The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

PHYSICAL SETTING
EARTH SCIENCE

Tuesday, June 20, 2006 — 9:15 a.m. to 12:15 p.m., only

This is a test of your knowledge of Earth science. Use that knowledge to answer all questions in this examination. Some questions may require the use of the *Earth Science Reference Tables*. The *Earth Science Reference Tables* are supplied separately. Be certain you have a copy of the *2001 edition* of these reference tables before you begin the examination.

Your answer sheet for Part A and Part B–1 is the last page of this examination booklet. Turn to the last page and fold it along the perforations. Then, slowly and carefully, tear off your answer sheet and fill in the heading.

The answers to the questions in Part B–2 and Part C are to be written in your separate answer booklet. Be sure to fill in the heading on the front of your answer booklet.

You are to answer *all* questions in all parts of this examination according to the directions provided in the examination booklet. Record your answers to the Part A and Part B–1 multiple-choice questions on your separate answer sheet. Write your answers to the Part B–2 and Part C questions in your answer booklet. All work should be written in pen, except for graphs and drawings, which should be done in pencil. You may use scrap paper to work out the answers to the questions, but be sure to record all your answers on your separate answer sheet and in your answer booklet.

When you have completed the examination, you must sign the statement printed at the end of your separate answer sheet, indicating that you had no unlawful knowledge of the questions or answers prior to the examination and that you have neither given nor received assistance in answering any of the questions during the examination. Your answer sheet and answer booklet cannot be accepted if you fail to sign this declaration.

Notice. . .

A four-function or scientific calculator and a copy of the *2001 Earth Science Reference Tables* must be available for you to use while taking this examination.

The use of any communications device is strictly prohibited when taking this examination. If you use any communications device, no matter how briefly, your examination will be invalidated and no score will be calculated for you.

DO NOT OPEN THIS EXAMINATION BOOKLET UNTIL THE SIGNAL IS GIVEN.

Part A

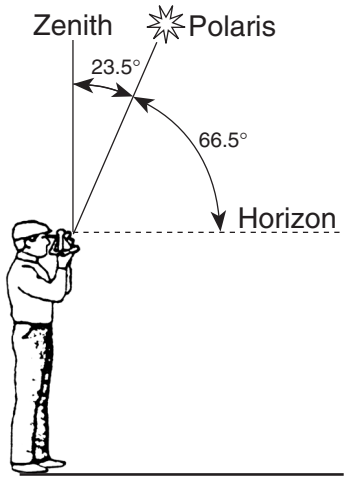
Answer all questions in this part.

Directions (1–35): For *each* statement or question, write on your separate answer sheet the *number* of the word or expression that, of those given, best completes the statement or answers the question. Some questions may require the use of the *Earth Science Reference Tables*.

1 Which object is closest to Earth?

(1) the Sun
(2) Venus
(3) the Moon
(4) Mars

2 The diagram below shows an observer on Earth measuring the altitude of *Polaris*.



What is the latitude of this observer?

(1) 90° N
(2) 66.5° N
(3) 43° N
(4) 23.5° N

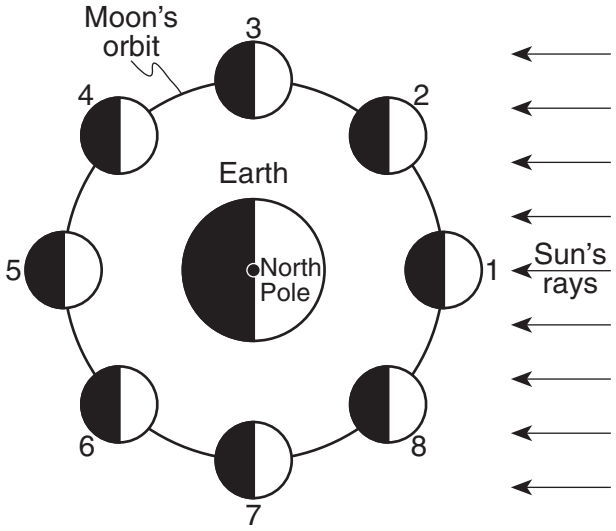
3 What is the minimum water velocity needed in a stream to maintain the transportation of the smallest boulder?

(1) 100 cm/sec
(2) 200 cm/sec
(3) 300 cm/sec
(4) 500 cm/sec

4 Earth's early atmosphere formed during the Early Archean Era. Which gas was generally absent from the atmosphere at that time?

(1) water vapor
(2) carbon dioxide
(3) nitrogen
(4) oxygen

5 The diagram below shows the Moon orbiting Earth, as viewed from space above Earth's North Pole. The Moon is shown at eight positions in its orbit.



(Not drawn to scale)

Spring ocean tides occur when the difference in height between high tide and low tide is greatest. At which two positions of the Moon will spring tides occur on Earth?

(1) 1 and 5
(2) 2 and 6
(3) 3 and 7
(4) 4 and 8

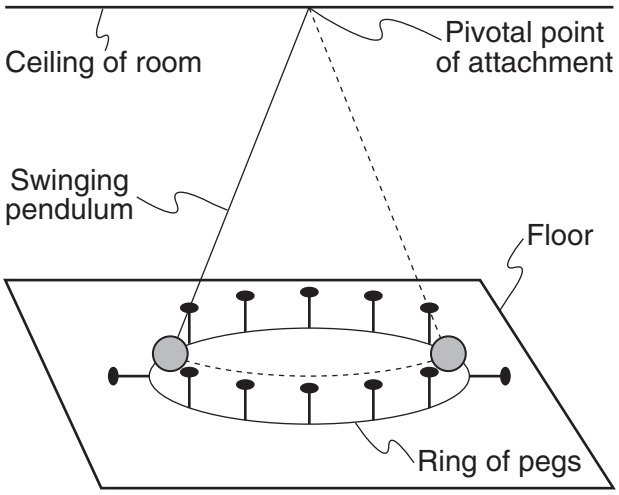
6 Compared to other groups of stars, the group that has relatively low luminosities and relatively low temperatures is the

(1) Red Dwarfs
(2) White Dwarfs
(3) Red Giants
(4) Blue Supergiants

7 Which sequence correctly lists the relative sizes from smallest to largest?

(1) our solar system, universe, Milky Way Galaxy
(2) our solar system, Milky Way Galaxy, universe
(3) Milky Way Galaxy, our solar system, universe
(4) Milky Way Galaxy, universe, our solar system

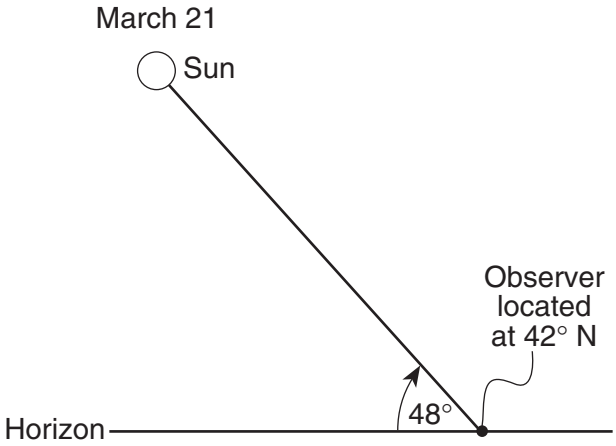
8 The diagram below represents a swinging Foucault pendulum.



This pendulum will show an apparent change in the direction of its swing due to Earth's

(1) curved surface
(2) tilted axis
(3) rotation
(4) revolution

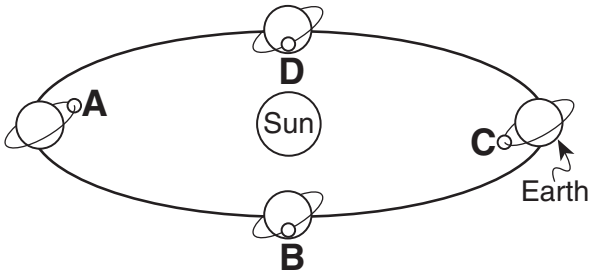
9 The diagram below shows the altitude of the Sun at solar noon on March 21, as seen by an observer at 42° N latitude.



Compared to the altitude of the Sun observed at solar noon on March 21, the altitude of the Sun observed at solar noon on June 21 will be

(1) 15° higher in the sky
(2) 23.5° higher in the sky
(3) 42° higher in the sky
(4) 48° higher in the sky

10 The diagram below shows Earth's orbit around the Sun and different positions of the Moon as it travels around Earth. Letters *A* through *D* represent four different positions of the Moon.



(Not drawn to scale)

An eclipse of the Moon is most likely to occur when the Moon is at position

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

11 In the Northern Hemisphere, planetary winds blowing from north to south are deflected, or curved, toward the west. This deflection is caused by the

(1) unequal heating of land and water surfaces
(2) movement of low-pressure weather systems
(3) orbiting of Earth around the Sun
(4) spinning of Earth on its axis

12 The table below shows air-pressure readings taken at two cities, in the same region of the United States, at noon on four different days.

Air-Pressure Readings

Day	City A Air Pressure (mb)	City B Air Pressure (mb)
1	1004.0	1004.0
2	1000.1	1002.9
3	1000.2	1011.1
4	1010.4	1012.3

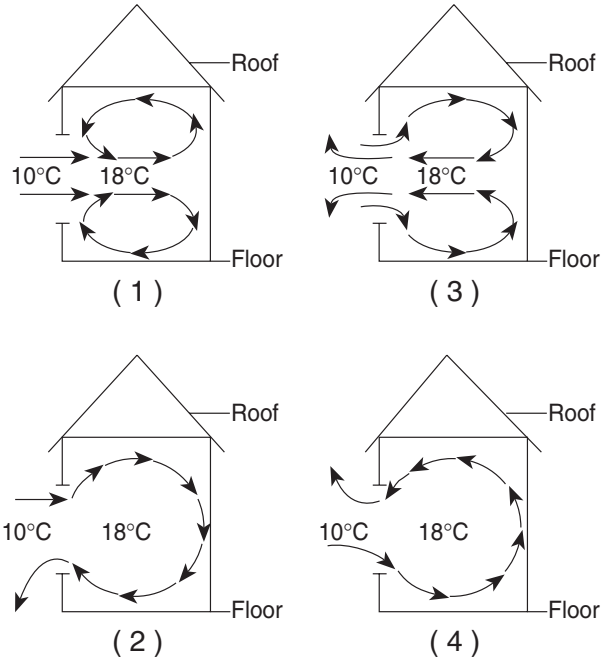
The wind speed in the region between cities *A* and *B* was probably the greatest at noon on day

(1) 1
(2) 2
(3) 3
(4) 4

13 If the base of a cloud is located at an altitude of 2 kilometers and the top of the cloud is located at an altitude of 8 kilometers, this cloud is located in the

(1) troposphere, only
(2) stratosphere, only
(3) troposphere and stratosphere
(4) stratosphere and mesosphere

14 On a day with no wind, the air temperature outside a house is 10°C. The air temperature inside the house is 18°C. Which diagram best represents the air circulation pattern that is most likely to occur when a window of the house is first opened?



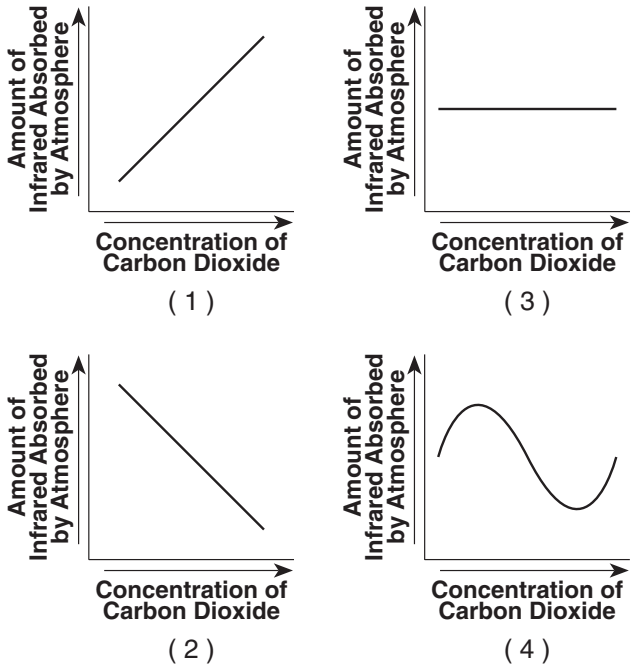
15 Most of the Gulf Stream Ocean Current is

(1) warm water that flows southwestward
(2) warm water that flows northeastward
(3) cool water that flows southwestward
(4) cool water that flows northeastward

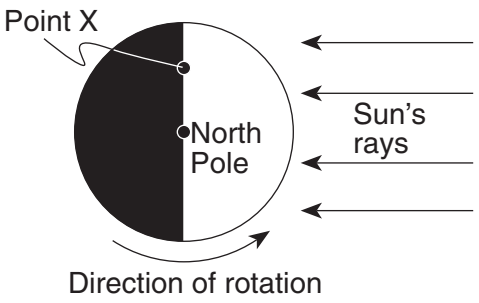
16 Which event is the best example of erosion?

(1) breaking apart of shale as a result of water freezing in a crack
(2) dissolving of rock particles on a limestone gravestone by acid rain
(3) rolling of a pebble along the bottom of a stream
(4) crumbling of bedrock in one area to form soil

17 Which graph best shows the relationship between the concentration of carbon dioxide in Earth's atmosphere and the amount of infrared radiation absorbed by the atmosphere?



18 The diagram below represents the direction of Earth's rotation as it appears from above the North Pole. Point *X* is a location on Earth's surface.



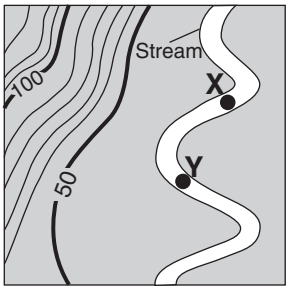
The time at point *X* is closest to

(1) 6 a.m.
(2) 12 noon
(3) 6 p.m.
(4) 12 midnight

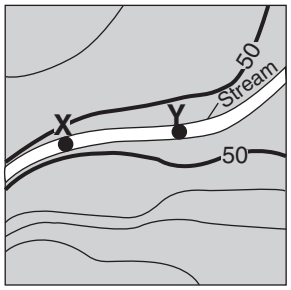
19 Snowfall is rare at the South Pole because the air over the South Pole is usually

(1) rising and moist
(2) rising and dry
(3) sinking and moist
(4) sinking and dry

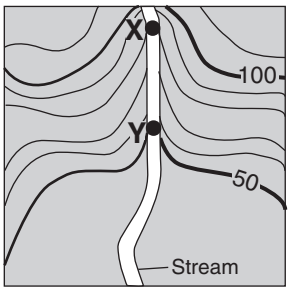
20 The four streams shown on the topographic maps below have the same volume between *X* and *Y*. The distance from *X* to *Y* is also the same. All the maps are drawn to the same scale and have the same contour interval. Which map shows the stream with the greatest velocity between points *X* and *Y*?



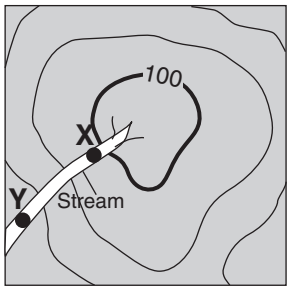
(1)



(3)



(2)



(4)

21 A student obtains a cup of quartz sand from a beach. A saltwater solution is poured into the sand and allowed to evaporate. The mineral residue from the saltwater solution cements the sand grains together, forming a material that is most similar in origin to

(1) an extrusive igneous rock
(2) an intrusive igneous rock
(3) a clastic sedimentary rock
(4) a foliated metamorphic rock

22 Which coastal area is most likely to experience a severe earthquake?

(1) east coast of North America
(2) east coast of Australia
(3) west coast of Africa
(4) west coast of South America

23 Which characteristic is most useful in correlating Devonian-age sedimentary bedrock in New York State with Devonian-age sedimentary bedrock in other parts of the world?

(1) color
(2) index fossils
(3) rock types
(4) particle size

24 A seismic station 4000 kilometers from the epicenter of an earthquake records the arrival time of the first *P*-wave at 10:00:00. At what time did the first *S*-wave arrive at this station?

(1) 9:55:00
(2) 10:05:40
(3) 10:07:05
(4) 10:12:40

25 Which statement correctly describes the density of Earth's mantle compared to the density of Earth's core and crust?

(1) The mantle is less dense than the core but more dense than the crust.
(2) The mantle is less dense than both the core and the crust.
(3) The mantle is more dense than the core but less dense than the crust.
(4) The mantle is more dense than both the core and the crust.

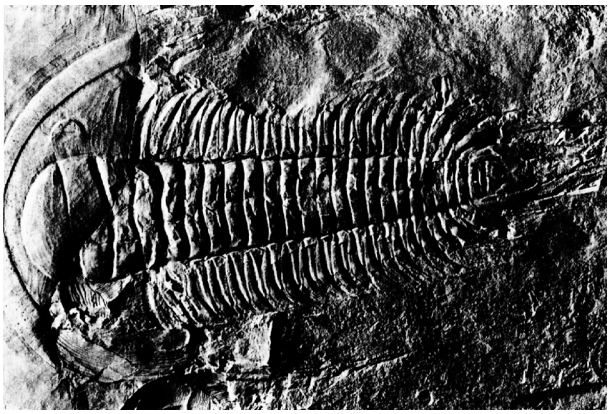
26 Convection currents in the plastic mantle are believed to cause divergence of lithospheric plates at the

(1) Peru-Chile Trench
(2) Mariana Trench
(3) Canary Islands Hot Spot
(4) Iceland Hot Spot

27 According to fossil evidence, which sequence shows the order in which these four life-forms first appeared on Earth?

(1) reptiles → amphibians → insects → fish
(2) insects → fish → reptiles → amphibians
(3) amphibians → reptiles → fish → insects
(4) fish → insects → amphibians → reptiles

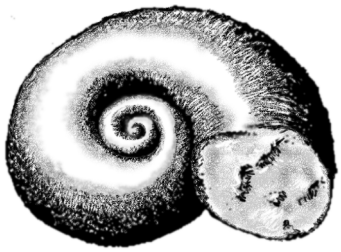
28 The fossil below was found in surface bedrock in the eastern United States.



Which statement best describes the formation of the rock containing this fossil?

(1) The rock was formed by the metamorphism of sedimentary rock deposited in a terrestrial environment during the Cretaceous Period.
(2) The rock was formed by the compaction and cementation of sediments deposited in a terrestrial environment during the Triassic Period.
(3) The rock was formed by the compaction and cementation of sediments deposited in a marine environment during the Cambrian Period.
(4) The rock was formed from the solidification of magma in a marine environment during the Triassic Period.

29 The diagram below shows an index fossil found in surface bedrock in some parts of New York State.

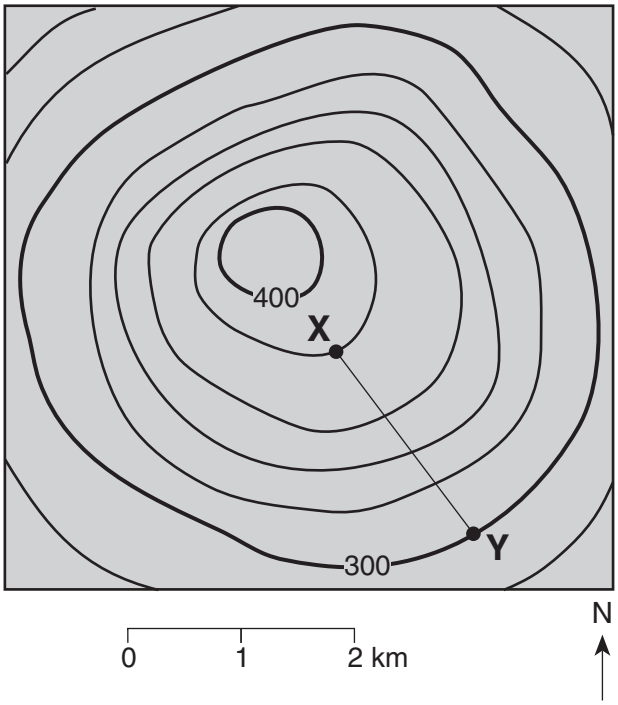


Maclurites

In which New York State landscape region is this gastropod fossil most likely found in the surface bedrock?

(1) Tug Hill Plateau
(2) Allegheny Plateau
(3) Adirondack Mountains
(4) Newark Lowlands

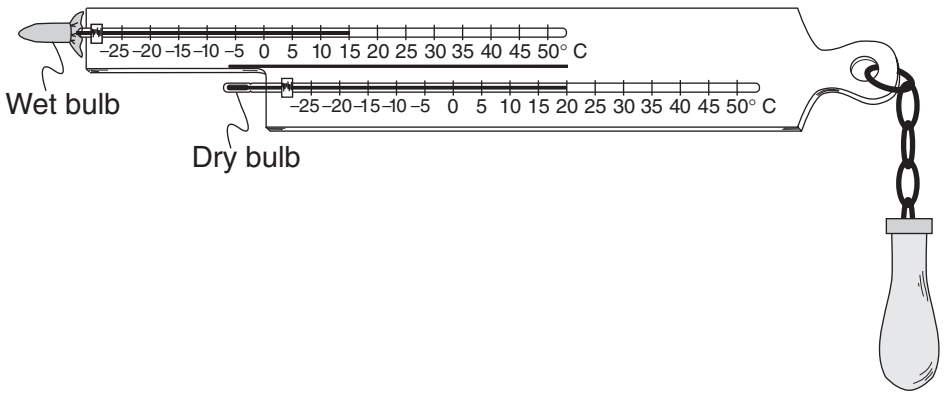
30 The topographic map below shows a hill. Points *X* and *Y* represent locations on the hill's surface. Elevations are shown in meters.



What is the gradient between points *X* and *Y*?

(1) 40 m/km
(2) 80 m/km
(3) 100 m/km
(4) 120 m/km

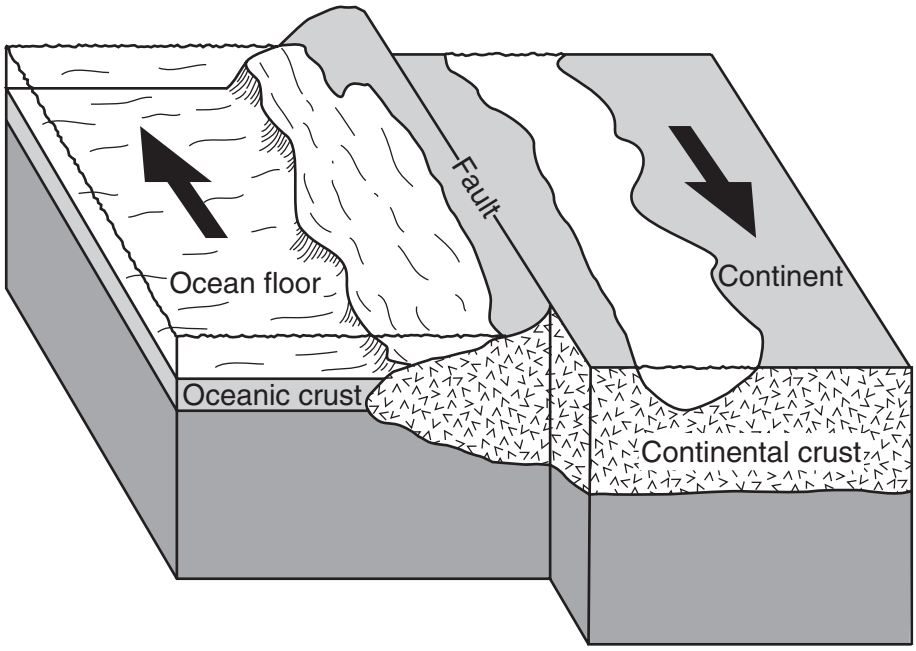
31 The diagram below shows a sling psychrometer.



Based on the dry-bulb temperature and the wet-bulb temperature, what is the relative humidity?

(1) 66%
(2) 58%
(3) 51%
(4) 12%

32 Arrows in the block diagram below show the relative movement along a tectonic plate boundary.

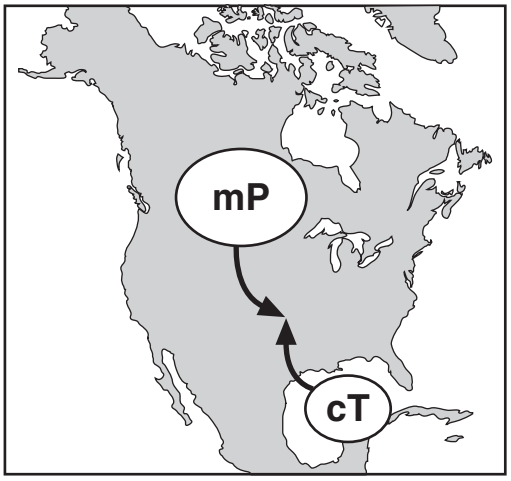


(Not drawn to scale)

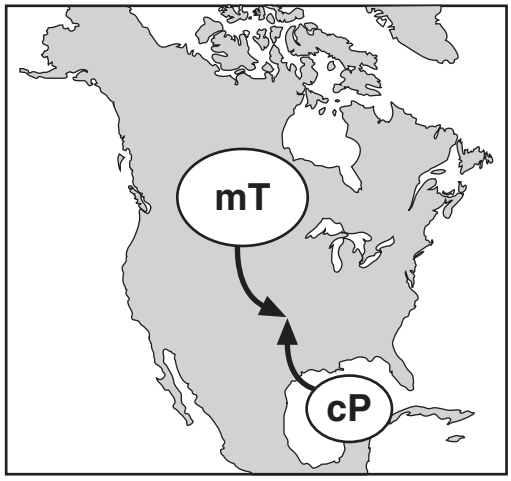
Between which two tectonic plates does this type of plate boundary exist?

(1) Nazca Plate and South American Plate
(2) Eurasian Plate and Indian-Australian Plate
(3) North American Plate and Eurasian Plate
(4) Pacific Plate and North American Plate

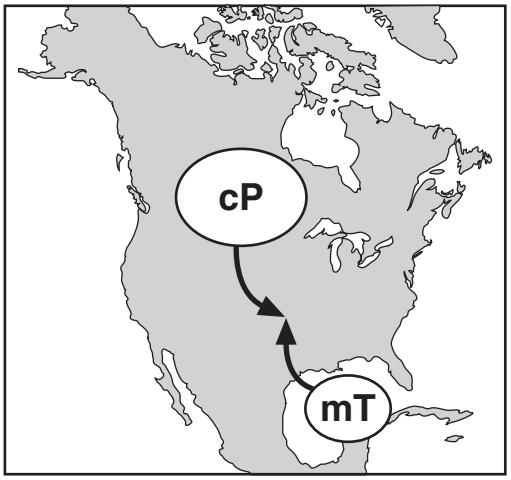
33 Which map shows the two correctly labeled air masses that frequently converge in the central plains to cause tornadoes?



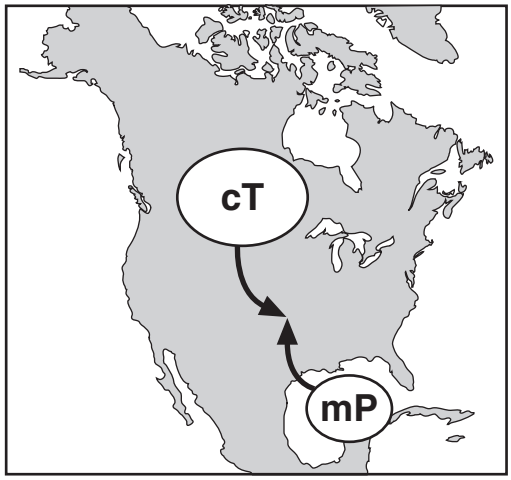
(1)



(3)

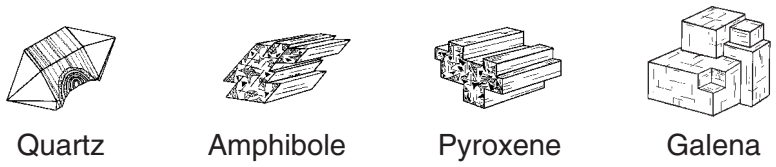


(2)



(4)

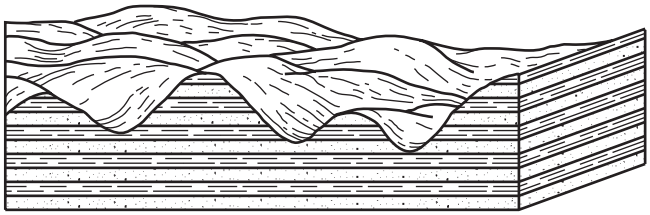
34 The diagram below shows four mineral samples, each having approximately the same mass.



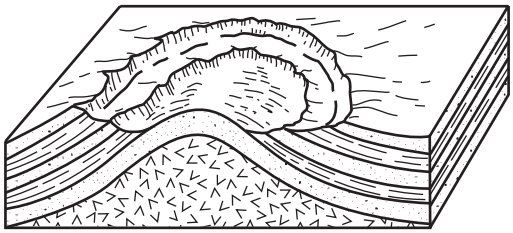
If all four samples are placed together in a closed, dry container and shaken vigorously for 10 minutes, which mineral sample would experience the most abrasion?

(1) quartz
(2) amphibole
(3) pyroxene
(4) galena

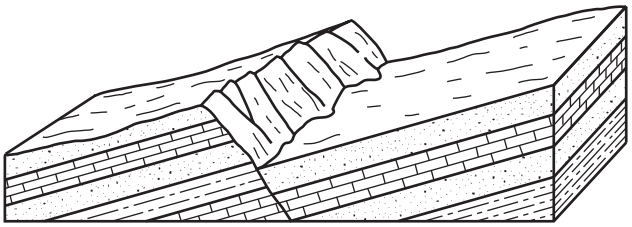
35 Which block diagram best represents a portion of a plateau?



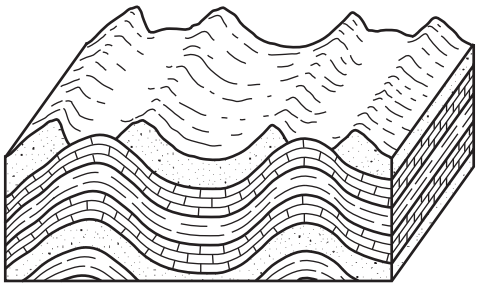
(1)



(3)



(2)



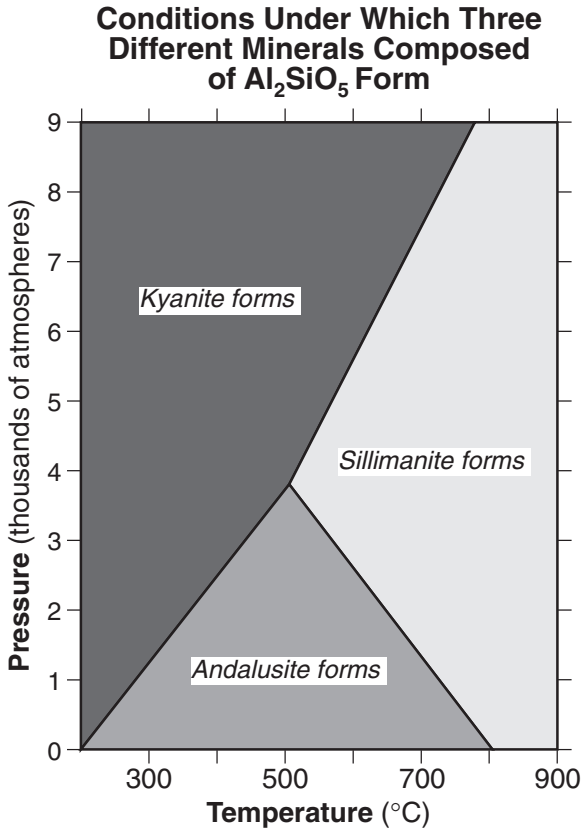
(4)

Part B–1

Answer all questions in this part.

Directions (36–50): For *each* statement or question, write on your separate answer sheet the *number* of the word or expression that, of those given, best completes the statement or answers the question. Some questions may require the use of the *Earth Science Reference Tables*.

Base your answers to questions 36 through 38 on the graph below, which shows the crustal temperature and pressure conditions under which three different minerals with the same chemical composition (Al_2SiO_5) crystallize.



36 Under which crustal temperature and pressure conditions will andalusite form?

(1) 300°C and 6000 atmospheres
(2) 500°C and 2000 atmospheres
(3) 600°C and 4000 atmospheres
(4) 700°C and 8000 atmospheres

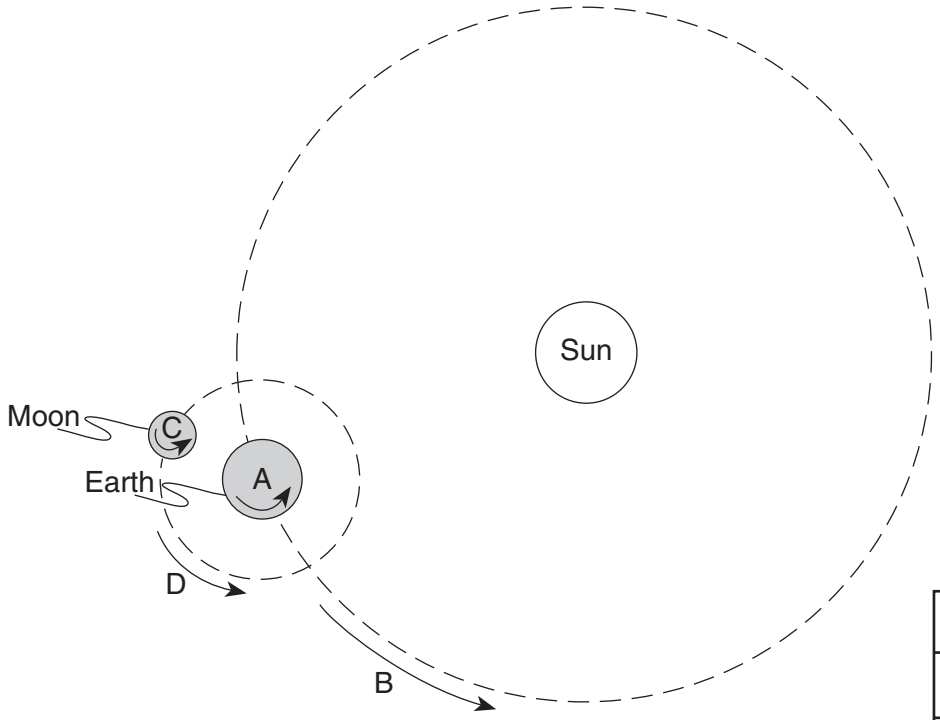
37 Which mineral has a chemical composition most similar to andalusite, sillimanite, and kyanite?

(1) pyrite
(2) gypsum
(3) dolomite
(4) potassium feldspar

38 If bedrock at a collisional plate boundary contains andalusite crystals, these crystals are changed into sillimanite and/or kyanite as temperature and pressure conditions increase. What is this process called?

(1) weathering
(2) solidification
(3) metamorphism
(4) cementation

Base your answers to questions 39 through 41 on the diagram below, which has lettered arrows showing the motions of Earth and the Moon.



(Not drawn to scale)

Key	
Arrow	**Motion**
A	Earth's rotation on its axis
B	Earth's revolution around the Sun
C	The Moon's rotation on its axis
D	The Moon's revolution around Earth

39 These lettered arrows represent motions that are

(1) noncyclic and unpredictable
(2) noncyclic and predictable
(3) cyclic and unpredictable
(4) cyclic and predictable

40 Which two motions are completed in about the same amount of time?

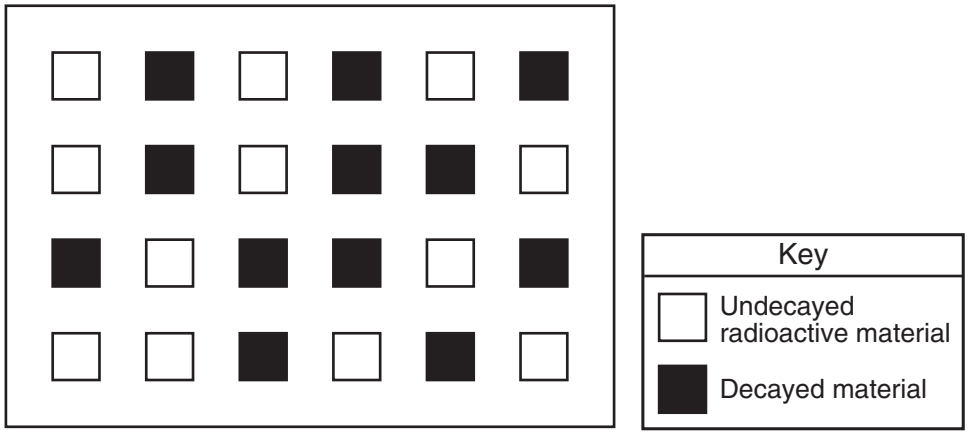
(1) *A* and *B*
(2) *B* and *C*
(3) *C* and *D*
(4) *A* and *D*

41 Which lettered arrow represents the motion that causes the Moon to show phases when viewed from Earth?

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

Base your answers to questions 42 and 43 on the diagram below, which represents a model of a radioactive sample with a half-life of 5000 years. The white boxes represent undecayed radioactive material and the shaded boxes represent the decayed material after the first half-life.

Radioactive Sample After First Half-Life



42 How many *more* boxes should be shaded to represent the additional decayed material formed during the second half-life?

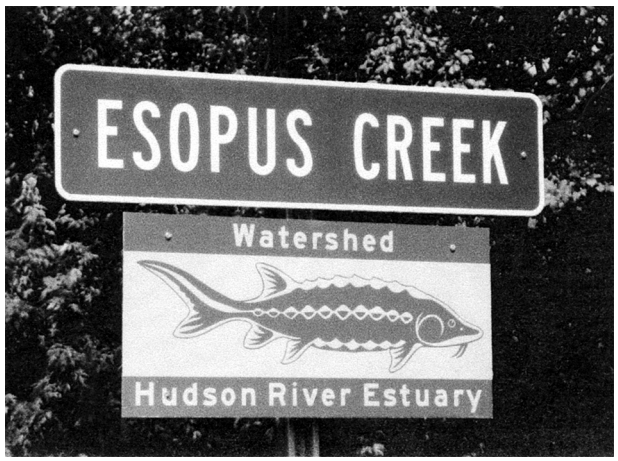
(1) 12
(2) 6
(3) 3
(4) 0

43 Which radioactive isotope has a half-life closest in duration to this radioactive sample?

(1) carbon-14
(2) potassium-40
(3) uranium-238
(4) rubidium-87

---

44 The photograph below shows a sign near the Esopus Creek in Kingston, New York.



The main purpose of the word "watershed" on this sign is to communicate that the Esopus Creek

(1) is a tributary of the Hudson River
(2) is a flood hazard where it flows into the Hudson River
(3) forms a delta in the Hudson River
(4) contains ancient fish fossils

Base your answers to questions 45 and 46 on the diagrams below. Diagrams *A*, *B*, and *C* represent three different river valleys.

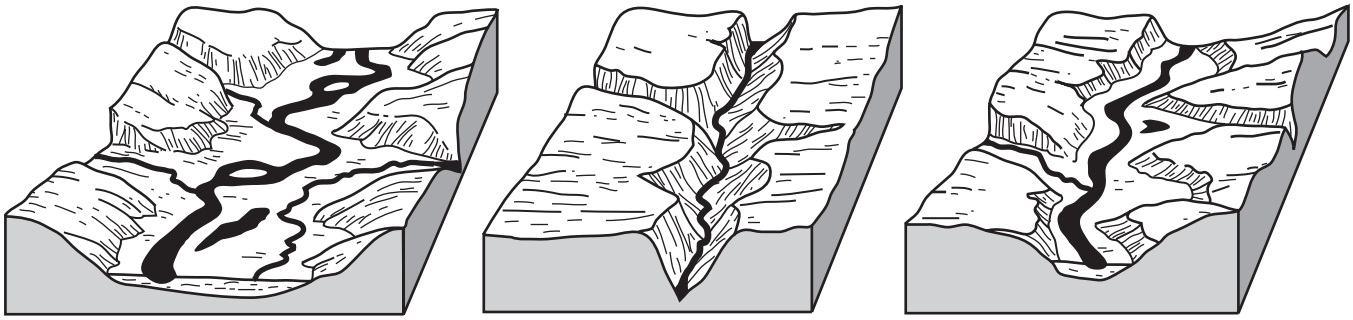
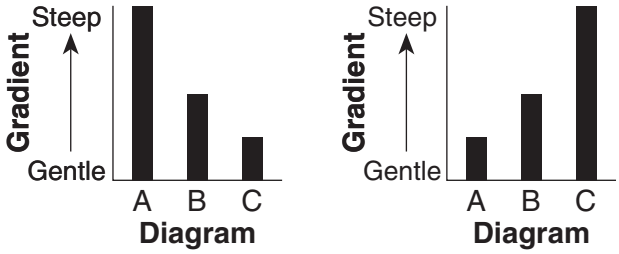


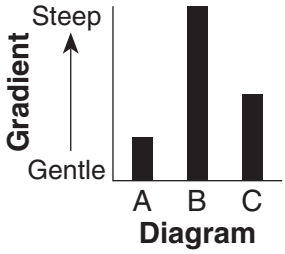
Diagram A **Diagram B** **Diagram C**

45 Which bar graph best represents the relative gradients of the main rivers shown in diagrams *A*, *B*, and *C*?

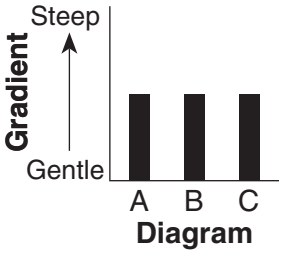


(1)

(3)



(2)

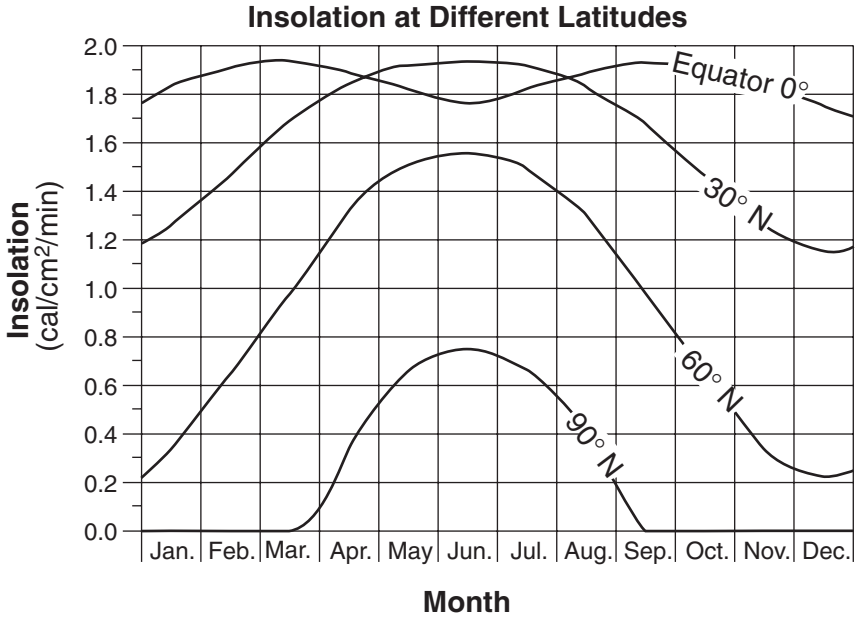


(4)

46 Most sediments found on the floodplain shown in diagram *A* are likely to be

(1) angular and weathered from underlying bedrock
(2) angular and weathered from bedrock upstream
(3) rounded and weathered from underlying bedrock
(4) rounded and weathered from bedrock upstream

Base your answers to questions 47 through 49 on the graph below, which shows the amount of insolation during one year at four different latitudes on Earth's surface.



47 This graph shows that insolation varies with

(1) latitude and time of day
(2) latitude and time of year
(3) longitude and time of day
(4) longitude and time of year

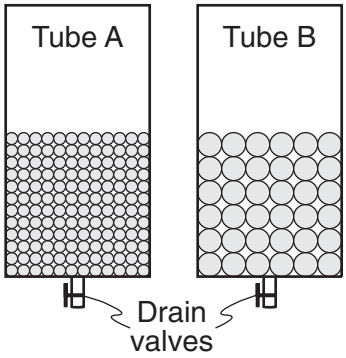
48 Why is less insolation received at the equator in June than in March or September?

(1) The daylight period is longest at the equator in June.
(2) Winds blow insolation away from the equator in June.
(3) The Sun's vertical rays are north of the equator in June.
(4) Thick clouds block the Sun's vertical rays at the equator in June.

49 Why is insolation 0 cal/cm^2/min from October through February at 90° N?

(1) Snowfields reflect sunlight during that time.
(2) Dust in the atmosphere blocks sunlight during that time.
(3) The Sun is continually below the horizon during that time.
(4) Intense cold prevents insolation from being absorbed during that time.

50 The diagram below shows tubes *A* and *B* partly filled with equal volumes of round plastic beads of uniform size. The beads in tube *A* are smaller than the beads in tube *B*. Water was placed in tube *A* until the pore spaces were filled. The drain valve was then opened, and the amount of time for the water to drain from the tube was recorded. The amount of water that remained around the beads was then calculated and recorded. Data table 1 shows the measurements recorded using tube *A*.



Data Table 1: Tube A	
water required to fill pore spaces	124 mL
time required for draining	2.1 sec
water that remained around the beads after draining	36 mL

If the same procedure was followed with tube *B*, which data table shows the measurements most likely recorded?

Data Table 2: Tube B	
water required to fill pore spaces	124 mL
time required for draining	1.4 sec
water that remained around the beads after draining	26 mL

(1)

Data Table 2: Tube B	
water required to fill pore spaces	124 mL
time required for draining	3.2 sec
water that remained around the beads after draining	36 mL

(3)

Data Table 2: Tube B	
water required to fill pore spaces	168 mL
time required for draining	3.2 sec
water that remained around the beads after draining	46 mL

(2)

Data Table 2: Tube B	
water required to fill pore spaces	168 mL
time required for draining	1.4 sec
water that remained around the beads after draining	36 mL

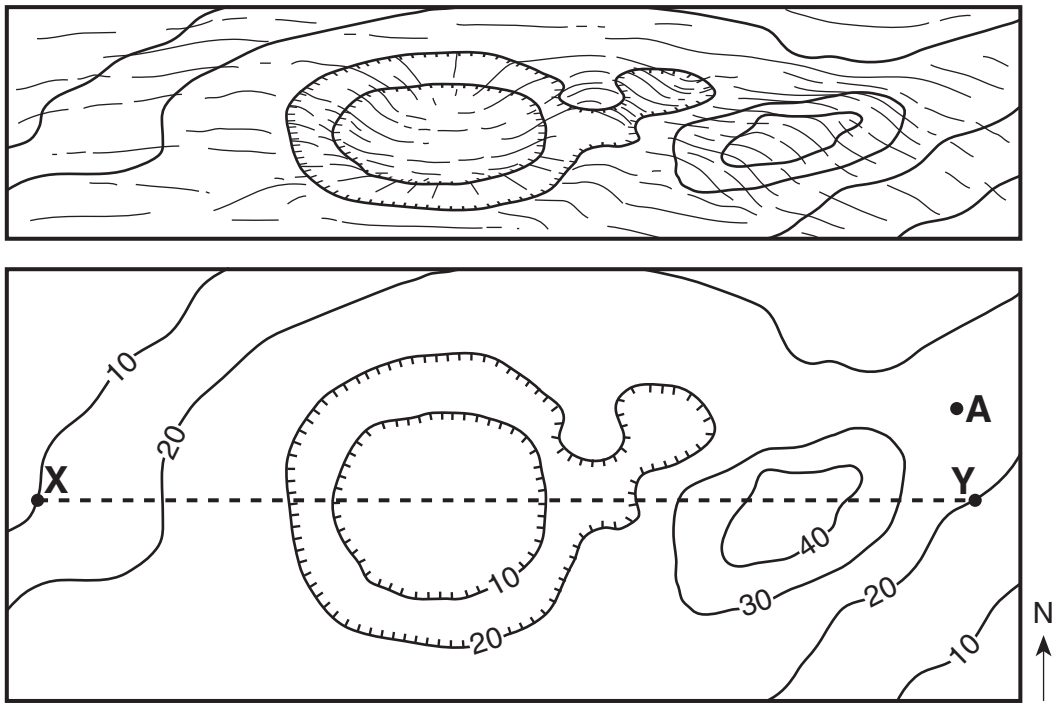
(4)

Part B–2

Answer all questions in this part.

Directions (51–64): Record your answers in the spaces provided in your answer booklet. Some questions may require the use of the *Earth Science Reference Tables.*

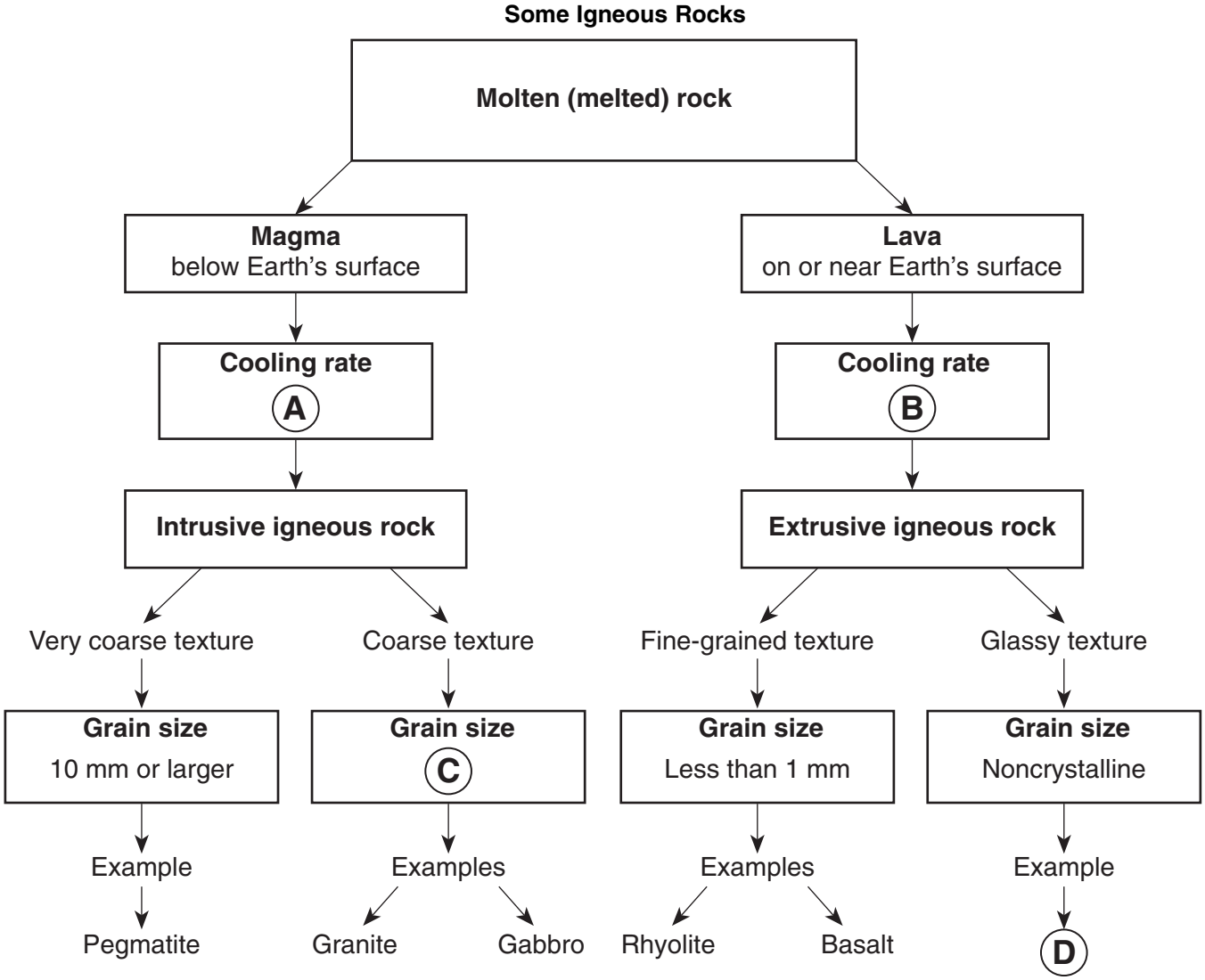
Base your answers to questions 51 and 52 on the diagrams below. The top diagram shows a depression and hill on a gently sloping area. The bottom diagram is a topographic map of the same area. Points *A*, *X*, and *Y* are locations on Earth's surface. A dashed line connects points *X* and *Y*. Elevation is indicated in feet.



51 What is a possible elevation of point *A*? [1]

52 On the grid *in your answer booklet,* construct a topographic profile along line *XY,* by plotting a point for the elevation of *each* contour line that crosses line *XY*. Points *X* and *Y* have already been plotted on the grid. Connect the points with a smooth, curved line to complete the profile. [2]

Base your answers to questions 53 through 55 on the flowchart below and on your knowledge of Earth science. The flowchart shows the formation of some igneous rocks. The circled letters *A*, *B*, *C*, and *D* indicate parts of the flowchart that have not been labeled.



53 Contrast the rate of cooling at (A) that forms intrusive igneous rock with the rate of cooling at (B) that forms extrusive igneous rock. [1]

54 Give the numerical grain-size range that should be placed in the flowchart at (C). Units must be included in your answer. [1]

55 State *one* igneous rock that could be placed in the flowchart at (D). [1]

Base your answers to questions 56 through 60 on the two diagrams in your answer booklet. Diagram I shows the orbits of the four inner planets. Black dots in diagram I show the positions in the orbits where each planet is closest to the Sun. Diagram II shows the orbits of the six planets that are farthest from the Sun. The distance scale in diagram II is different than the distance scale in diagram I.

56 On diagram I *in your answer booklet,* place the letter **W** on Mars' orbit to represent the position of Mars where the Sun's gravitational force on Mars would be *weakest*. [1]

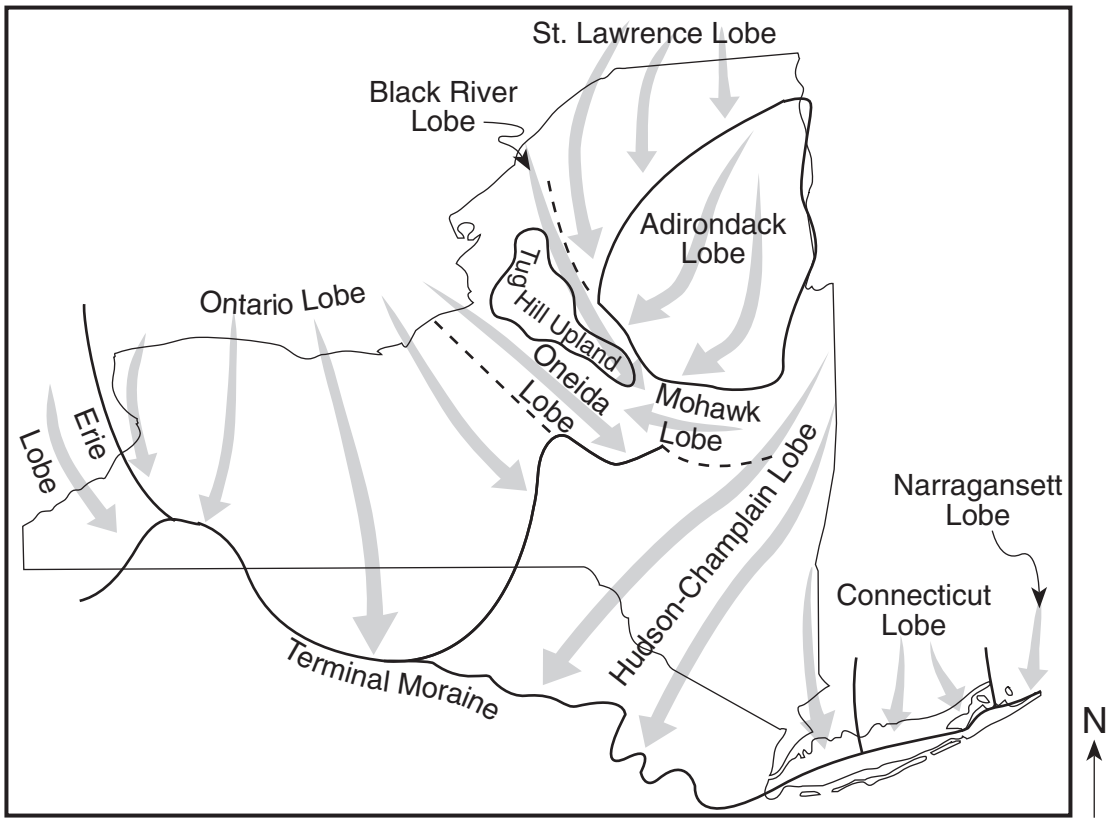
57 On diagram II *in your answer booklet,* circle the names of the *two* largest Jovian planets. [1]

58 How long does it take the planet Uranus to complete one orbit around the Sun? Units must be included in your answer. [1]

59 Describe how the orbits of each of the nine planets are similar in shape. [1]

60 Pluto's orbital speed is usually slower than Neptune's orbital speed. Based on diagram II, explain why Pluto's orbital speed is sometimes faster than Neptune's orbital speed. [1]

Base your answers to questions 61 through 64 on the map below, which shows the different lobes (sections) of the Laurentide Ice Sheet, the last continental ice sheet that covered most of New York State. The arrows show the direction that the ice lobes flowed. The terminal moraine shows the maximum advance of this ice sheet.



61 During which geologic epoch did the Laurentide Ice Sheet advance over New York State? [1]

62 Describe the arrangement of rock material in the sediments that were directly deposited by the glacier. [1]

63 According to the map, toward which compass direction did the ice lobe flow over the Catskills? [1]

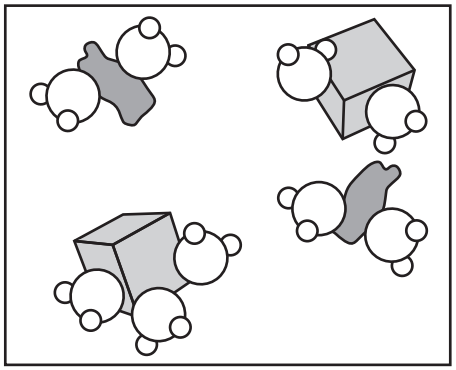
64 What evidence might be found on surface bedrock of the Catskills that would indicate the direction of ice flow in this region? [1]

Part C

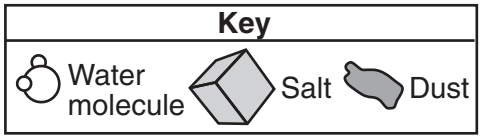
Answer all questions in this part.

Directions (65–83): Record your answers in the spaces provided in your answer booklet. Some questions may require the use of the *Earth Science Reference Tables.*

Base your answers to questions 65 and 66 on the diagram below, which represents water molecules attached to salt and dust particles within a cloud in the atmosphere.



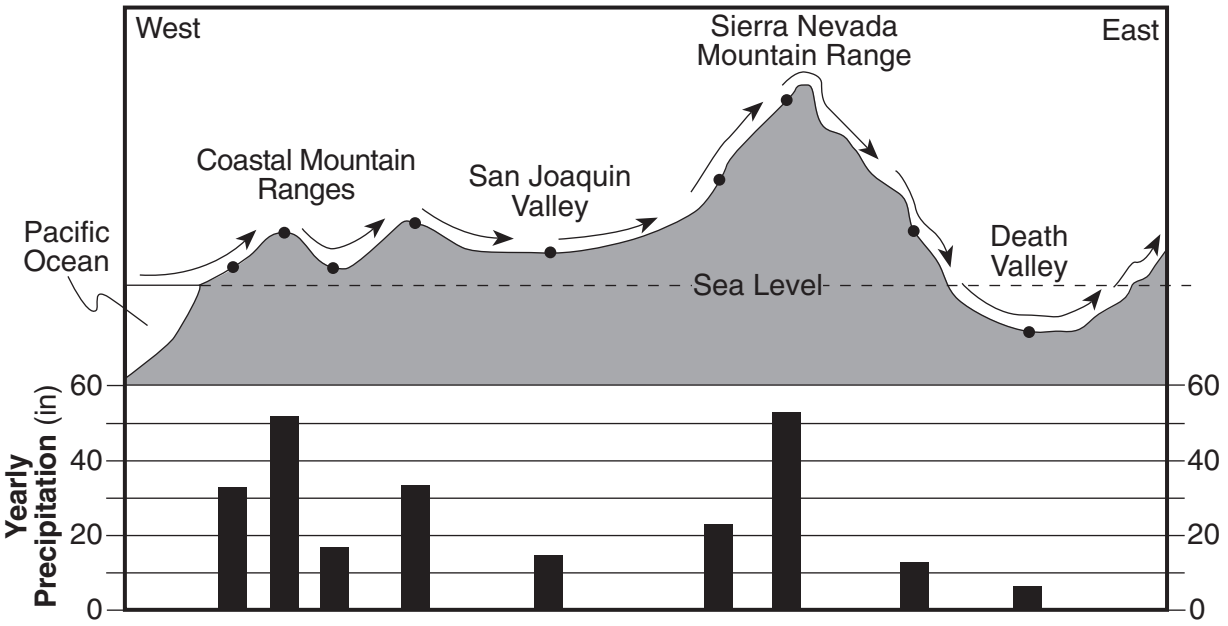
(Not drawn to scale)



65 Explain why salt and dust particles are important in cloud formation. [1]

66 State *one* natural process that causes large amounts of dust to enter Earth's atmosphere. [1]

Base your answers to questions 67 through 69 on the cross section and bar graph below. The cross section shows a portion of Earth's crust along the western coast of the United States. The points show different locations on Earth's surface. The arrows show the prevailing wind direction. The bar below each point shows the yearly precipitation at that location.



67 Explain why the valleys have *lower* amounts of precipitation than points on the western slopes of the mountain ranges. [1]

68 What is the yearly precipitation total for the four points located in the Coastal Mountain Ranges? [1]

69 State *one* reason why colder temperatures would be recorded at the top of the Sierra Nevada Mountain Range than at the top of the Coastal Mountain Ranges. [1]

Base your answers to questions 70 and 71 on the diagram in your answer booklet, which shows the latitude-longitude grid on a model of Earth. Point *Y* is a location on Earth's surface.

70 On the diagram *in your answer booklet,* place an **X** at 15° S 30° W. [1]

71 What is Earth's rate of rotation at point *Y*, in degrees per hour? [1]

Base your answers to questions 72 through 76 on the two maps in your answer booklet and on your knowledge of Earth science. Both maps show data from a December snowstorm. Map 1 shows the snowfall, measured in inches, at various locations in New York State, Pennsylvania, and New Jersey. Map 2 shows weather conditions in New York State and the surrounding region during the storm. Letter **L** represents the center of the low-pressure system that produced the snowstorm. Isobars show air pressure, in millibars.

72 On map 1 *in your answer booklet,* draw the 30.0-inch snowfall isoline. Assume that the decimal point for each snowfall depth marks the exact location where the snowfall was measured. [1]

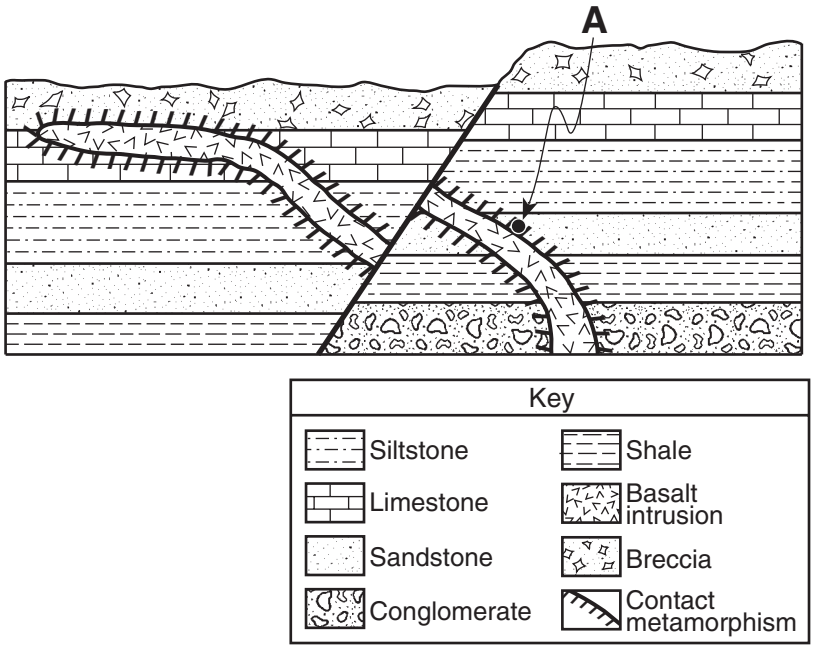
73 Most residents knew this storm was coming. State *one* action a New York State resident should have taken to prepare for a snow emergency. [1]

74 Using map 2, complete the table *in your answer booklet* by describing the weather conditions at Buffalo, New York. [2]

75 Describe the general surface wind pattern around the low-pressure center shown on map 2. [1]

76 Toward which compass direction would this low-pressure center most likely have moved if this system followed a normal storm track? [1]

Base your answers to questions 77 through 80 on the geologic cross section below. The rock layers have not been overturned. Point *A* is located in the zone of contact metamorphism.



77 Which metamorphic rock most likely formed at point *A*? [1]

78 State the evidence shown by the cross section that supports the inference that the fault is younger than the basalt intrusion. [1]

79 *In your answer booklet,* list basalt, limestone, and breccia in the order in which they were formed. [1]

80 What is the largest silt particle that could be found in the siltstone layer? [1]

Base your answers to questions 81 through 83 on the passage below and on your knowledge of Earth science.

A New Oregon Volcano?

The Three Sisters are 10,000-foot volcanic mountain peaks in Oregon. Volcanic eruptions began building the Three Sisters from andesitic lava and cinders 700,000 years ago. The last major eruption occurred 2000 years ago.

West of the Three Sisters peaks, geologists have recently discovered that Earth's surface is bulging upward in a bull's-eye pattern 10 miles wide. There is a 4-inch rise at its center, which geologists believe could be the beginning of another volcano. The uplift was found by comparing satellite images. This uplift in Oregon may allow the tracking of a volcanic eruption from its beginning, long before the smoke and explosions begin.

This uplift is most likely caused by an upflow of molten rock from more than four miles below the surface. Rock melts within Earth's interior and then moves upward in cracks in Earth's crust, where it forms large underground pools called magma chambers. Magma upwelling often produces signs that help scientists predict eruptions and protect humans. When the pressure of rising magma becomes forceful enough to crack bedrock, swarms of small earthquakes occur. Rising magma releases carbon dioxide and other gases that can be detected at the surface.

81 Identify *one* of the minerals found in the andesite rock of the Three Sisters volcanoes. [1]

82 The cross section *in your answer booklet* represents Earth's interior beneath the Three Sisters. Place a triangle, ▲, on the cross section to indicate the location where the new volcano will most likely form. [1]

83 On the same cross section, place arrows through each point, *X, Y,* and *Z,* to indicate the relative motion of *each* of these sections of the lithosphere. [1]

Tear Here

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

PHYSICAL SETTING
EARTH SCIENCE

Tuesday, June 20, 2006 — 9:15 a.m. to 12:15 p.m., only

ANSWER SHEET

Student ..... Sex: ☐ Male ☐ Female Grade .....

Teacher ..... School .....

Record your answers to Part A and Part B–1 on this answer sheet.

Part A

1	13	25 .....
2	14	26 .....
3	15	27 .....
4	16	28 .....
5	17	29 .....
6	18	30 .....
7	19	31 .....
8	20	32 .....
9	21	33 .....
10	22	34 .....
11	23	35 .....
12	24	

Part A Score

Part B–1

36	44 .....
37	45 .....
38	46 .....
39	47 .....
40	48 .....
41	49 .....
42	50 .....
43	

Part B–1 Score

Write your answers to Part B–2 and Part C in your answer booklet.

The declaration below should be signed when you have completed the examination.

I do hereby affirm, at the close of this examination, that I had no unlawful knowledge of the questions or answers prior to the examination and that I have neither given nor received assistance in answering any of the questions during the examination.

Signature

Tear Here

Tear Here

Tear Here

PS/EARTH SCIENCE