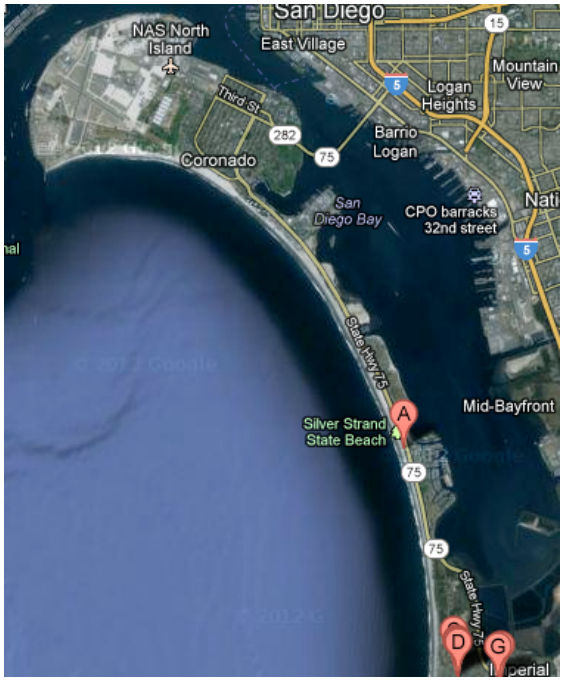
6th Grade Chapter 3 Study Guide



Changing Earth's Surface

The process by which natural forces move weathered rock and soil from one place to another is called erosion.

Landslides, mudflows, slump, and creep are all examples of mass movement.

Mass movement is caused by gravity.

Particles of clay and silt eroded and deposited by the wind are called loess.

The process that lays down sediment in a new location is deposition.

Creep is very slow movement of sediment down a slope.

The stronger the wind, the larger the particles it erodes.

Water Erosion

Water erosion begins when runoff from rainfall flows in a thin layer over the land in a kind of erosion called sheet erosion.

Where a river flows from an area of harder rock to an area of softer rock, the softer rock may wear away, eventually forming a drop called a waterfall.

Deltas are built up by deposition.

As more water flows through a river, its speed will increase.

A fast-flowing river would be most likely to lift sand-sized particles of sediment and carry them downstream.

The Mojave Desert's desert pavement was created through the process known as deflation. (See photo on right.)

During sheet erosion, runoff forms tiny groves in the soil called rills.

An alluvial fan may form where a stream flows out of a narrow mountain valley, slows down, and deposits sediment.

As a river's slope increases, the power of the river to cause erosion usually increases. As a river's slope decreases, the power of the river to cause erosion usually decreases.

A gully is full of water only after a rainstorm.

Waves and Wind

The energy that produces ocean waves comes from wind blowing across the water's surface.

As the energy of a wave moves through the water, the water particles move up and down, but do not move forward.

If waves erode the soft rock along the base of a steep coast, the result may eventually be a landform called a wave-cut cliff.

The Silver Strand Beach in California is an example of a barrier beach. (See picture.)

Glaciers

Continental glaciers are much larger and thicker than valley glaciers.

The process in which rock fragments freeze to the bottom of a glacier and then are carried away when the glacier moves is called plucking.

A U-shaped valley is evidence that a glacier once covered an area.

A ridge of till located at the farthest point reached by a glacier is called a terminal moraine.

A small depression that forms when a chunk of ice is left in glacial till is known as a kettle.

A continental glacier spreads out over a large island or continent.

Once the depth of snow and ice reaches more than 30 to 40 meters, the force of gravity begins to pull a glacier downhill.

In a process called abrasion, the rocks dragged by glaciers produce grooves and scratches in bedrock.

Many of the highest peaks in the Sierra Nevadas contain small valley glaciers.