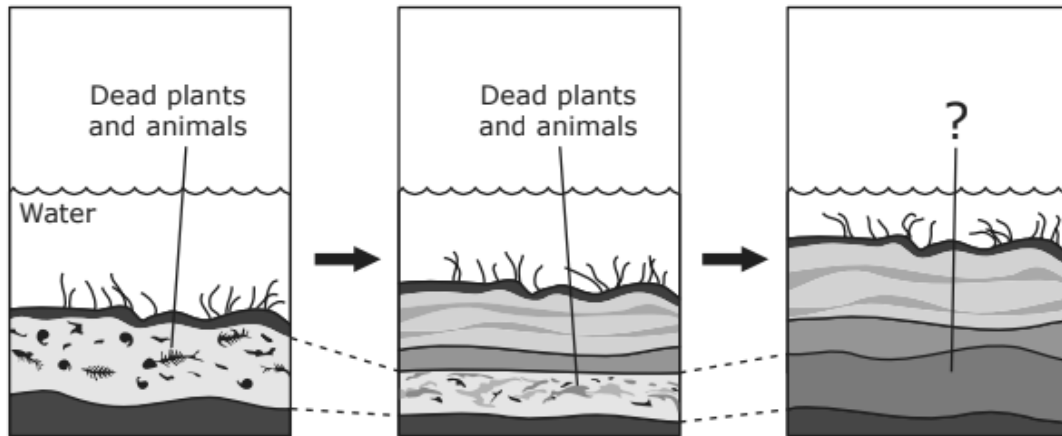


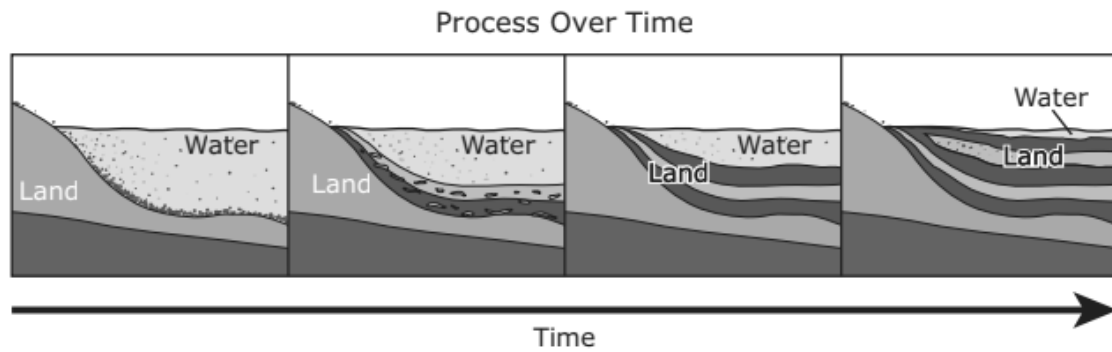
- 2 The diagram shows layers deposited under a body of water. This layering continued for millions of years.



What most likely happened to the dead plants and animals?

- F They were eaten by scavengers.
 - G They became fossil fuels.
 - H They were washed away by water.
 - J They became an underground aquifer.
-
- 36 Which statement best describes the processes of weathering and erosion?
- F Weathering and erosion are directly responsible for the breakdown of any type of rock into smaller particles and the carrying away of the loose sediments.
 - G Weathering and erosion are directly responsible for depositing loose sediments on the bottom of the ocean, forming layers of sediment.
 - H Weathering and erosion are directly responsible for the amount of water in a river that transports sediments to the sea.
 - J Weathering and erosion are directly responsible for the transportation, deposition, and compaction of loose sediments on the seafloor.

13 The diagram shows parts of a process that occurred over time.



Which process does this diagram most likely represent?

- A The erosion of a coastline
- B The deposition of sediments
- C The weathering of a mountain
- D The formation of a sea

18 Which of these environments could form coal if the area is buried for a long time?



26 A three-step process is shown.



Which of these are most likely formed by the process shown?

- F** Glaciers
- G** Mountains
- H** Sand dunes
- J** Sedimentary rocks

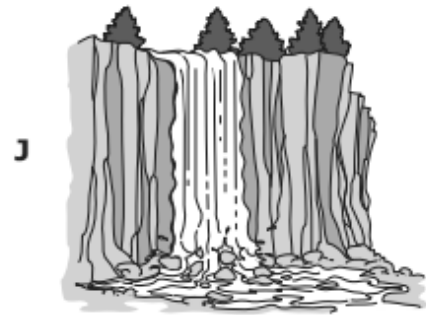
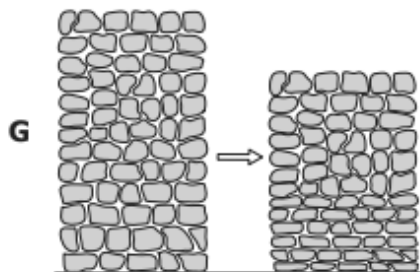
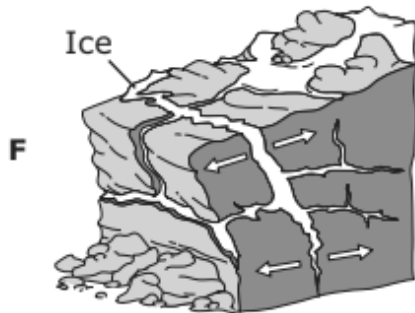
36 Sediments are transported at different speeds. Which type of sediment transport is the slowest?

- F** Transport by rivers
- G** Transport by winds
- H** Transport by glaciers
- J** Transport by ocean currents

14 Which list contains only processes that must occur in order for fossil fuels to form?

- F** Formation of faults, burial, glacier formation
- G** Organism growth, burial, volcanic eruptions
- H** Organism growth, burial, compaction
- J** Erosion, burial, earthquakes

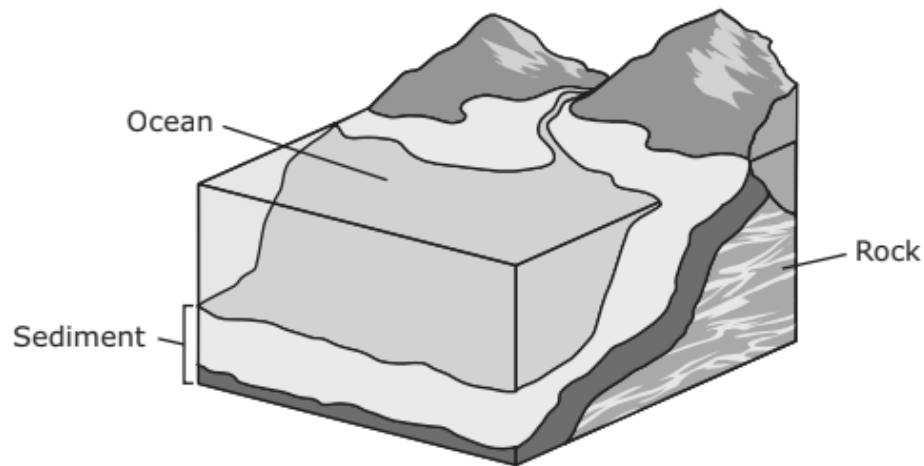
28 Which diagram models the process of compaction leading to the formation of sedimentary rock?



20 All of these are related to the formation of oil or natural gas **EXCEPT** —

- F** decomposed animals
- G** decayed plants
- H** sedimentary rocks
- J** active volcanoes

32 The model below shows layers of sediment on the floor of an ocean.



Which of the following best explains how these layers can become rock over many years?

- F** Sand in the sediment melts and turns into rock.
 - G** The weight of the water compacts the sediment into rock.
 - H** Changing water temperatures turn sand in the sediment into rock.
 - J** Pollution caused by humans turns the sediment into rock.
- 20** Fossil fuels formed over long periods of time after particles in water settled to the sea floor and formed marine mud. What kinds of particles needed to be present in the marine mud in order for fossil fuels to form?
- F** Mostly sand and a few small bits of wood
 - G** Mostly decaying organisms
 - H** Mostly lava and a few sedimentary rocks
 - J** Mostly metal minerals

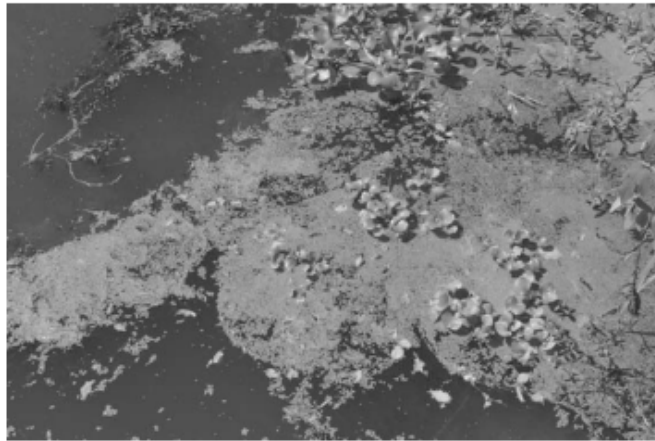
44 Some students make a model to show one of the first steps in the formation of sedimentary rock. The students pour 2 centimeters of light-colored sand into a clear plastic box. Then they add 1 centimeter of gravel. Finally they pour 2 centimeters of dark-colored sand on top of the gravel. Which characteristic of sedimentary rock does this model best show?

- F** Sedimentary rock is made of layers.
- G** Sedimentary rock is cemented bits of rock.
- H** Sedimentary rock is often limestone.
- J** Sedimentary rock is common in Texas.

8 Erosion is one of the processes involved in the formation of sedimentary rock. Which of these best describes the process of erosion?

- F** Rocks are broken into smaller pieces that remain in the same location.
- G** Pressure compacts layers of sediment and turns them into rock.
- H** Pieces of rock or soil are carried from one place to another.
- J** Sediment grains fall to the bottom of a lake to form sedimentary layers.

44 This photograph shows plants growing on the surface of a pond.



© Light Traces Photography

How do plants like these form fossil fuels?

- F** The dead plants sink to the bottom of the pond and get buried by sediment for millions of years.
 - G** The dead plants get buried for millions of years and form fossils that attract carbon.
 - H** The dead plants sink to the bottom of the pond and are consumed by decomposers.
 - J** The dead plants produce carbon that is consumed by fish, which form fossils.
- 17** The diagram below shows the sequence of the processes that turn solid rock into sandstone.



Which two processes best complete this diagram?

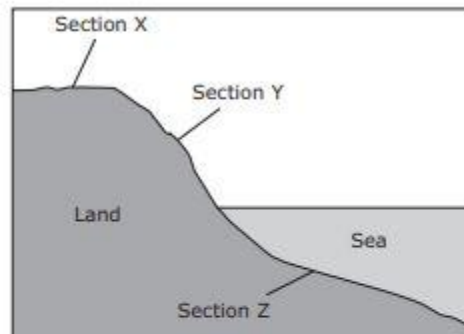
- A** Melting and cooling
- B** Erosion and compaction
- C** Compaction and cementation
- D** Evaporation and dissolving

- 32** Many of America's large oil fields are found underground at the Permian Basin in West Texas. An area of the Permian Basin is shown.



How did these oil fields form?

- F** Dead plants and animals were buried for millions of years.
 - G** Plants were eaten by consumers that left fossilized remains.
 - H** Heat caused underground rocks to undergo chemical changes.
 - J** Rocks at the surface of Earth melted and then solidified.
- 6** A diagram of different sections of land is shown.



Which action is most likely happening in Section Y in the diagram?

- F** Wind and rain compacting rock into larger pieces
- G** Water carrying rocky material to a new location
- H** Chemicals in water gluing sediments to each other
- J** Pressure causing layers of sediment to form over time