c1

Student: _____

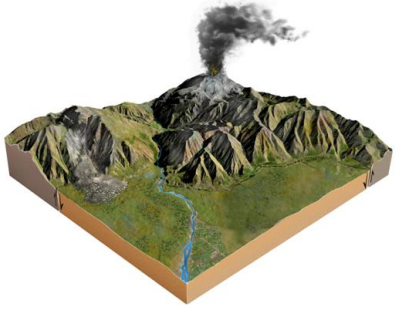
1. Which of the following was talked about in the opening two-page spread of Chapter 1?

   A. oil beneath the Arctic National Wildlife Reserve
   B. the scenery of Glacier National Park
   C. earthquakes along the San Andres fault
   D. oil beneath the Gulf Coast of the United States

2. Which of the following is probably least at risk for geologic hazards?

   A. next to a river in low areas
   B. near an active fault
   C. on soils that gently expand when wet
   D. on gentle slopes away from mountains
   E. close to, but upwind of, an active volcano

3. Which potential geologic hazard is NOT represented by a feature on this figure?



A. an earthquake

B. a volcano

C. contaminated groundwater

D. a landslide

E. flood-prone areas

4. Which of the following geologic aspects influence our lives based on the photograph showing horses and cows on a grassy field?

A. the presence of mountains, which influence the formation of clouds and precipitation

B. the steepness of slopes

C. the availability of water

D. all of these

5. The distribution of natural resources is influenced by the:

A. type of rocks

B. age of the rocks

C. way in which the rocks formed

D. all of these

6. Which of the following factors was most important in controlling the distribution of copper mines in the western U.S. versus iron mines in the Great Lakes region?

   A. the amount of precipitation (rain and snow)
   B. the time of year when precipitation occurs
   C. different ages and geologic histories of the rocks
   D. the latitude (distance south or north from the equator)

7. Geology can help us learn about Earth's past by studying:

   A. why continents have different regions
   B. why a landscape looks the way it does
   C. how life in the past was different than today
   D. how global climate has changed since the ice ages
   E. all of these

8. Which of the following is NOT a way geology informs us about Earth's past?

   A. how the first second of the universe differed from a second today
   B. why continents have different regions today
   C. why a landscape looks the way it does today
   D. how life in the past was different than today
   E. how past global climate was different than today

9. The main layers of the Earth in correct order, from the surface moving down, is:

A. upper crust, outer core, inner core, mantle

B. outer core, inner core, upper mantle, lower crust

C. crust, mantle, outer core, inner core

D. upper mantle, lower mantle, inner core, crust

10. Which of the following Earth layers is the thinnest?

A. oceanic crust

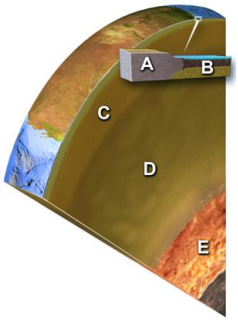
B. upper mantle

C. lower mantle

D. outer core

E. inner core

11. Which layer on this figure is the upper mantle?



A. A

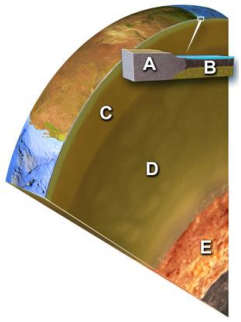
B. B

C. C

D. D

E. E

12. Which layer on this figure is the continental crust?



A. A

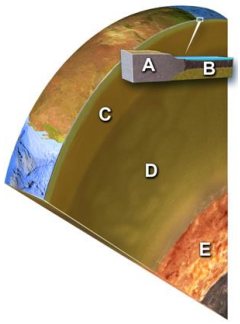
B. B

C. C

D. D

E. E

13. Which layer on this figure is the oceanic crust?



A. A

B. B

C. C

D. D

E. E

14. Which layer in the earth is similar to the composition of granite?

    A. continental crust
    B. oceanic crust
    C. upper mantle
    D. lower mantle
    E. core

15. Which layer in the earth is similar in composition to basalt, a dark lava rock?

    A. continental crust
    B. oceanic crust
    C. upper mantle
    D. lower mantle
    E. core

16. Which layer in the earth is similar to the green mineral olivine?

    A. continental crust
    B. oceanic crust
    C. mantle
    D. core

17. Which layer in the earth is similar in composition to an iron-nickel meteorite?

    A. continental crust
    B. oceanic crust
    C. upper mantle
    D. lower mantle
    E. core

18. Which of the following is NOT a possible reason for why a region is higher in elevation than adjacent regions?

    A. the lithosphere is hotter
    B. it has continental crust, but adjacent regions have oceanic crust
    C. the crust is thicker
    D. the crust is more dense

19. What is the most likely reason why a region is higher than adjacent regions?

    A. there is a hot spot beneath it
    B. the crust is thicker
    C. it is underlain by oceanic crust
    D. the asthenosphere is hotter
    E. the crust is hotter

20. Which of the following is the best description of what the lithosphere contains?

A. continental and oceanic crust
B. both types of crust and the uppermost mantle
C. weak part of the upper mantle
D. upper and lower mantle
E. lower mantle and outer core

21. Which of the following Earth layers is the thickest?

A. continental crust
B. oceanic crust
C. mantle
D. outer core

22. The principle of isostasy refers to:

A. the difference in the strength of the mantle versus the crust
B. the relationship between regional elevations and thickness of crust
C. how the outer core differs from the inner core
D. how the upper mantle differs from the lower mantle

23. Which of the following is NOT an important difference between continents and oceans?

A. thickness of the crust

B. composition of the crust

C. density of the crust

D. whether it is part of the lithosphere

E. elevation

24. Which of the following combinations would result in the highest regional elevations?

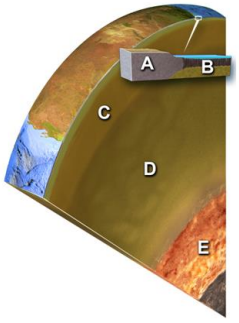
A. thin, dense crust

B. thick, dense crust

C. thin, less dense crust

D. thick, less dense crust

25. Which layer on this figure is the outer core?



A. A

B. B

C. C

D. D

E. E

26. Compared to oceanic crust, continental crust is:

A. thinner

B. more dense

C. lighter in color

D. all of these

27. The main difference between the lithosphere and the asthenosphere is the:

A. asthenosphere is less rigid

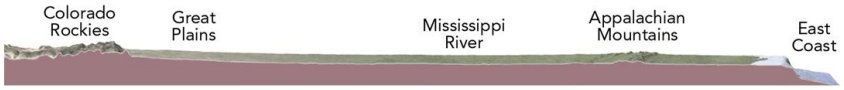
B. asthenosphere flows less easily

C. asthenosphere is cooler

D. asthenosphere has more oceanic crust

E. asthenosphere has more continental crust

28. Based on this topographic profile across the central United States, which region probably has the thickest crust?



A. Colorado Rockies

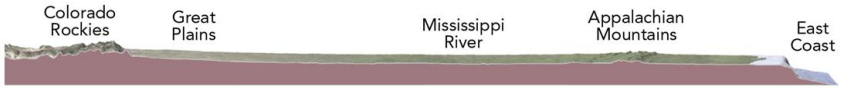
B. Great Plains

C. Mississippi River

D. Appalachian Mountains

E. East Coast

29. Based on this topographic profile across the central United States, which region probably has neither the thinnest nor thickest crust?

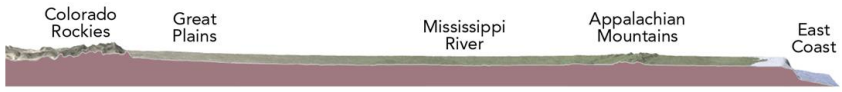


A. Colorado Rockies

B. Mississippi River

C. East Coast

30. Based on this topographic profile across the central United States, which region probably has the thinnest crust?



A. Colorado Rockies

B. Great Plains

C. Mississippi River

D. Appalachian Mountains

E. East Coast

31. Which of the following is true about processes that affect Earth?

A. Atmospheric pressure is less at sea level than in high mountains.

B. Forces decrease downward within Earth.

C. Forces are imposed on deep rocks from all directions.

D. All heat inside Earth comes from magma.

E. None of these.

32. Which of the following is true about gravity?

A. Gravity of the Sun and Moon exert a pull on Earth.

B. The mass of the Earth causes a downward pull on objects on Earth.

C. Gravity causes ice, water, and rocks to move downhill.

D. All of these.

33. Which of the following is true about forces and energy imposed on Earth from space?

A. Internal processes within the Moon produce light during the night.

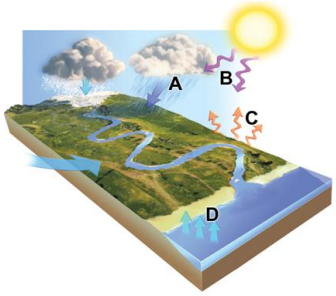
B. Sun's electromagnetic energy is all blocked by Earth's protective atmosphere.

C. Our massive Sun is the only object that exerts a gravitational pull on Earth.

D. All of these.

E. None of these.

34. Which arrows in this figure indicates infrared energy, which has been converted from ultraviolet energy?



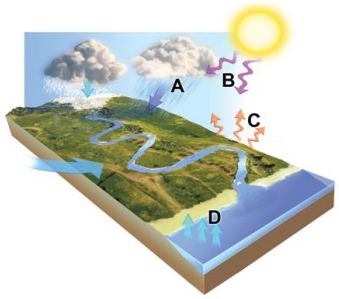
A. A

B. B

C. C

D. D

35. Which arrows in this figure indicates evaporation?



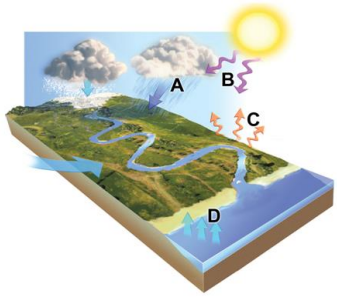
A. A

B. B

C. C

D. D

36. Which arrows in this figure indicates ultraviolet energy, an external energy source?



A. A

B. B

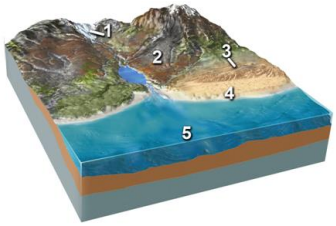
C. C

D. D

37. Which of the following are ways that the atmosphere interacts with Earth's surface?

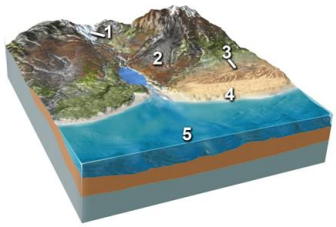
A. Liquid water on the surface can evaporate, becoming water vapor in the atmosphere.
B. The atmosphere includes a low percentage of water vapor, most of which comes from the oceans.
C. Earth's atmosphere blocks most of the Sun's harmful ultraviolet radiation.
D. Some energy that strikes the earth is converted into infrared energy.
E. All of these.

38. Which of the following locations would contain a wide variety of sediment, from large angular blocks to fine rock powder, produced from grinding of the rocks?



A. location 1, along the margins of a glacier
B. location 2, along a steep mountain front
C. location 3, in sand dunes
D. location 4, along a beach
E. location 5, on relatively deep seafloor

39. Which of the following locations would contain large, angular rocks that broke away from bedrock and moved downhill?



A. location 1, along the margins of a glacier

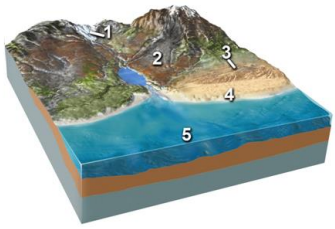
B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. location 4, along a beach

E. location 5, on relatively deep seafloor

40. Which of the following locations would contain sand, rounded stones, and broken shells?



A. location 1, along the margins of a glacier

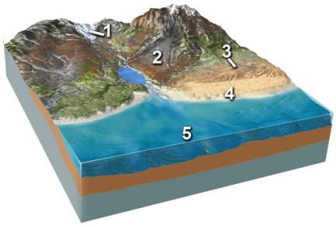
B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. location 4, along a beach

E. location 5, on relatively deep seafloor

41. Which of the following locations would contain mud and the remains of small creatures?



A. location 1, along the margins of a glacier

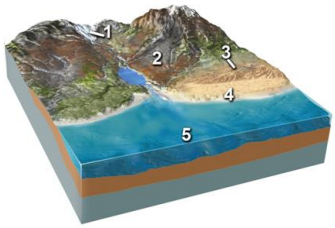
B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. location 4, along a beach

E. location 5, on relatively deep seafloor

42. Which of the following locations would most likely contain large, angular rocks?



A. location 1, along the margins of a glacier

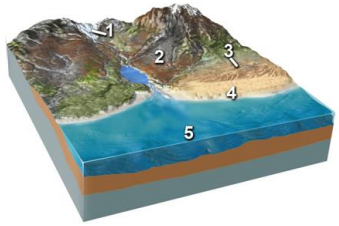
B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. locations 1 and 2

E. locations 2 and 3

43. Which of the following locations would most likely contain a high percentage of sand?



A. location 2, along a steep mountain front

B. location 3, in sand dunes

C. location 4, along a beach

D. locations 2 and 3

E. locations 3 and 4

44. Which of the following surface environments is the most likely site for deposits in this photograph?

A. steep mountain front

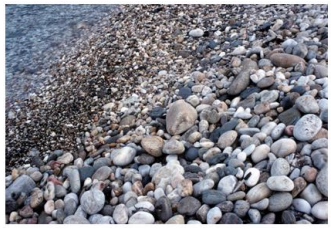
B. river channel

C. sand dunes

D. beach

E. lake

45. Which of the following surface environments is the most likely site for deposits in this photograph?



A. steep mountain front

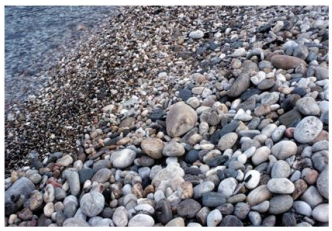
B. glacier

C. sand dunes

D. beach

E. lake

46. What type of rock would the materials shown in this photograph produce?



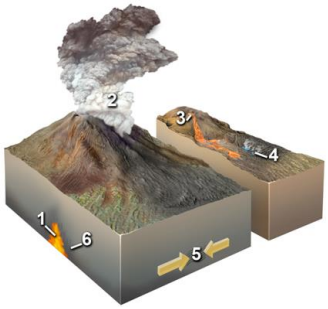
A. sedimentary

B. igneous

C. metamorphic

D. hydrothermal

47. Which of the following locations would form an igneous rock?



A. locations 1 and 2

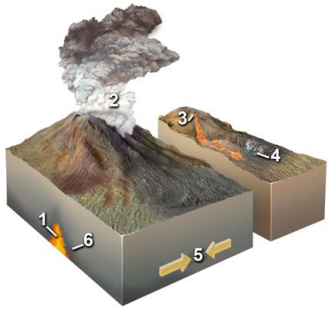
B. locations 2 and 3

C. locations 3 and 4

D. locations 1, 2, and 3

E. locations 5 and 6

48. Which of the following locations would form a metamorphic rock?



A. locations 1 and 2

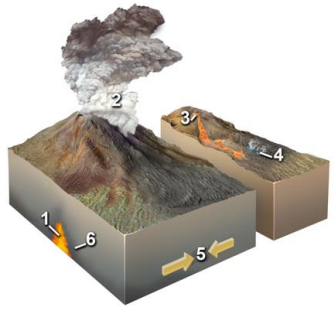
B. locations 2 and 3

C. locations 3 and 4

D. locations 1, 2, and 3

E. locations 5 and 6

49. Which of the following locations would form a hydrothermal rock?



A. location 1

B. location 2

C. location 3

D. location 4

E. locations 2 and 3

50. Which of the following is NOT a typical environment in which a metamorphic rock forms?

A. solidification of lava

B. heating adjacent to underground magma

C. squeezing by tectonic forces

D. burial to great depths

51. Which of the following is NOT one of the main families of rocks?

A. sedimentary

B. igneous

C. metamorphic

D. meteorites

52. Which of the following is NOT a typical environment in which a sedimentary rock forms?

A. beside glaciers

B. river channels

C. heating next to a magma

D. deep seafloor

E. shoreline of a lake

53. Which of the following is NOT an environment in which an igneous rock forms?

A. explosive eruption of volcanic ash

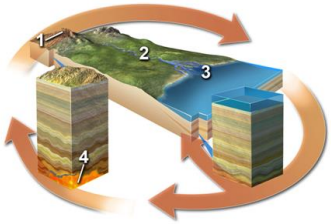
B. cooling and solidification of lava

C. solidification of magma at depth

D. intense squeezing from tectonic forces

E. all of these are environments that form igneous rock

54. Which of the following locations would have weathering of bedrock or loose sediment?



A. location 1

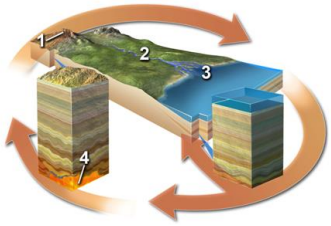
B. location 2

C. location 3

D. location 4

E. locations 1 and 2

55. Which of the following best indicates a location where sediment is transported?



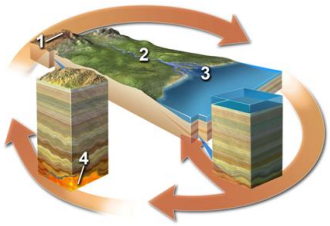
A. location 1

B. location 2

C. location 3

D. location 4

56. Which of the following best indicates a location where sediment is deposited but not eroded?



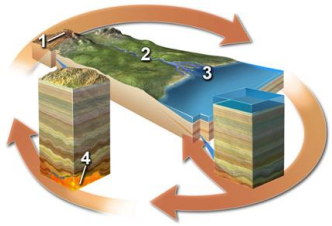
A. location 1

B. location 2

C. location 3

D. location 4

57. Which of the following settings would result in the formation of igneous rocks?



A. location 1

B. location 2

C. location 3

D. location 4

58. Which of the following does NOT list processes in an order consistent with a logical progression through the rock cycle?

A. weathering, erosion, deposition

B. solidification, melting, burial

C. erosion, deposition, burial

D. uplift, weathering, erosion

E. burial, metamorphism, melting

59. According to the rock cycle, sediment that is being transported by a river could become a metamorphic rock after:

A. uplift and weathering

B. melting and solidification

C. deposition and burial

D. solidification and uplift

60. Uplift can occur during the rock cycle:

A. only after deformation and metamorphism
B. only after melting and solidification
C. only after metamorphism or solidification
D. at any point after burial

61. Which of the following is NOT true about how water moves on our planet?

A. Rainfall can coat rocks and soil with a thin film of water, helping them to weather.
B. Moving water and its sediment can erode into solid rock, sculpting Earth's surface.
C. Groundwater typically rises towards higher areas where it emerges as springs.
D. Wind causes waves in the oceans and helps guide ocean currents.
E. Glaciers can transport sediment and carve the underlying landscape.

62. Of Earth's four overlapping spheres, which of the following does NOT involve material above Earth's surface?

A. atmosphere
B. lithosphere
C. biosphere
D. hydrosphere

63. Of Earth's four overlapping spheres, which of the following is (are) mostly between the lithosphere and atmosphere?

A. atmosphere
B. lithosphere
C. biosphere
D. hydrosphere
E. both the biosphere and hydrosphere

64. Compared to the outer planets in our solar system, the inner planets are:

A. larger
B. contain more gas
C. rocky and so are called terrestrial planets
D. have better developed planetary rings
E. none of these

65. The largest object in the solar system is:

A. Earth
B. the Earth's Moon
C. Saturn
D. Jupiter
E. the Sun

66. Which of the following is considered to be one of the outer planets?

A. Mars
B. Jupiter
C. Venus
D. Moon
E. none of these

67. Which of the following is a way that geology influences Rapid City and areas of the Black Hills, either presently or in the past?

A. flooding along creeks that drain the Black Hills
B. tilted rock layers that control the steepness of slopes
C. tourism from presidents' faces chiseled into granite
D. large gold deposits
E. all of these

68. The main cause of the Rapid City flood of 1972 was:

A. rapid melting of glaciers in the Black Hills because of global warming
B. failure of a dam because of a large landslide into the reservoir
C. poor design and poor construction of a large concrete dam
D. intense rainfall from a thunderstorm that resulted in a flash flood
E. all of these

69. Which of the following geologic hazards was NOT discussed for the area around St. George, Utah?

A. volcanic eruptions

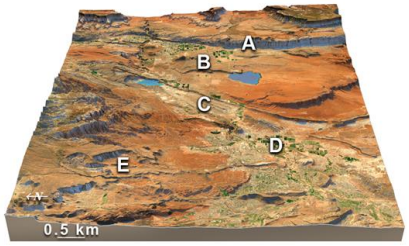
B. earthquakes from a fault along the Hurricane cliffs

C. flooding from the main river

D. flash flooding from the mountains

E. all of these were discussed

70. Which of the features labeled on the accompanying figure was discussed as a possible source of earthquakes?



A. the cliff at A

B. the volcano at B

C. pumping of the oil field at C

D. shaking during large floods at D

E. landslides off the mountains at E

71. Which of the following geologic resources was discussed for the area around St. George, Utah?

A. oil field
B. floodplains with fertile soils
C. a large cement plant
D. all of these
E. a and b only

72. A dry climate might impact how people live by increasing:

A. the risk of drought and other water shortages
B. irrigation needs
C. the likelihood of volcanic activity
D. the likelihood of earthquakes
E. both a and b

73. Choose appropriate way(s) that steep cliffs might impact people living nearby:

A. easy to build houses on steep cliffs
B. favorable location for livestock grazing
C. decreases area available to grow crops
D. increases landslide hazard
E. both c and d

74. Rainfall in mountain ranges might impact people living nearby by:

A. increasing erosion in mountains
B. increasing flooding hazards
C. increasing mudslide hazards
D. water flowing into streams and rivers, increasing water supply
E. all of these

75. Choose appropriate way(s) that hot springs might impact people living nearby:

A. provides geothermal power
B. enables easy transportation of goods
C. increases likelihood of earthquakes
D. provides a recreational outlet
E. both a and d

76. Choose appropriate way(s) that volcanoes might impact people living nearby:

A. Releases steam and noxious gases into the atmosphere.
B. Volcanic ash provides fertile sediment for growing crops.
C. Ash ejected into the atmosphere blocks sunlight.
D. Projectiles thrown into the air can hit your house.
E. All of these impact people living nearby.

77. Choose appropriate way(s) that an oil field might impact people living nearby:

A. increasing job opportunities

B. improving the local economy

C. increasing likelihood of volcanic eruptions

D. increasing likelihood of an oil spill

E. a, b, and d only

c1 Key

1. Which of the following was talked about in the opening two-page spread of Chapter 1?

A. oil beneath the Arctic National Wildlife Reserve

B. the scenery of Glacier National Park

C. earthquakes along the San Andres fault

D. oil beneath the Gulf Coast of the United States

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #1
Section: 1.0
Topic: Nature of Geology

2. Which of the following is probably least at risk for geologic hazards?

A. next to a river in low areas

B. near an active fault

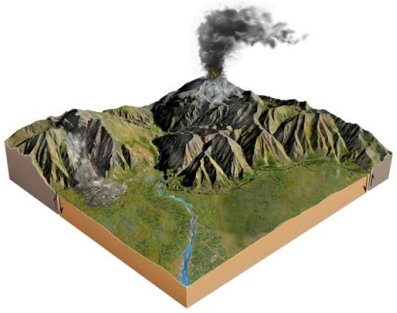
C. on soils that gently expand when wet

D. on gentle slopes away from mountains

E. close to, but upwind of, an active volcano

Availability to Students: None
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #2
Section: 1.1
Topic: Nature of Geology

3. Which potential geologic hazard is NOT represented by a feature on this figure?



A. an earthquake

B. a volcano

C. contaminated groundwater

D. a landslide

E. flood-prone areas

Availability to Students: Blackboard Quiz
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #3
Section: 1.1
Topic: Nature of Geology

4. Which of the following geologic aspects influence our lives based on the photograph showing horses and cows on a grassy field?

A. the presence of mountains, which influence the formation of clouds and precipitation

B. the steepness of slopes

C. the availability of water

D. all of these

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #4
Section: 1.1
Topic: Nature of Geology

5. The distribution of natural resources is influenced by the:

A. type of rocks

B. age of the rocks

C. way in which the rocks formed

D. all of these

Availability to Students: Classroom Response System
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #5
Section: 1.1
Topic: Nature of Geology

6. Which of the following factors was most important in controlling the distribution of copper mines in the western U.S. versus iron mines in the Great Lakes region?

A. the amount of precipitation (rain and snow)

B. the time of year when precipitation occurs

C. different ages and geologic histories of the rocks

D. the latitude (distance south or north from the equator)

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #6
Section: 1.1
Topic: Nature of Geology

7. Geology can help us learn about Earth's past by studying:

A. why continents have different regions
B. why a landscape looks the way it does
C. how life in the past was different than today
D. how global climate has changed since the ice ages
E. all of these

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #7
Section: 1.2
Topic: Nature of Geology

8. Which of the following is NOT a way geology informs us about Earth's past?

A. how the first second of the universe differed from a second today
B. why continents have different regions today
C. why a landscape looks the way it does today
D. how life in the past was different than today
E. how past global climate was different than today

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #8
Section: 1.2
Topic: Nature of Geology

9. The main layers of the Earth in correct order, from the surface moving down, is:

A. upper crust, outer core, inner core, mantle

B. outer core, inner core, upper mantle, lower crust

C. crust, mantle, outer core, inner core

D. upper mantle, lower mantle, inner core, crust

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #9
Section: 1.3
Topic: Nature of Geology

10. Which of the following Earth layers is the thinnest?

A. oceanic crust

B. upper mantle

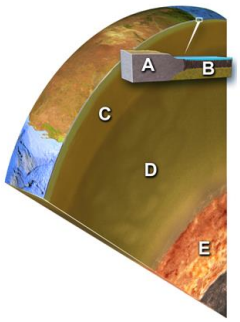
C. lower mantle

D. outer core

E. inner core

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #10
Section: 1.3
Topic: Nature of Geology

11. Which layer on this figure is the upper mantle?



A. A

B. B

C. C

D. D

E. E

Availability to Students: Blackboard Quiz

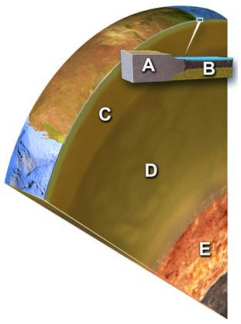
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #11

Section: 1.3

Topic: Nature of Geology

12. Which layer on this figure is the continental crust?



A. A

B. B

C. C

D. D

E. E

Availability to Students: Classroom Response System

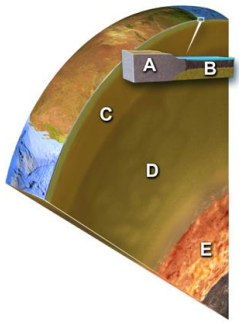
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #12

Section: 1.3

Topic: Nature of Geology

13. Which layer on this figure is the oceanic crust?



A. A

B. B

C. C

D. D

E. E

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #13
Section: 1.3
Topic: Nature of Geology

14. Which layer in the earth is similar to the composition of granite?

A. continental crust

B. oceanic crust

C. upper mantle

D. lower mantle

E. core

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #14
Section: 1.3
Topic: Nature of Geology

15. Which layer in the earth is similar in composition to basalt, a dark lava rock?

A. continental crust

B. oceanic crust

C. upper mantle

D. lower mantle

E. core

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #15
Section: 1.3
Topic: Nature of Geology

16. Which layer in the earth is similar to the green mineral olivine?

A. continental crust

B. oceanic crust

C. mantle

D. core

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #16
Section: 1.3
Topic: Nature of Geology

17. Which layer in the earth is similar in composition to an iron-nickel meteorite?

A. continental crust
B. oceanic crust
C. upper mantle
D. lower mantle
E. core

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #17
Section: 1.3
Topic: Nature of Geology

18. Which of the following is NOT a possible reason for why a region is higher in elevation than adjacent regions?

A. the lithosphere is hotter
B. it has continental crust, but adjacent regions have oceanic crust
C. the crust is thicker
D. the crust is more dense

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #18
Section: 1.3
Topic: Nature of Geology

19. What is the most likely reason why a region is higher than adjacent regions?

A. there is a hot spot beneath it

B. the crust is thicker

C. it is underlain by oceanic crust

D. the asthenosphere is hotter

E. the crust is hotter

Availability to Students: Blackboard Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #19
Section: 1.3
Topic: Nature of Geology

20. Which of the following is the best description of what the lithosphere contains?

A. continental and oceanic crust

B. both types of crust and the uppermost mantle

C. weak part of the upper mantle

D. upper and lower mantle

E. lower mantle and outer core

Availability to Students: Blackboard Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #20
Section: 1.3
Topic: Nature of Geology

21. Which of the following Earth layers is the thickest?

A. continental crust

B. oceanic crust

C. mantle

D. outer core

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #21
Section: 1.3
Topic: Nature of Geology

22. The principle of isostasy refers to:

A. the difference in the strength of the mantle versus the crust

B. the relationship between regional elevations and thickness of crust

C. how the outer core differs from the inner core

D. how the upper mantle differs from the lower mantle

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #22
Section: 1.3
Topic: Nature of Geology

23. Which of the following is NOT an important difference between continents and oceans?

A. thickness of the crust

B. composition of the crust

C. density of the crust

D. whether it is part of the lithosphere

E. elevation

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #23
Section: 1.3
Topic: Nature of Geology

24. Which of the following combinations would result in the highest regional elevations?

A. thin, dense crust

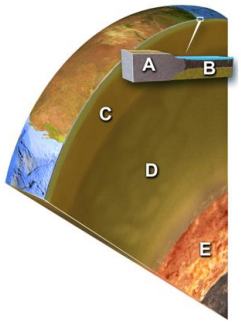
B. thick, dense crust

C. thin, less dense crust

D. thick, less dense crust

Availability to Students: None
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #24
Section: 1.3
Topic: Nature of Geology

25. Which layer on this figure is the outer core?



A. A

B. B

C. C

D. D

E. E

Availability to Students: Classroom Response System

Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #25

Section: 1.3

Topic: Nature of Geology

26. Compared to oceanic crust, continental crust is:

A. thinner

B. more dense

C. lighter in color

D. all of these

Availability to Students: None

Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #26

Section: 1.3

Topic: Nature of Geology

27. The main difference between the lithosphere and the asthenosphere is the:

A. asthenosphere is less rigid

B. asthenosphere flows less easily

C. asthenosphere is cooler

D. asthenosphere has more oceanic crust

E. asthenosphere has more continental crust

Availability to Students: None

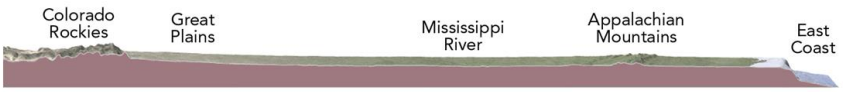
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #27

Section: 1.3

Topic: Nature of Geology

28. Based on this topographic profile across the central United States, which region probably has the thickest crust?



A. Colorado Rockies

B. Great Plains

C. Mississippi River

D. Appalachian Mountains

E. East Coast

Availability to Students: None

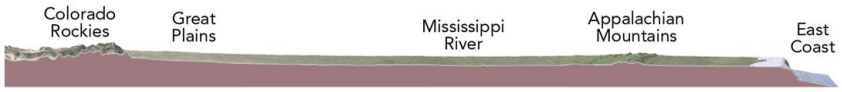
Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #28

Section: 1.3

Topic: Nature of Geology

29. Based on this topographic profile across the central United States, which region probably has neither the thinnest nor thickest crust?



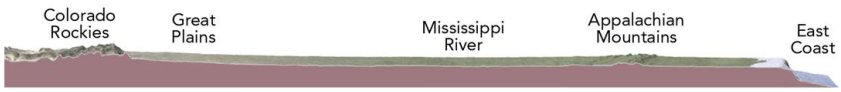
A. Colorado Rockies

B. Mississippi River

C. East Coast

Availability to Students: Classroom Response System
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #29
Section: 1.3
Topic: Nature of Geology

30. Based on this topographic profile across the central United States, which region probably has the thinnest crust?



A. Colorado Rockies

B. Great Plains

C. Mississippi River

D. Appalachian Mountains

E. East Coast

Availability to Students: Online Practice Quiz
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #30
Section: 1.3
Topic: Nature of Geology

31. Which of the following is true about processes that affect Earth?

A. Atmospheric pressure is less at sea level than in high mountains.

B. Forces decrease downward within Earth.

C. Forces are imposed on deep rocks from all directions.

D. All heat inside Earth comes from magma.

E. None of these.

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #31
Section: 1.4
Topic: Nature of Geology

32. Which of the following is true about gravity?

A. Gravity of the Sun and Moon exert a pull on Earth.

B. The mass of the Earth causes a downward pull on objects on Earth.

C. Gravity causes ice, water, and rocks to move downhill.

D. All of these.

Availability to Students: Blackboard Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #32
Section: 1.4
Topic: Nature of Geology

33. Which of the following is true about forces and energy imposed on Earth from space?

A. Internal processes within the Moon produce light during the night.

B. Sun's electromagnetic energy is all blocked by Earth's protective atmosphere.

C. Our massive Sun is the only object that exerts a gravitational pull on Earth.

D. All of these.

E. None of these.

Availability to Students: None

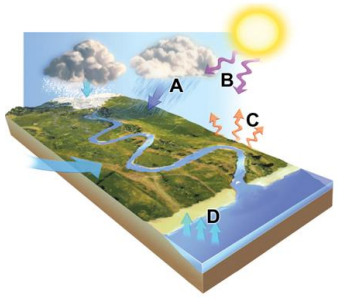
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #33

Section: 1.4

Topic: Nature of Geology

34. Which arrows in this figure indicates infrared energy, which has been converted from ultraviolet energy?



A. A

B. B

C. C

D. D

Availability to Students: Online Practice Quiz

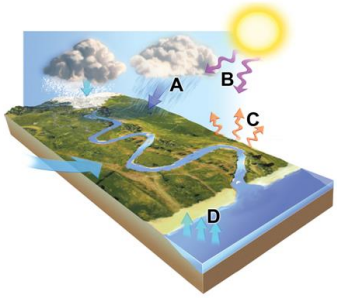
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #34

Section: 1.4

Topic: Nature of Geology

35. Which arrows in this figure indicates evaporation?



A. A

B. B

C. C

D. D

Availability to Students: Classroom Response System

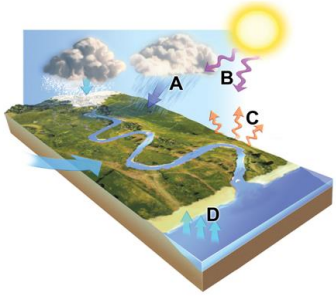
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #35

Section: 1.4

Topic: Nature of Geology

36. Which arrows in this figure indicates ultraviolet energy, an external energy source?



A. A

B. B

C. C

D. D

Availability to Students: None

Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #36

Section: 1.4

Topic: Nature of Geology

37. Which of the following are ways that the atmosphere interacts with Earth's surface?

A. Liquid water on the surface can evaporate, becoming water vapor in the atmosphere.

B. The atmosphere includes a low percentage of water vapor, most of which comes from the oceans.

C. Earth's atmosphere blocks most of the Sun's harmful ultraviolet radiation.

D. Some energy that strikes the earth is converted into infrared energy.

E. All of these.

Availability to Students: Classroom Response System

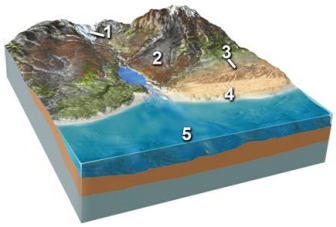
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #37

Section: 1.4

Topic: Nature of Geology

38. Which of the following locations would contain a wide variety of sediment, from large angular blocks to fine rock powder, produced from grinding of the rocks?



A. location 1, along the margins of a glacier

B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. location 4, along a beach

E. location 5, on relatively deep seafloor

Availability to Students: Online Practice Quiz

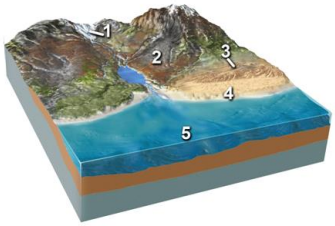
Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #38

Section: 1.5

Topic: Nature of Geology

39. Which of the following locations would contain large, angular rocks that broke away from bedrock and moved downhill?



A. location 1, along the margins of a glacier

B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. location 4, along a beach

E. location 5, on relatively deep seafloor

Availability to Students: None

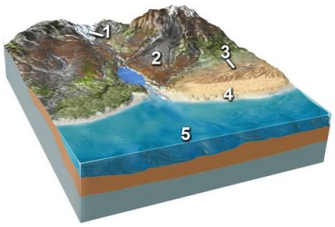
Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #39

Section: 1.5

Topic: Nature of Geology

40. Which of the following locations would contain sand, rounded stones, and broken shells?



A. location 1, along the margins of a glacier

B. location 2, along a steep mountain front

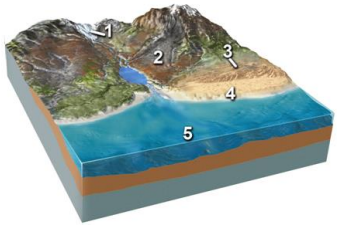
C. location 3, in sand dunes

D. location 4, along a beach

E. location 5, on relatively deep seafloor

Availability to Students: None
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #40
Section: 1.5
Topic: Nature of Geology

41. Which of the following locations would contain mud and the remains of small creatures?



A. location 1, along the margins of a glacier

B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. location 4, along a beach

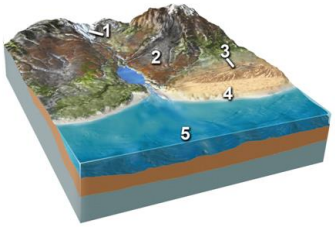
E. location 5, on relatively deep seafloor

Availability to Students: Classroom Response System
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #41

Section: 1.5

Topic: Nature of Geology

42. Which of the following locations would most likely contain large, angular rocks?



A. location 1, along the margins of a glacier

B. location 2, along a steep mountain front

C. location 3, in sand dunes

D. locations 1 and 2

E. locations 2 and 3

Availability to Students: None

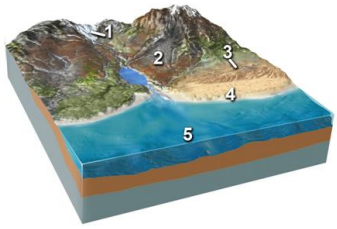
Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #42

Section: 1.5

Topic: Nature of Geology

43. Which of the following locations would most likely contain a high percentage of sand?



A. location 2, along a steep mountain front

B. location 3, in sand dunes

C. location 4, along a beach

D. locations 2 and 3

E. locations 3 and 4

Availability to Students: Classroom Response System
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #43
Section: 1.5
Topic: Nature of Geology

44. Which of the following surface environments is the most likely site for deposits in this photograph?

A. steep mountain front

B. river channel

C. sand dunes

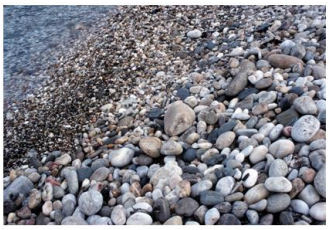
D. beach

E. lake

Availability to Students: Blackboard Quiz
Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #44
Section: 1.5
Topic: Nature of Geology

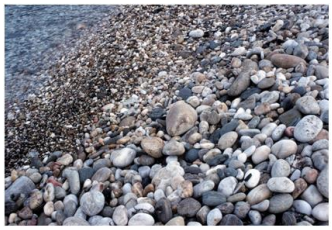
45. Which of the following surface environments is the most likely site for deposits in this photograph?



A. steep mountain front
B. glacier
C. sand dunes
D. beach
E. lake

Availability to Students: None
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #45
Section: 1.5
Topic: Nature of Geology

46. What type of rock would the materials shown in this photograph produce?



A. sedimentary

B. igneous

C. metamorphic

D. hydrothermal

Availability to Students: Blackboard Quiz

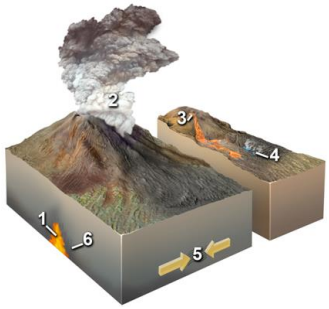
Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #46

Section: 1.5

Topic: Nature of Geology

47. Which of the following locations would form an igneous rock?



A. locations 1 and 2

B. locations 2 and 3

C. locations 3 and 4

D. locations 1, 2, and 3

E. locations 5 and 6

Availability to Students: None

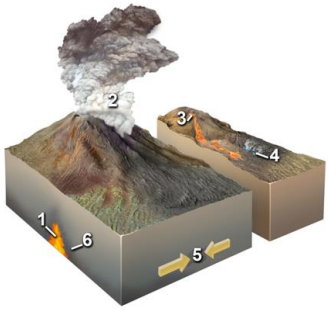
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #47

Section: 1.5

Topic: Nature of Geology

48. Which of the following locations would form a metamorphic rock?



A. locations 1 and 2

B. locations 2 and 3

C. locations 3 and 4

D. locations 1, 2, and 3

E. locations 5 and 6

Availability to Students: None

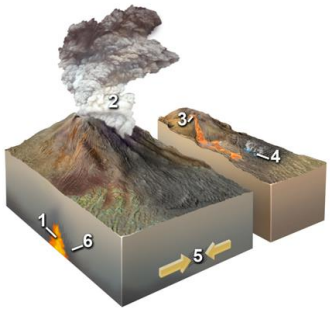
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #48

Section: 1.5

Topic: Nature of Geology

49. Which of the following locations would form a hydrothermal rock?



A. location 1

B. location 2

C. location 3

D. location 4

E. locations 2 and 3

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #49
Section: 1.5
Topic: Nature of Geology

50. Which of the following is NOT a typical environment in which a metamorphic rock forms?

A. solidification of lava

B. heating adjacent to underground magma

C. squeezing by tectonic forces

D. burial to great depths

Availability to Students: None
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #50
Section: 1.5
Topic: Nature of Geology

51. Which of the following is NOT one of the main families of rocks?

A. sedimentary

B. igneous

C. metamorphic

D. meteorites

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #51
Section: 1.5
Topic: Nature of Geology

52. Which of the following is NOT a typical environment in which a sedimentary rock forms?

A. beside glaciers

B. river channels

C. heating next to a magma

D. deep seafloor

E. shoreline of a lake

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #52
Section: 1.5
Topic: Nature of Geology

53. Which of the following is NOT an environment in which an igneous rock forms?

A. explosive eruption of volcanic ash

B. cooling and solidification of lava

C. solidification of magma at depth

D. intense squeezing from tectonic forces

E. all of these are environments that form igneous rock

Availability to Students: None

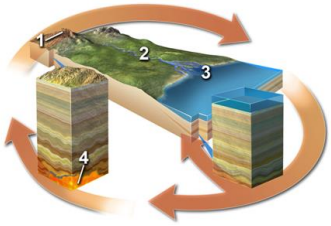
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #53

Section: 1.5

Topic: Nature of Geology

54. Which of the following locations would have weathering of bedrock or loose sediment?



A. location 1

B. location 2

C. location 3

D. location 4

E. locations 1 and 2

Availability to Students: None

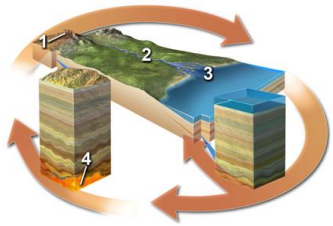
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #54

Section: 1.6

Topic: Nature of Geology

55. Which of the following best indicates a location where sediment is transported?



A. location 1

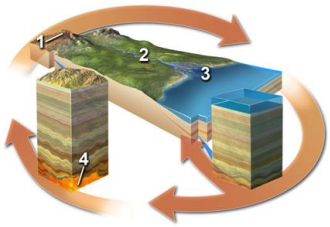
B. location 2

C. location 3

D. location 4

Availability to Students: Blackboard Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #55
Section: 1.6
Topic: Nature of Geology

56. Which of the following best indicates a location where sediment is deposited but not eroded?



A. location 1

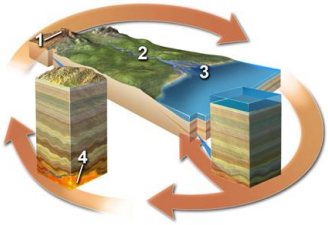
B. location 2

C. location 3

D. location 4

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #56
Section: 1.6
Topic: Nature of Geology

57. Which of the following settings would result in the formation of igneous rocks?



A. location 1

B. location 2

C. location 3

D. location 4

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #57
Section: 1.6
Topic: Nature of Geology

58. Which of the following does NOT list processes in an order consistent with a logical progression through the rock cycle?

A. weathering, erosion, deposition

B. solidification, melting, burial

C. erosion, deposition, burial

D. uplift, weathering, erosion

E. burial, metamorphism, melting

Availability to Students: Classroom Response System
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #58
Section: 1.6
Topic: Nature of Geology

59. According to the rock cycle, sediment that is being transported by a river could become a metamorphic rock after:

A. uplift and weathering
B. melting and solidification
C. deposition and burial
D. solidification and uplift

Availability to Students: None
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #59
Section: 1.6
Topic: Nature of Geology

60. Uplift can occur during the rock cycle:

A. only after deformation and metamorphism
B. only after melting and solidification
C. only after metamorphism or solidification
D. at any point after burial

Availability to Students: Blackboard Quiz
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #60
Section: 1.6
Topic: Nature of Geology

61. Which of the following is NOT true about how water moves on our planet?

A. Rainfall can coat rocks and soil with a thin film of water, helping them to weather.

B. Moving water and its sediment can erode into solid rock, sculpting Earth's surface.

C. Groundwater typically rises towards higher areas where it emerges as springs.

D. Wind causes waves in the oceans and helps guide ocean currents.

E. Glaciers can transport sediment and carve the underlying landscape.

Availability to Students: Blackboard Quiz
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #61
Section: 1.7
Topic: Nature of Geology

62. Of Earth's four overlapping spheres, which of the following does NOT involve material above Earth's surface?

A. atmosphere

B. lithosphere

C. biosphere

D. hydrosphere

Availability to Students: Online Practice Quiz
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #62
Section: 1.7
Topic: Nature of Geology

63. Of Earth's four overlapping spheres, which of the following is (are) mostly between the lithosphere and atmosphere?

A. atmosphere
B. lithosphere
C. biosphere
D. hydrosphere
E. both the biosphere and hydrosphere

Availability to Students: Online Practice Quiz
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #63
Section: 1.7
Topic: Nature of Geology

64. Compared to the outer planets in our solar system, the inner planets are:

A. larger
B. contain more gas
C. rocky and so are called terrestrial planets
D. have better developed planetary rings
E. none of these

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #64
Section: 1.8
Topic: Nature of Geology

65. The largest object in the solar system is:

A. Earth
B. the Earth's Moon
C. Saturn
D. Jupiter
E. the Sun

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #65
Section: 1.8
Topic: Nature of Geology

66. Which of the following is considered to be one of the outer planets?

A. Mars
B. Jupiter
C. Venus
D. Moon
E. none of these

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #66
Section: 1.8
Topic: Nature of Geology

67. Which of the following is a way that geology influences Rapid City and areas of the Black Hills, either presently or in the past?

A. flooding along creeks that drain the Black Hills
B. tilted rock layers that control the steepness of slopes
C. tourism from presidents' faces chiseled into granite
D. large gold deposits
E. all of these

Availability to Students: Online Practice Quiz
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #67
Section: 1.9
Topic: Nature of Geology

68. The main cause of the Rapid City flood of 1972 was:

A. rapid melting of glaciers in the Black Hills because of global warming
B. failure of a dam because of a large landslide into the reservoir
C. poor design and poor construction of a large concrete dam
D. intense rainfall from a thunderstorm that resulted in a flash flood
E. all of these

Availability to Students: None
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #68
Section: 1.9
Topic: Nature of Geology

69. Which of the following geologic hazards was NOT discussed for the area around St. George, Utah?

A. volcanic eruptions

B. earthquakes from a fault along the Hurricane cliffs

C. flooding from the main river

D. flash flooding from the mountains

E. all of these were discussed

Availability to Students: Online Investigation

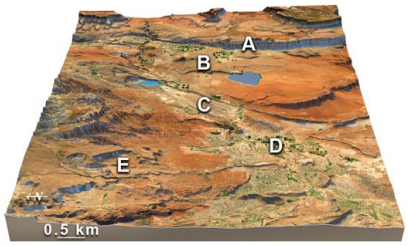
Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #69

Section: 1.10

Topic: Nature of Geology

70. Which of the features labeled on the accompanying figure was discussed as a possible source of earthquakes?



A. the cliff at A

B. the volcano at B

C. pumping of the oil field at C

D. shaking during large floods at D

E. landslides off the mountains at E

Availability to Students: Online Investigation

Difficulty Level: Remember/Understand

Reynolds - Chapter 01 #70

Section: 1.10

Topic: Nature of Geology

71. Which of the following geologic resources was discussed for the area around St. George, Utah?

A. oil field
B. floodplains with fertile soils
C. a large cement plant
D. all of these
E. a and b only

Availability to Students: Online Investigation
Difficulty Level: Remember/Understand
Reynolds - Chapter 01 #71
Section: 1.10
Topic: Nature of Geology

72. A dry climate might impact how people live by increasing:

A. the risk of drought and other water shortages
B. irrigation needs
C. the likelihood of volcanic activity
D. the likelihood of earthquakes
E. both a and b

Availability to Students: Online Investigation
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #72
Section: 1.10
Topic: Nature of Geology

73. Choose appropriate way(s) that steep cliffs might impact people living nearby:

A. easy to build houses on steep cliffs

B. favorable location for livestock grazing

C. decreases area available to grow crops

D. increases landslide hazard

E. both c and d

Availability to Students: Online Investigation
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #73
Section: 1.10
Topic: Nature of Geology

74. Rainfall in mountain ranges might impact people living nearby by:

A. increasing erosion in mountains

B. increasing flooding hazards

C. increasing mudslide hazards

D. water flowing into streams and rivers, increasing water supply

E. all of these

Availability to Students: Online Investigation
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #74
Section: 1.10
Topic: Nature of Geology

75. Choose appropriate way(s) that hot springs might impact people living nearby:

A. provides geothermal power
B. enables easy transportation of goods
C. increases likelihood of earthquakes
D. provides a recreational outlet
E. both a and d

Availability to Students: Online Investigation
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #75
Section: 1.10
Topic: Nature of Geology

76. Choose appropriate way(s) that volcanoes might impact people living nearby:

A. Releases steam and noxious gases into the atmosphere.
B. Volcanic ash provides fertile sediment for growing crops.
C. Ash ejected into the atmosphere blocks sunlight.
D. Projectiles thrown into the air can hit your house.
E. All of these impact people living nearby.

Availability to Students: Online Investigation
Difficulty Level: Apply/Analyze
Reynolds - Chapter 01 #76
Section: 1.10
Topic: Nature of Geology

77. Choose appropriate way(s) that an oil field might impact people living nearby:

A. increasing job opportunities

B. improving the local economy

C. increasing likelihood of volcanic eruptions

D. increasing likelihood of an oil spill

E. a, b, and d only

Availability to Students: Online Investigation

Difficulty Level: Apply/Analyze

Reynolds - Chapter 01 #77

Section: 6.15

Topic: Volcanoes

c1 Summary

Category	*# of Questions*
Availability to Students: Blackboard Quiz	10
Availability to Students: Classroom Response System	9
Availability to Students: None	37
Availability to Students: Online Investigation	9
Availability to Students: Online Practice Quiz	12
Difficulty Level: Apply/Analyze	28
Difficulty Level: Remember/Understand	49
Reynolds - Chapter 01	77
Section: 1.0	1
Section: 1.1	5
Section: 1.10	8
Section: 1.2	2
Section: 1.3	22
Section: 1.4	7
Section: 1.5	16
Section: 1.6	7
Section: 1.7	3
Section: 1.8	3
Section: 1.9	2
Section: 6.15	1
Topic: Nature of Geology	76
Topic: Volcanoes	1