

Agents of Erosion and Deposition





Which of the following describes the process of **erosion**?

- A the chemical breakdown of rocks
- **B** the physical breakdown of rocks
- **c** the removal of smaller rock particles
- D all of the above



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Streams and rivers are constantly eroding and shaping the landscape. The Mississippi River, for example, erodes and moves 436,000 tons of sediment every single day. All the materials that a river or stream carries is called the river's or stream's

- A discharge
- B load
- **C** gradient
- **D** drainage



The river pictured here erodes its channel wider rather than deeper and does not have a steep gradient. This river is described as a

____ river.

- A youthful
- **B** mature
- C suspended load
- **D** rejuvenated





It is possible for a dramatic tectonic event to uplift a portion of the earth's crust on which mature rivers had previously run, thus suddenly increasing the river's gradient. The river begins to cut more deeply into the uplifted sediments, making this now a(n)

- A youthful
- **B** mature
- C old
- **D** rejuvenated





A meandering river winds over the landscape as seen in this picture. Rock and soil (called alluvium) is eroded on the outside of the meander and is deposited on the inside of the meander. The meandering river erodes alluvium on the outside of the meander, and deposits it on the inside of the

meander because water flows **slower** on the **outside** of the meander.

True or false?

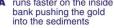
A true B false



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Gold prospectors pan for gold on the **inside bank** of a meander in a mature river because the river

A runs faster on the inside



- B runs slower on the inside bank, so the gold falls out of suspension
- c is shallower and safer on the inside bank
- D here is called the cut bank



When moving water from a river empties into a standing body of water like the ocean, the sediments fall out of suspension and are deposited. The result is a triangular-shaped deposit known as a delta. Why do the sediments fall out of suspension?

- A the water loses energy and slows down
- **B** the water gains energy and moves faster
- c ocean water is colder
- D ocean water is warmer



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When moving water transports sediments from a mountainous or hilly area into a flat, low-lying plain, the water suddenly slows down and the sediment is deposited in a triangular-shaped formation. Geologists

call this triangular formation a(n) ______



- **B** flood plain
- c alluvial fan
- **D** meander





Beaches are large deposits of grains that have been eroded from rock for what scientists believe to be millions of years. The type of sand, such as the familiar tan-colored quartz sand, on a beach depends on ______.

- A how long waves have weathered the rock
- B how much energy the waves exert on a rock
- C the latitude of the beach
- D the source rock of the sand



In oceans, lakes, or rivers, sediment deposition can form

- A beaches and sea arches
- B sea caves and wave-cut terraces
- sandbars and barrier spits
- D sea cliffs and beaches





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Class Name Which of the following Streams and rivers are constantly eroding and describes the process shaping the landscape. The Mississippi River, for example, erodes and moves 436,000 tons of of erosion? sediment every single day. All the materials that the chemical a river or stream carries is called the river's or B breakdown of rocks D stream's the physical breakdown of rocks A discharge the removal of smaller **B** load rock particles **C** gradient D all of the above **D** drainage It is possible for a dramatic tectonic event to uplift a The river pictured here erodes its channel 3 portion of the earth's crust on which mature rivers wider rather than deeper and does not have a had previously run, thus suddenly increasing the steep gradient. This river is described as a river's gradient. The river begins to cut more river. deeply into the uplifted sediments, making this B now a(n) river. A youthful **B** mature A youthful suspended **B** mature load C old **D** rejuvenated **D** rejuvenated A meandering river winds over the landscape as Gold prospectors pan for gold on the inside bank 5 6 seen in this picture. Rock and soil (called alluvium) of a meander in a mature river is eroded on the outside of the meander and is because the river deposited on the inside of the meander. The meandering river erodes alluvium on the outside of runs faster on the inside the meander, and deposits it on the inside of the bank pushing the gold into the sediments B meander because water flows slower on the runs slower on the inside outside of the meander. bank, so the gold falls out of suspension True or false? is shallower and safer on the inside bank B false D here is called the cut bank A true When moving water from a river empties into a When moving water transports sediments from a mountainous or hilly area into a flat, low-lying standing body of water like the ocean, the sediments plain, the water suddenly slows down and the fall out of suspension and are deposited. The result is a triangular-shaped deposit known as a sediment is deposited in a triangular-shaped formation. Geologists delta. Why do the sediments fall out of suspension? call this triangular the water loses energy formation a(n) and slows down the water gains energy A delta and moves faster B flood plain ocean water is colder C alluvial fan ocean water is warmer meander Beaches are large deposits of grains that have In oceans, lakes, or rivers, 10 been eroded from rock for what scientists believe sediment deposition to be millions of years. The **type** of sand, such as can form the familiar tan-colored quartz sand, on a beach depends on A beaches and D sea arches how long waves have sea caves and weathered the rock wave-cut terraces how much energy the waves exert on a rock sandbars and the latitude of the beach

the source rock of the sand

D sea cliffs and beaches