



Rock Stories told by each picture, with credits for photos

<p>1. Among jagged mountains that are wearing away rapidly, a river carries so much gravel that it takes the form of a “braided stream”. As the gravel is rolled in the stream, the pebbles become rounded. Later, after burial, these gravel deposits are cemented together naturally to make a rock. (photo from Argentina: Rachel Bar-enblatt - http://www.flickr.com/photos/rbarenblatt/3399894675/)</p>	<p>2. A volcano shoots a mixture of lava and gases hundreds of feet into the air. As the lava cools and falls close by the volcanic vent, it forms a “cinder cone” of rocks that have the bubbles intact and no crystals visible to the unaided eye. (photo of Hawaii volcano: US Geological Survey)</p>
<p>3. A marsh near the seashore receives muddy waters from nearby rivers that is spread into quiet waters of the marsh by rising and falling tides. Later, the mud is buried and compacted into the rock called shale. Still later, the shale is caught up in a collision of tectonic plates. Dragged deep underground, it is changed by heat and pressure. (photo from England: http://www.flickr.com/photos/earthwatcher/306385200/)</p>	<p>4. A volcano explodes and sends a mixture of hot gases and rock fragments hurtling down the slope. The jagged fragments include pieces of volcanic glass and other materials. As these materials settle, the intense heat helps to weld the particles together. (photo of Mt. St. Helens: US Geological Survey)</p>
<p>5. Piling up like toothpaste from a tube, thick lava builds up a dome in the crater left by a volcano’s previous eruption. The silica-rich magma cools almost instantaneously as it is exposed to air, leaving no time for even microscopic crystals to form, and making a glassy material. (photo of Mt. St. Helens: US Geological Survey)</p>	<p>6. Propelled by gigantic but slow earth movements called plate tectonics, two continents jam together and form some of the highest mountains on earth. Ten miles below the surface, friction between the continents melts the rock into magma, but the magma becomes trapped underground, slowly growing big crystals as it cools over thousands of years.(photo of Mt. Everest: Lance Trumbull www.EverestPeaceProject.org)</p>
<p>7. A river has been transporting sand from eroding hills into flat country. Where the river’s current is less, sand drops from the water, especially along the inside of meandering bends. Later the sand is buried and the grains are bonded together by natural cement. (photo: http://www.flickr.com/photos/zeesstof/132674663/in/set-72057594113517055/)</p>	<p>8. In clear tropical waters, far from any source of sand or mud, flowerlike animals called crinoids thrive. The cylinder-shaped sections of stem are made of hard minerals and stay behind to make rock, naturally cemented together after the animal dies. (photo of Fernbank Museum of Natural History diorama: Bill Witherspoon)</p>