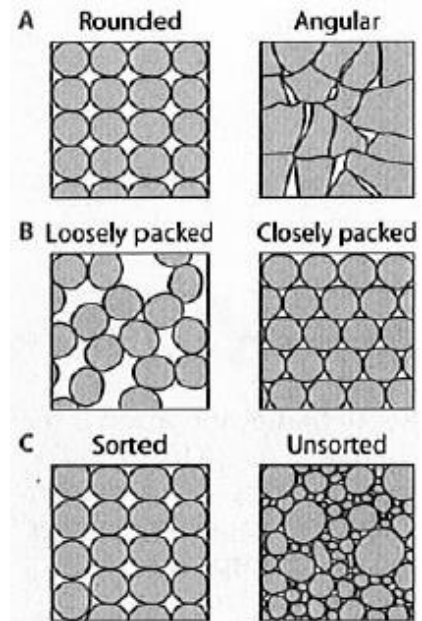
It is solar noon at location X. At which location will solar noon next occur?

- | | |
|-------|-------|
| (1) A | (2) B |
| (3) C | (4) D |

Factors Affecting Infiltration

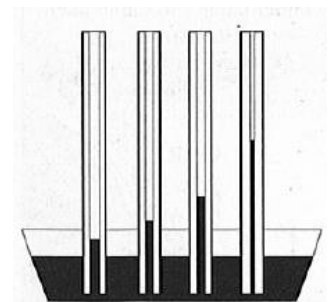
- **Slope of the Land** – steeper the slope (gradient), less infiltration & more runoff
- **Degree of saturation** – more water in the ground, the less it can absorb, increasing water table
- **Porosity** – percentage of open space in Earth's surface, greater porosity greater infiltration

- **(A) Shape:** well – rounded particle have greater porosity
- **(B) Packing:** more closely packed particles has lower porosity
- **(C) Sorting:** particle size does not affect porosity
 - **Sorted:** greater porosity
 - **Unsorted:** lower porosity



- **Permeability**
 - **Permeable:** speed of water through material
 - **Impermeable:** object may be porous & not allow water to pass through it
- **Capillarity** – how high water moves against gravity, extremely important to plants

- **Cohesion:** water molecules attracted to each other
- **Adhesion:** water molecules attracted to unlike materials



- **Vegetation** – absorbs water, low runoff & higher infiltration
- **Land Use** – roads, parking lots, buildings, grazing pastures decrease permeability & increase runoff

The Water Cycle: using the word bank, match the number to the correct water cycle process below.

Infiltration _____

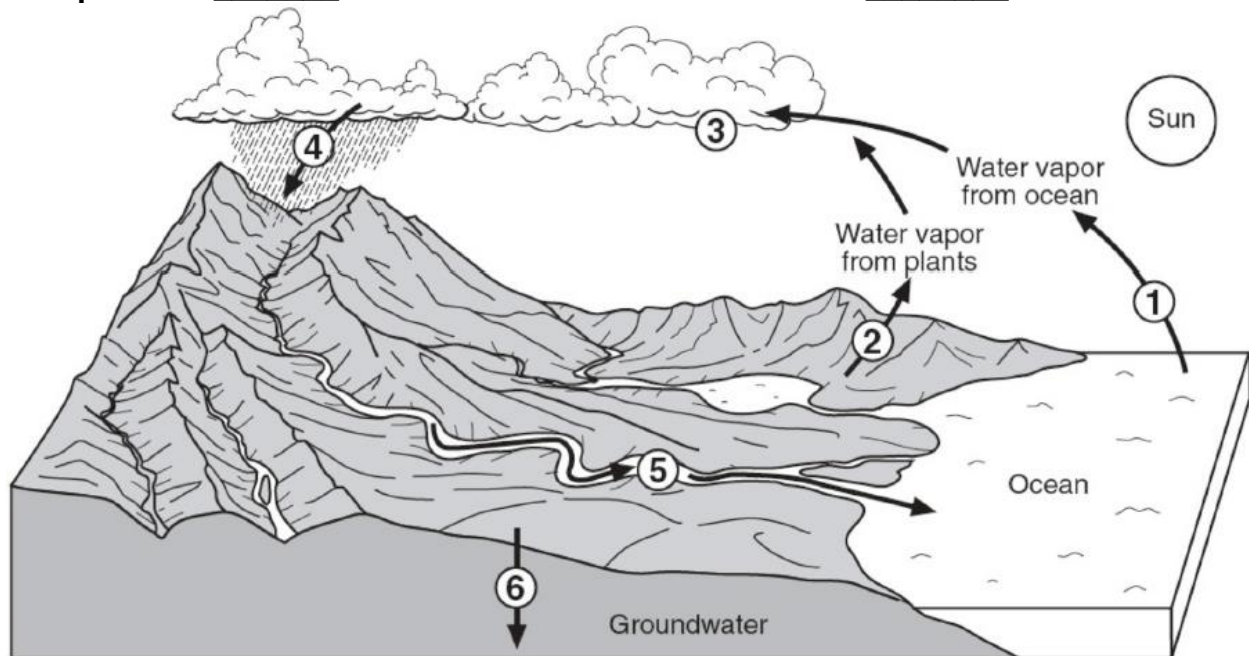
Transpiration _____

Precipitation _____

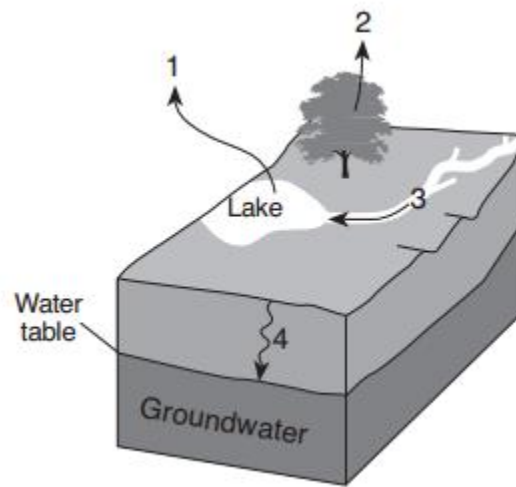
Runoff _____

Evaporation _____

Condensation _____



30.) The arrows in the block diagram below show the movement of water after it has fallen as precipitation.



Which arrow indicates the process of transpiration?

- | | |
|-------|-------|
| (1) 1 | (2) 2 |
| (3) 3 | (4) 4 |

31.) Which processes are most likely to cause a rise in the water table?

- | | |
|---------------------------|-------------------------------------|
| (1) runoff and erosion | (2) precipitation and infiltration |
| (3) deposition and burial | (4) solidification and condensation |

32.) When snow cover on the land melts, the water will most likely become surface runoff if the land surface is

- | | |
|-------------------|---------------------------|
| (1) frozen | (2) porous |
| (3) grass covered | (4) unconsolidated gravel |

33.) In which environment is the amount of transpiration usually the greatest?



(1)



(3)



(2)



(4)

34.) Water will infiltrate surface material that is

(1) impermeable & unsaturated

(2) impermeable & saturated

(3) permeable & unsaturated

(4) permeable & saturated

Weathering

- Chemical & physical breakdown of rocks at or near Earth's surface

Chemical Weathering: change in mineral or chemical composition ie. Rust

Physical Weathering: Frost Action (Freezing & Thawing), Plant Action, Wind (Abrasion)

Erosion

- Weathering of rock into sediments that are **transported**

Transportation Systems of Erosion

- Stream, glacier, wave, wind, or human activity

Gravity Erosion

Mass Movement: pulling massive amounts of rocks & sediments downhill

Running Water Erosion & Streams

Streams

- Running water erosion in a channel

Tributary

- Smaller stream flows into a larger stream

35.) What is the main difference between chemical and physical weathering?

(1) Chemical weathering alters the composition of minerals, and physical weathering does not.

(2) Chemical weathering increases the surface area of minerals, and physical weathering does not.

(3) Physical weathering alters the composition of minerals, and chemical weathering does not.

(4) Physical weathering increases the surface area of minerals, and chemical weathering does not.

36.) Which is the best example of physical weathering?

- | | |
|---|--|
| (1) The cracking of rock caused by the freezing and thawing of water. | (2) The transportation of sediment in a stream. |
| (3) The reaction of limestone with acid rainwater. | (4) The formation of a sandbar along the side of a stream. |

37.) Water is a major agent of chemical weathering because water

- | | |
|---|--|
| (1) Cools the surroundings when it evaporates. | (2) Dissolves many of the minerals that make up rocks. |
| (3) Has a density of about one gram per cubic centimeter. | (4) has the highest specific heat of all common earth materials. |

38.) In which climate would the chemical weathering of limestone occur most rapidly?

- | | |
|------------------|--------------------|
| (1) cold and dry | (2) cold and humid |
| (3) warm and dry | (4) warm and humid |

39.) A variety of soil types are found in New York State primarily because areas of the state differ in their

- | | |
|--------------------------------------|---------------------------------|
| (1) amounts of insolation | (2) distances from the ocean |
| (3) underlying bedrock and sediments | (4) amounts of human activities |

40.) The chemical composition of a soil formed in a certain area from the bedrock beneath it is determined by the

- | | |
|---|--|
| (1) method by which the soil was transported to the area | (2) slope of the land and the particle size of the soil |
| (3) length of time since the last crustal movement in the area occurred | (4) minerals in the bedrock beneath the soil and the climate of the area |

41.) Which type of climate has the greatest amount of rock weathering caused by frost action?

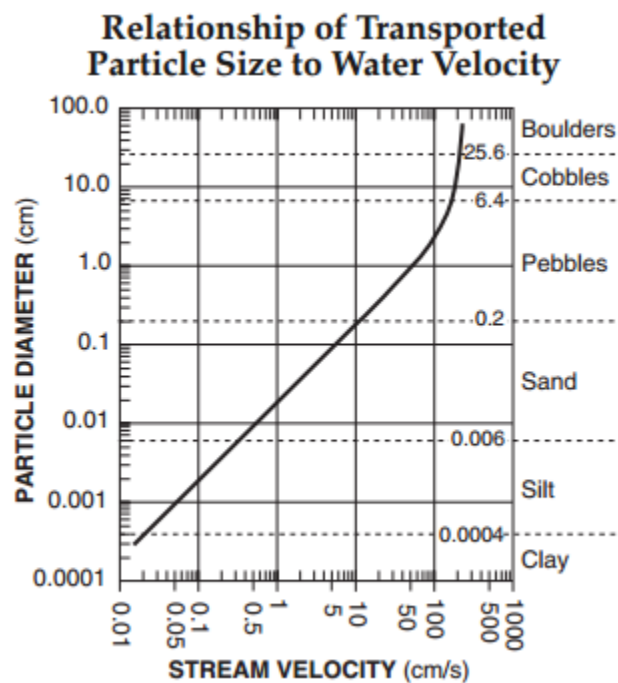
(1) a wet climate in which temperatures remain below freezing

(2) a wet climate in which temperatures alternate between below freezing and above freezing

(3) a dry climate in which temperatures remain below freezing

(4) a dry climate in which temperatures alternate between below freezing and above freezing

42.) Use the table from the Earth Science Reference Tables to answer question 8.



Which sediment is most easily picked up and transported by the wind?

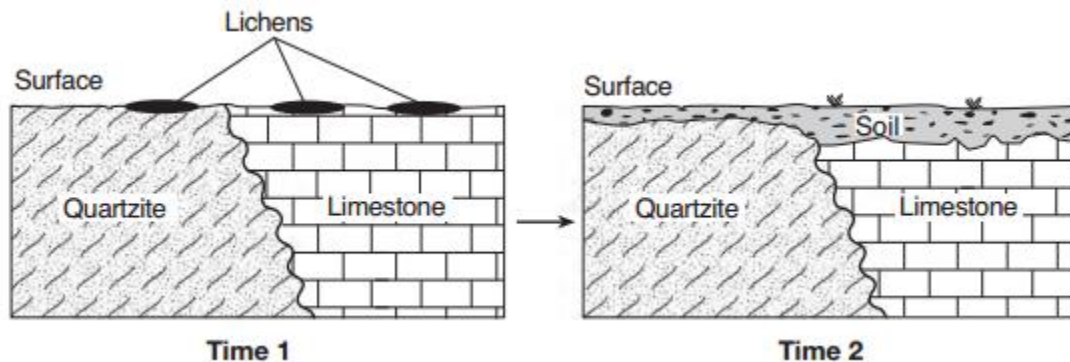
(1) cobbles

(2) pebbles

(3) sand

(4) silt

43.) Lichens are usually the first organisms that first appear in barren, rocky areas. They use root-like structures to split bedrock into small fragments. Lichens also secrete acidic solutions that help break down rock. The cross sections below represent an area when lichens first appeared (time 1) and that same area hundreds of years later, after it was changed by lichens and exposed to air and water (time 2).

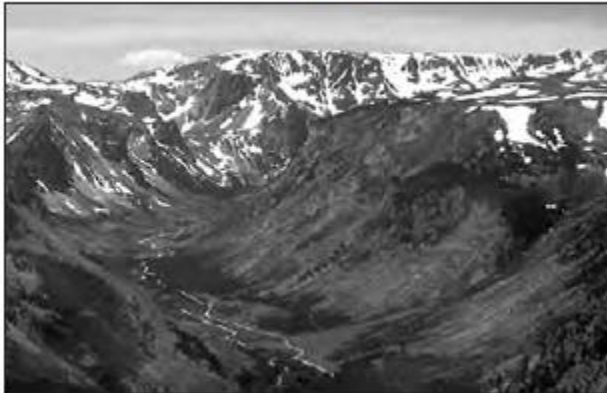


The soil shown in time 2 was formed mainly by

- | | |
|---|---|
| (1) compaction and cementing | (2) weathering and biological activity |
| (3) faulting and tilting of rock strata | (4) mass movement and deposition of particles |

44.) Photographs A and B below show two different valleys.

Photograph A



Photograph B



Which list best identifies the agent of erosion that primarily determined the shape of each valley?

(1) photograph A—glacier; photograph B—river

(2) photograph A—river; photograph B—glacier

(3) both photographs—river

(4) both photographs—glacier

45.) The photograph below shows both erosional and depositional features formed by an agent of erosion.



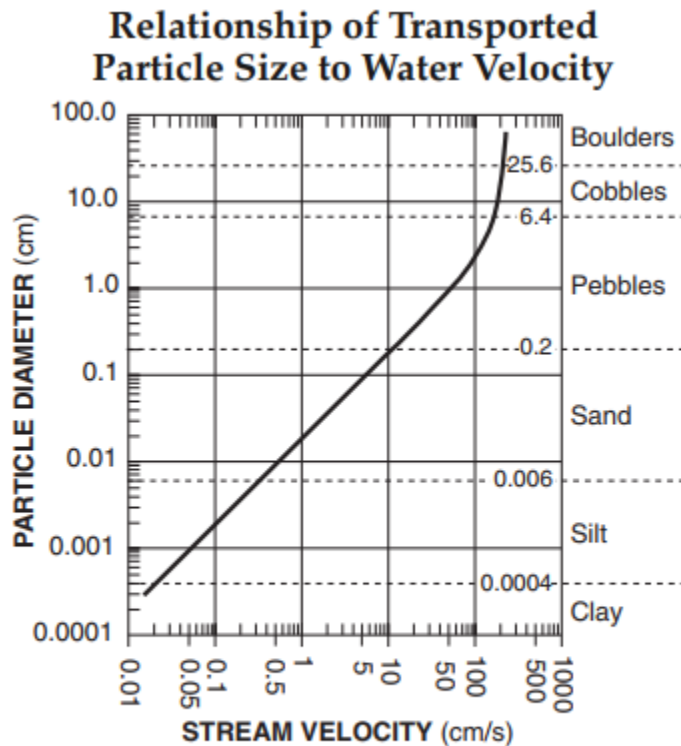
(1) running water

(2) glacial ice

(3) ocean waves

(4) prevailing wind

46.) What is the minimum water velocity necessary to maintain movement of 0.1-centimeter-diameter particles in a stream?



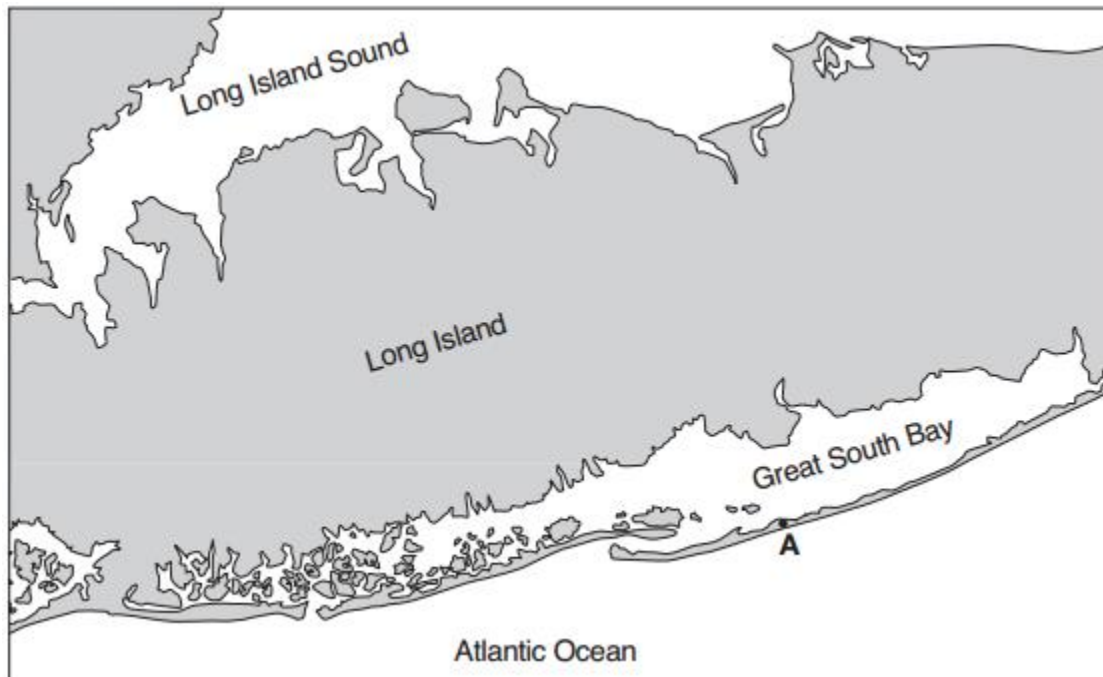
This generalized graph shows the water velocity needed to maintain, but not start, movement. Variations occur due to differences in particle density and shape.

- | | |
|---------------|-------------------------|
| (1) 0.02 cm/s | (2) 0.5 cm/s conduction |
| (3) 5.0 cm/s | (4) 20.0 cm/s |

47) Sediment is deposited as a river enters a lake because the

- | | |
|-------------------------------------|----------------------------------|
| (1) velocity of the river decreases | (2) force of gravity decreases |
| (3) volume of water increases | (4) slope of the river increases |

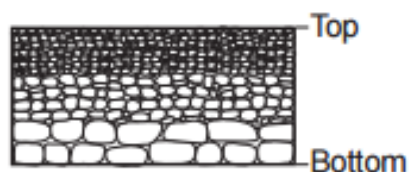
48.) The map below shows coastal features of a portion of Long Island, New York. Point A represents a location on a landscape feature that resulted from wave action and longshore currents.



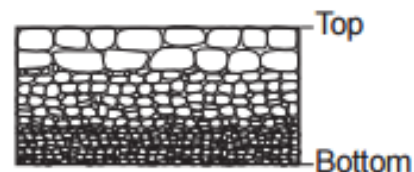
On which landscape feature is point A located?

- (1) moraine
- (2) delta
- (3) barrier island
- (4) floodplain

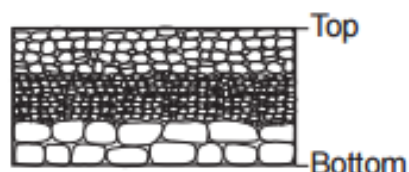
49.) Which cross section best represents the pattern of sediments deposited on the bottom of a lake as the velocity of the stream entering the lake steadily decreased?



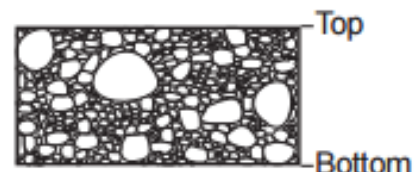
(1)



(3)



(2)



(4)

50.) Use the table from the Earth Science Reference Tables to answer the following questions.

HARD- NESS	CLEAV FRACT	COMMON COLORS	DISTINGUISHING CHARACTERISTICS	USE(S)	COMPOSITION*	MINERAL NAME
1-2	✓	silver to gray	black streak, greasy feel	pencil lead, lubricants	C	Graphite
2.5	✓	metallic silver	gray-black streak, cubic cleavage, density = 7.6 g/cm ³	ore of lead, batteries	PbS	Galena
3	✓	colorless or variable	bubbles with acid, rhombohedral cleavage	cement, lime	CaCO ₃	Calcite
3.5	✓	colorless or variable	bubbles with acid when powdered	building stones	CaMg(CO ₃) ₂	Dolomite
4	✓	colorless or variable	cleaves in 4 directions	hydrofluoric acid	CaF ₂	Fluorite
5-6	✓	black to dark green	cleaves in 2 directions at 90°	mineral collections, jewelry	(Ca,Na)(Mg,Fe,Al)(Si,Al) ₂ O ₆	Pyroxene (commonly augite)
6.5	✓	green to gray or brown	commonly light green and granular	furnace bricks, jewelry	(Fe,Mg) ₂ SiO ₄	Olivine

Which mineral will scratch fluorite, galena, and pyroxene?

- (1) graphite (2) olivine (3) calcite (4) dolomite

51.) Use the table from the Earth Science Reference Tables to answer the following question.

**Average Chemical Composition
of Earth's Crust, Hydrosphere, and Troposphere**

ELEMENT (symbol)	CRUST		HYDROSPHERE	TROPOSPHERE
	Percent by mass	Percent by volume	Percent by volume	Percent by volume
Oxygen (O)	46.10	94.04	33.0	21.0
Silicon (Si)	28.20	0.88		
Aluminum (Al)	8.23	0.48		
Iron (Fe)	5.63	0.49		
Calcium (Ca)	4.15	1.18		
Sodium (Na)	2.36	1.11		
Magnesium (Mg)	2.33	0.33		
Potassium (K)	2.09	1.42		
Nitrogen (N)				78.0
Hydrogen (H)			66.0	
Other	0.91	0.07	1.0	1.0

Which two elements make up the greatest percentages by mass in Earth's crust?

- (1) oxygen and potassium
- (2) oxygen and silicon
- (3) aluminum and potassium
- (4) aluminum and silicon

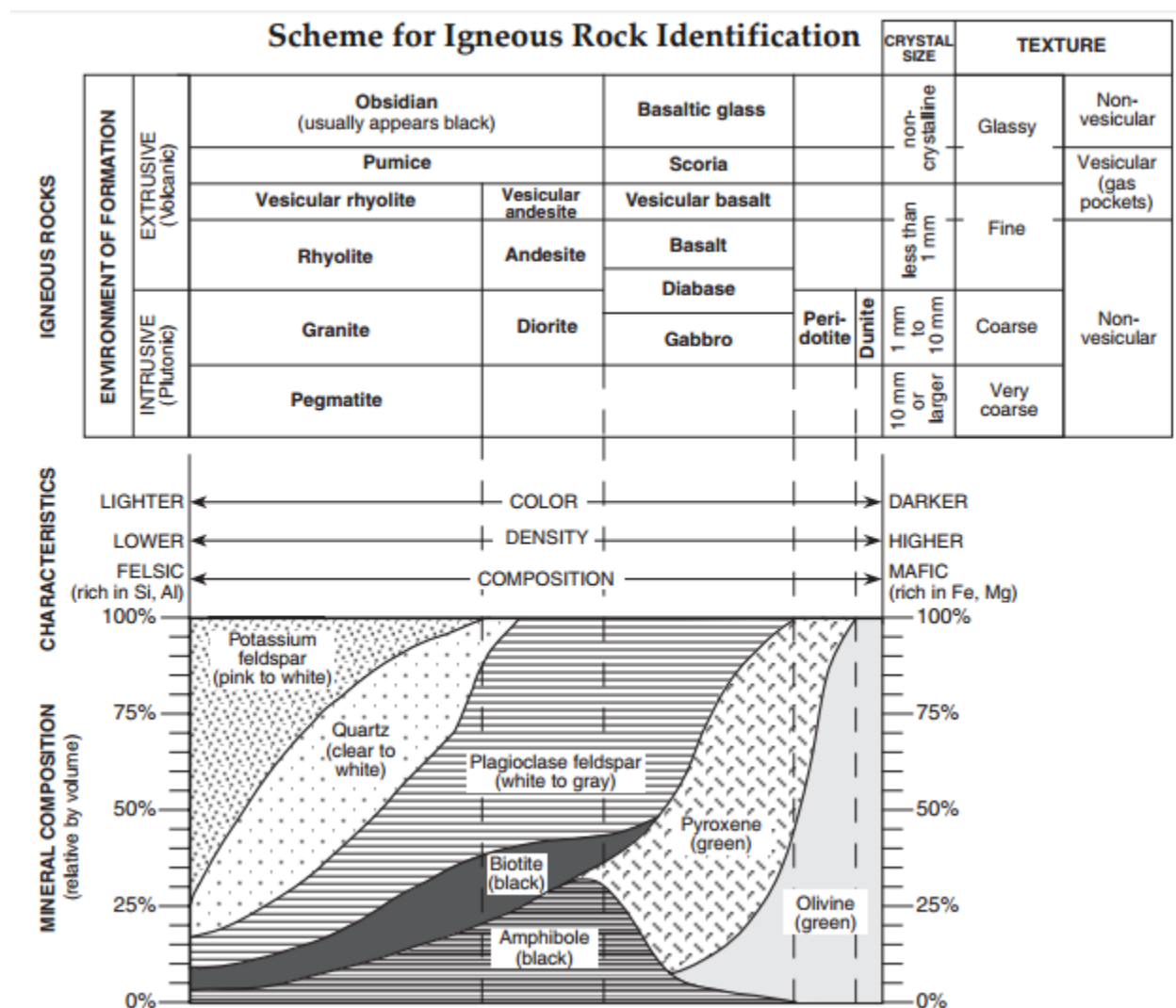
52.) Which rock is composed of the mineral halite that formed when seawater evaporated?

- (1) limestone
- (2) dolostone
- (3) rock gypsum
- (4) rock salt

53.) Which mineral precipitates from oceans and forms rock salt?

- (1) quartz
- (2) fluorite
- (3) halite
- (4) olivine

54.) Use the table from the Earth Science Reference Tables for question 54 - 56.



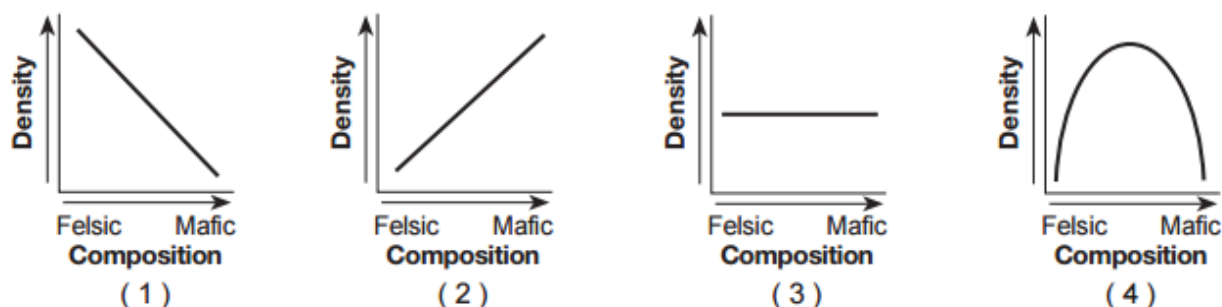
Which mineral is most frequently found in both granitic continental crust and basaltic oceanic crust?

- (1) olivine
- (2) potassium feldspar
- (3) plagioclase feldspar
- (4) quartz

55.) The igneous rock gabbro most likely formed from molten material that cooled

- (1) rapidly at Earth's surface
- (2) slowly at Earth's surface
- (3) rapidly below Earth's surface
- (4) slowly below Earth's surface

56.) Which graph best shows the relationship between the composition of different igneous rocks and their densities?

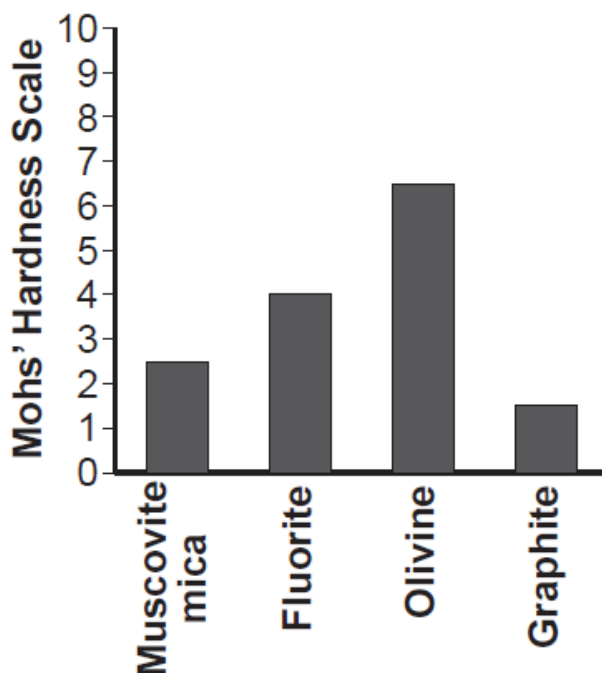


57.) The graph below shows the hardness of four minerals.

Which mineral is hard enough to scratch calcite but is not hard enough to scratch amphibole?

3	✓	colorless or variable	bubbles with acid, rhombohedral cleavage	cement, lime	CaCO_3	Calcite
5.5	✓	black to dark green	cleaves at 56° and 124°	mineral collections, jewelry	$\text{CaNa(Mg,Fe)}_4(\text{Al,Fe,Ti})_3\text{Si}_6\text{O}_{22}(\text{O,OH})_2$	Amphibole (commonly hornblende)

- (1) muscovite mica
- (2) fluorite
- (3) olivine
- (4) graphite



58. Basaltic bedrock of the oceanic crust is classified as?

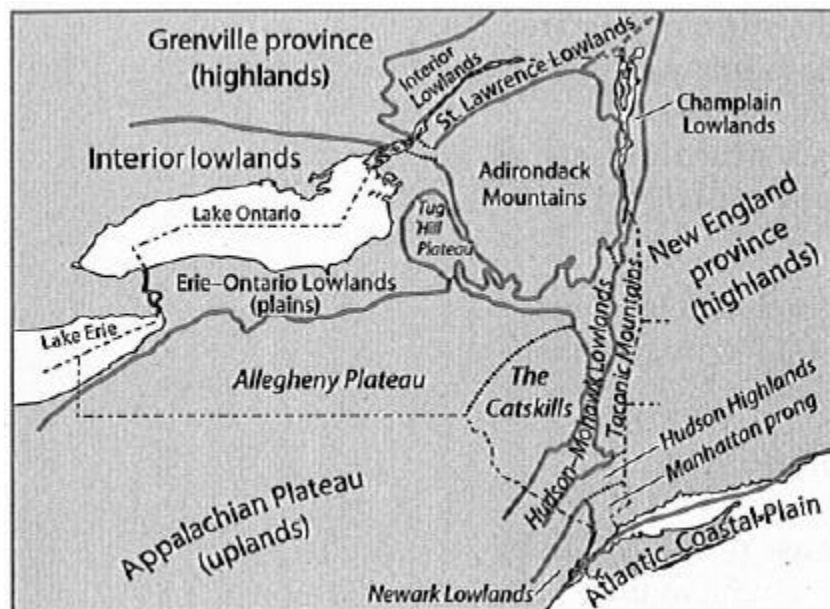
- (1) felsic, with a density of 2.7 g/cm^3
- (2) felsic, with a density of 3.0 g/cm^3
- (3) mafic, with a density of 2.7 g/cm^3
- (4) mafic, with a density of 3.0 g/cm^3

59.) Compared to the oceanic crust, the continental crust is usually:

- (1) thicker, with a less dense granitic composition
- (2) thicker, with a more dense basaltic composition
- (3) thinner, with a less dense granitic composition
- (4) thinner, with a more dense basaltic composition

Landscape Regions

- **Characteristics** – elevation, bedrock, structure, stream drainage pattern, soil characteristics, and amount of slope that form identifiable areas



60. Which New York State landscape region has the lowest elevation, the most level land surface, and is composed primarily of Cretaceous through Pleistocene unconsolidated sediments? Pages 8-9, 2-3

- (1) the Hudson-Mohawk Lowlands
- (2) the Atlantic Coastal plain
- (3) the Champlain Lowlands
- (4) the Erie-Ontario Lowlands

Factors of Landscape Development

Uplifting forces – displace and form new rock to raise the land, mountain building

- Examples – volcanic action, earthquakes, and plate interactions

Leveling forces – lower or level out the Earth by breaking down the rocks, energy source is the Sun

- Examples - weathering, erosion, deposition, and sinking

Climate on Landscape Development – climate & bedrock determine landscape

- Humidity increases chemical weathering on landscapes
- Vegetation decreases erosion on landscape
- Arid landscapes are wind-blown

61. Landscape regions in which leveling forces are dominant over uplifting forces are often characterized by

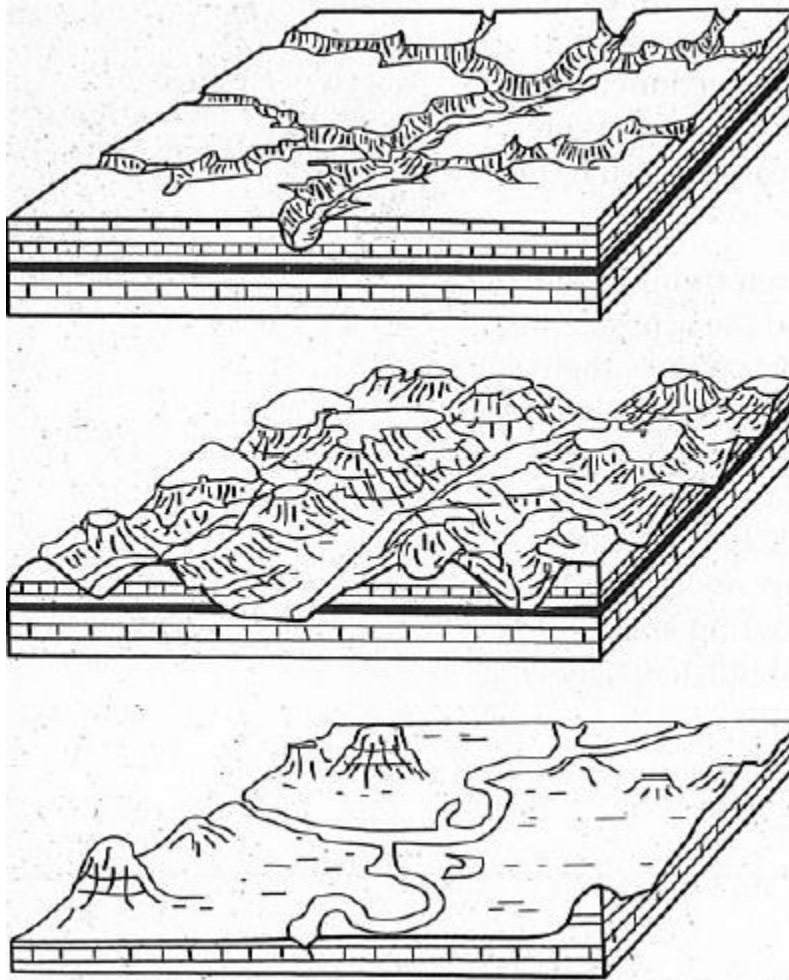
(1) volcanoes

(2) mountain building

(3) low elevations and gentle slopes

(4) high elevations and steep slopes

62. The three diagrams below represent the same location at different times. What is the best explanation for the difference in appearance of this location?



(1) This region was exposed to leveling forces for different lengths of time

(2) This region has different underlying bedrock structures

(3) This region developed in different climate regions

(4) This region has the same type of underlying rock layers

63. Which factor(s) is most important in determining the evolution of a landscape?

(1) surface landscape

(2) development of drainage

(3) plant cover

(4) climate & rock structure

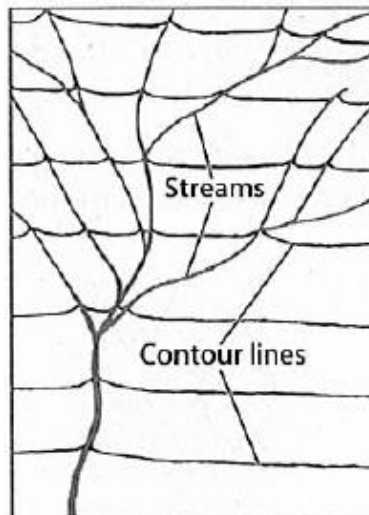
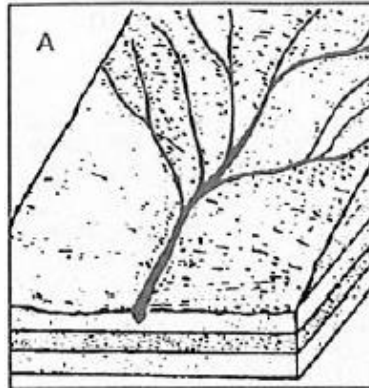
Bedrock

- Characteristics of bedrock determine characteristics of landscape

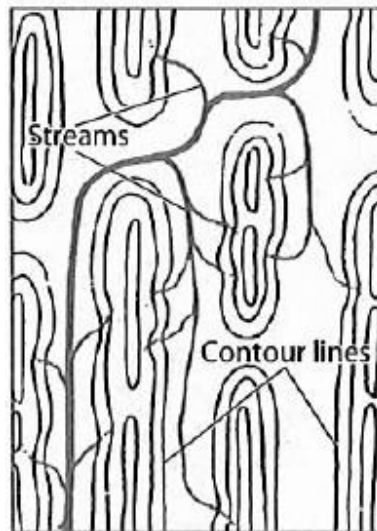
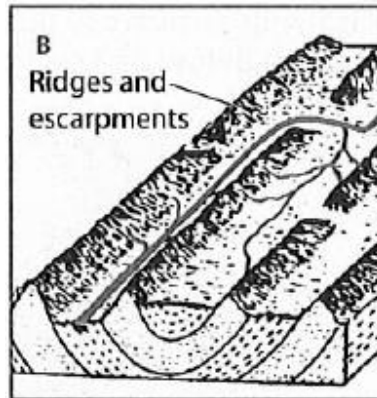
Escarpment – more resistant rock layer, or cliff, along the edge of rock layers

Drainage Patterns

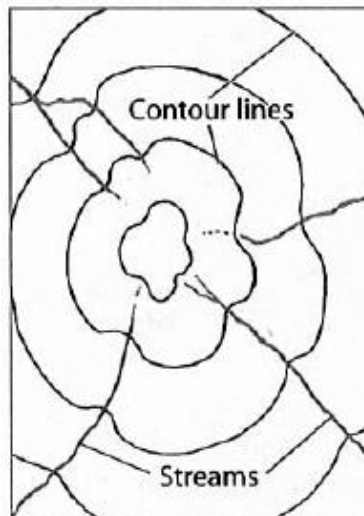
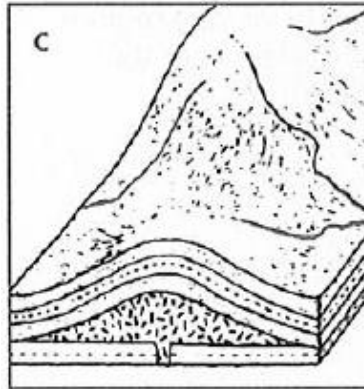
Dendritic drainage – horizontal sedimentary rocks and lava flows with little difference in rock resistance



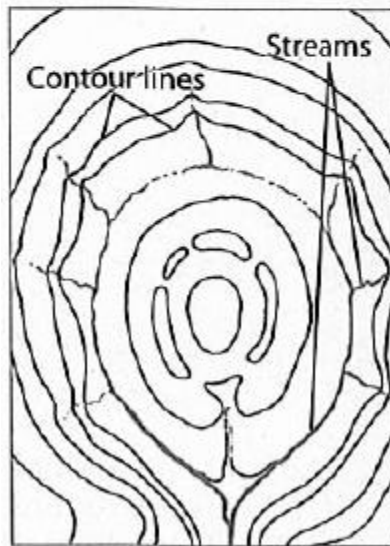
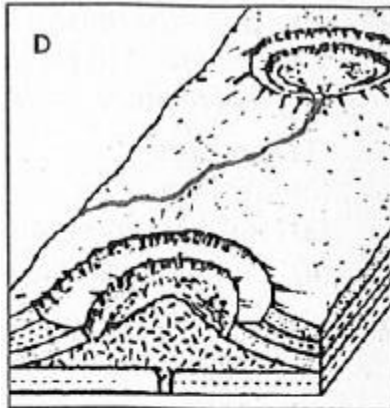
Trellis (block) drainage – observed in folded rocks with much difference in resistance, with faulted and jointed rock



Radial drainage – occurs in areas of domed structure (volcanoes)



Annular drainage – pattern of concentric circles in areas of domed structure



64. Which cross-sectional diagram below best represents a landscape region that resulted from faulting?



(1)



(3)

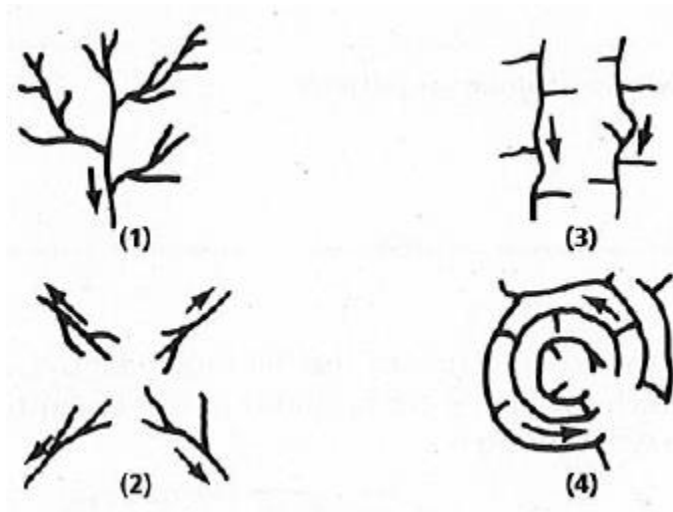


(2)

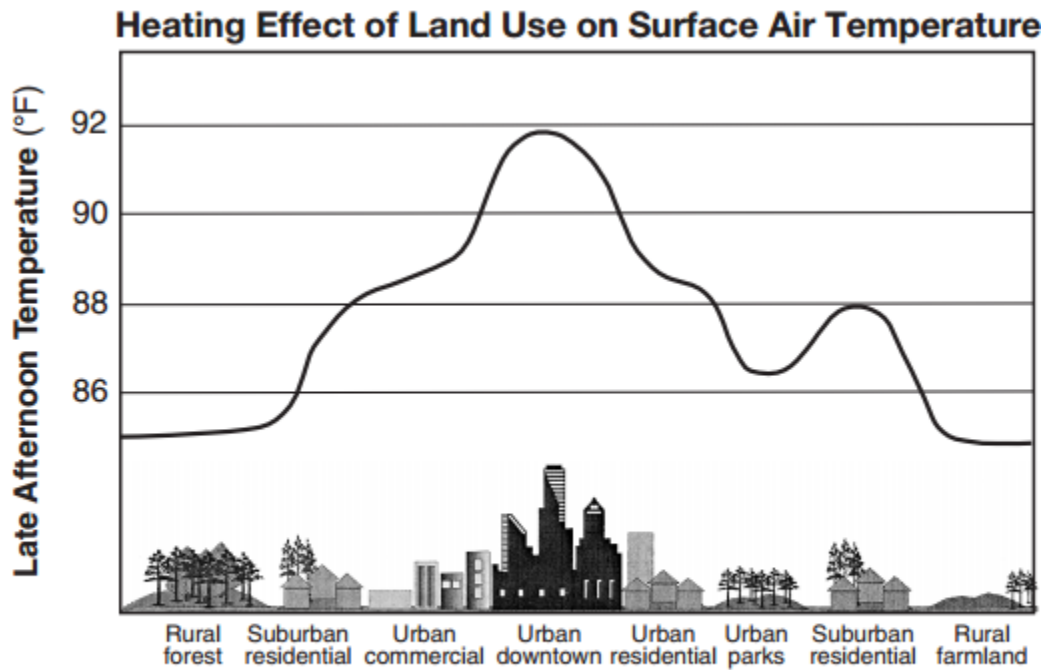


(4)

65. Which of the following stream patterns is most characteristic of horizontal rock structure?



66. The graph below shows the heating effect that different land uses have on surface air temperatures on a summer afternoon.

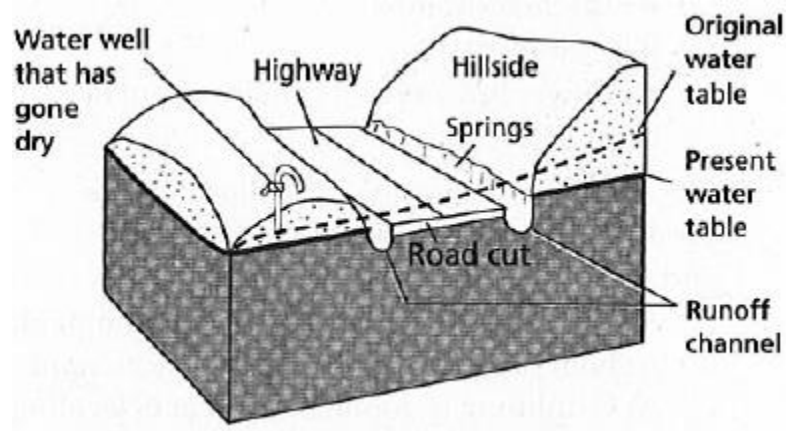


Source: US Global Change Research Program (adapted)

Which land use results in the least heating effect in urban areas?

- | | |
|-----------------|--------------|
| (1) commercial | (2) downtown |
| (3) residential | (4) parks |

67.) The diagram shows a New York State highway road cut. The water well has probably gone dry because

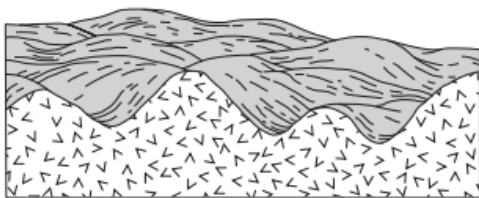
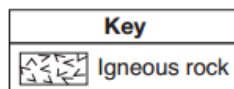


- (1) crustal uplift has altered the landscape (2) human activities have altered the landscape
 (3) the climate has become more humid (4) the bedrock porosity has changed

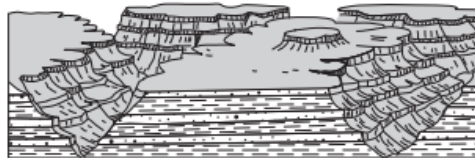
68.) Stream drainage patterns that develop in a landscape region are controlled mostly by

- (1) bedrock structure (2) precipitation amounts
 (3) nearness to a large body of water (4) air temperature variations

69.) Which cross section best represents a plateau landscape region?



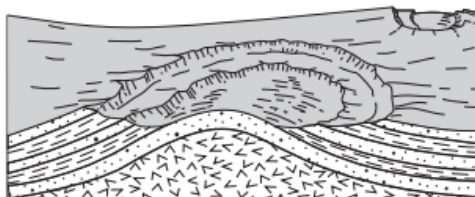
(1)



(3)



(2)



(4)

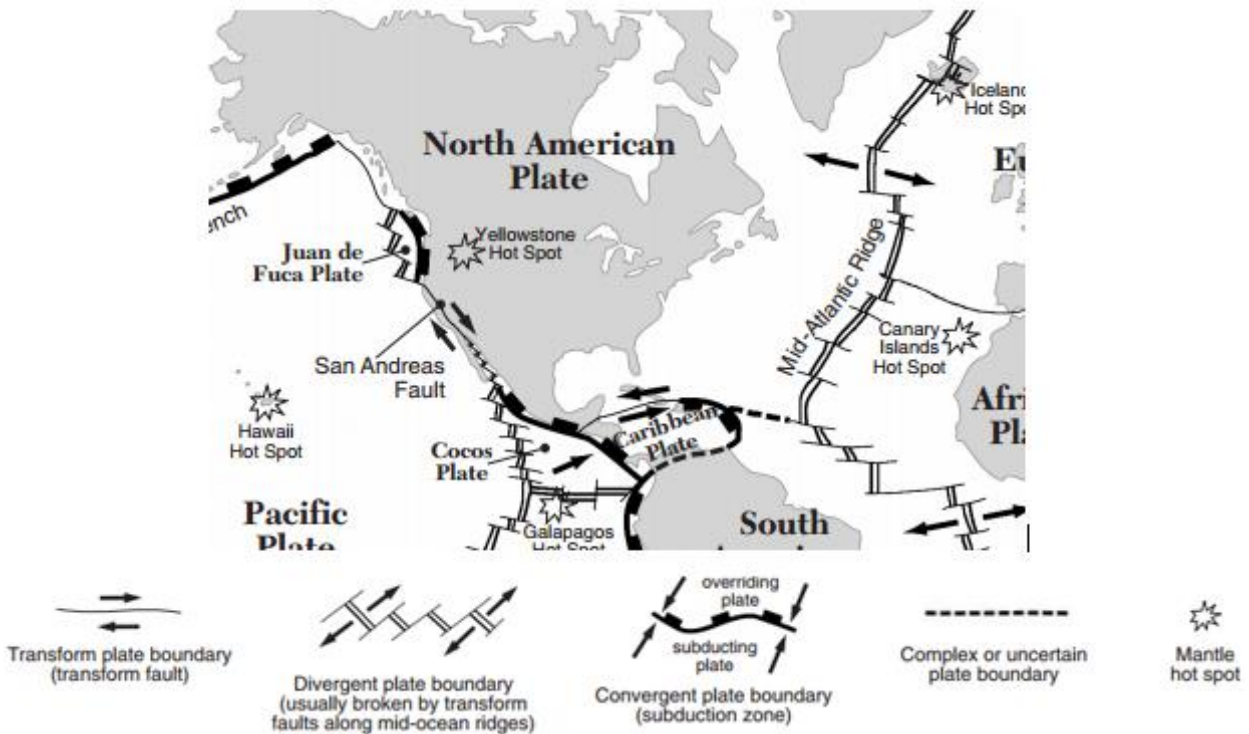
70.) The map below shows a picture of California and a section of the San Andreas Fault?

What is the primary process occurring along the San Andreas Fault?

- (1) Spreading movement
- (2) Transform movement
- (3) Subduction
- (4) Convergence



Use the following table from the Earth Science Reference Tables to answer questions 71 & 72.



71.) Which mantle hot spot is located directly below a mid-ocean ridge plate boundary?

- | | |
|--------------------|-------------|
| (1) Yellowstone | (2) Iceland |
| (3) Canary Islands | (4) Hawaii |

72.) The formation of the Canary Islands was primarily caused by their location near a

- | | |
|------------------------|---------------------|
| (1) subduction | (2) mantle hot spot |
| (3) divergent boundary | (4) transform fault |

73.) Which two features are commonly found at divergent plate boundaries?

- | | |
|---------------------------------------|-------------------------------|
| (1) mid-ocean ridges & rift valleys | (2) wide valleys & deltas |
| (3) ocean trenches & subduction zones | (4) hot spots and island arcs |

74.) Earth's magnetic field has reversed itself several times during the past. This pattern of magnetic reversal is best preserved in

- (1) metamorphic bedrock in mountain ranges
- (2) bedrock with fossils containing radioactive carbon-14
- (3) ocean trenches and subduction zones
- (4) hot spots and island arcs

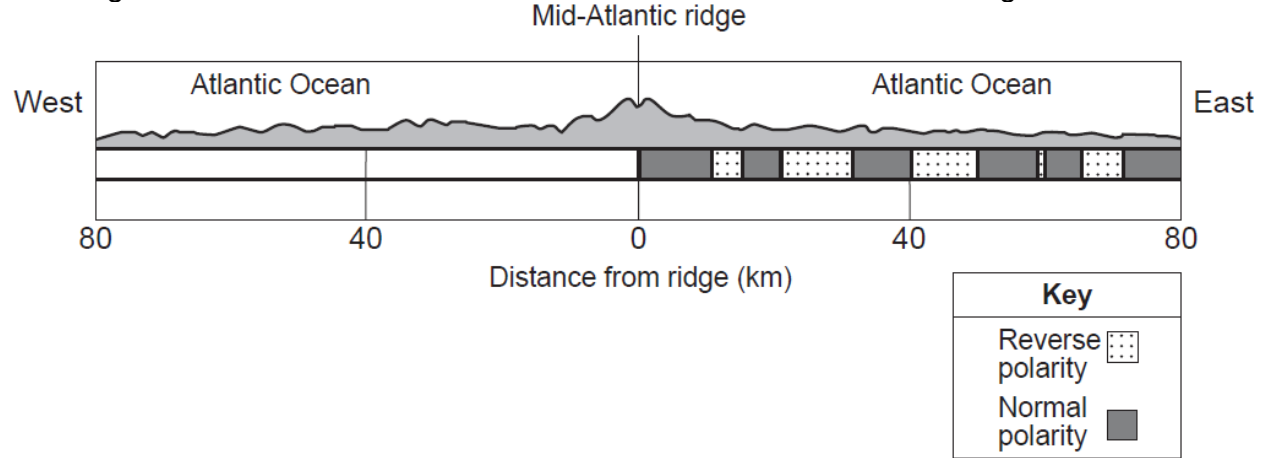
75.) Compared to the oceanic crust, the continental crust is usually:

- (1) thicker, with a less dense granitic composition
- (2) thicker, with a more dense basaltic composition
- (3) thinner, with a less dense granitic composition
- (4) thinner, with a more dense basaltic composition

76.) Earth's internal heat is the primary source of energy that?

- (1) Warms the lower troposphere
- (2) Melts glacial ice at lower altitudes
- (3) Moves lithospheric plates
- (4) Pollutes deep groundwater with radioactivity

77.) The cross section below represents a pattern of magnetic field reversals preserved in the igneous bedrock of the oceanic crust east of the Mid-Atlantic ridge.



Which cross section best represents the magnetic field pattern west of the Mid-Atlantic ridge?

