

Notes – Weathering and Erosion Video

- 1. What are the three major processes that wear down the Earth's surface?** *The two processes that actually wear down rock into soil are chemical weathering and physical weathering. Erosion is the process of moving that weathered rock to new locations.*
- 2. What are four examples of physical weathering?** *Physical or mechanical weathering is the process by which rock is physically broken down into small pieces. Abrasion is the grinding away of rock by rock particles carried by wind, water, ice or gravity. Ice wedging is the process of liquid water entering small cracks in rock and then freezing and expanding, thus splitting the rock. Plant growth by tree roots into small rock cracks wedges the rock apart. Animal burrows in the ground break up the soil and allows continued weathering of the rock mixed in the soil. Pressure release in recently uncovered rock causes the outer layers of rock to flake off.*
- 3. What are three examples of chemical weathering?** *Chemical weathering is the process of breaking down rock through chemical changes. The agents of chemical weathering include oxygen, water, carbon dioxide, living organisms and acid rain.*
- 4. What are the four natural forces of erosion?** *The four natural forces of erosion are water, wind, ice (glaciers) and gravity.*
- 5. What is the most powerful force of erosion?** *Water is the most powerful force of erosion.*
- 6. What U.S. landform, created by weathering and erosion, is considered to be one of the seven natural wonders of the world?** *The Grand Canyon, in Northern Arizona, is a canyon carved by the Colorado River. It is up to one mile deep, over 200 miles long, and up to 10 miles wide.*
- 7. What causes erosion along coastlines?** *Waves pick up small sand and rock particles as they crash onto a rocky coastline, and wear away at the rock face through abrasion. As the rock is weathered, it collects as sand beaches, which is distributed along the coast by ocean currents.*
- 8. What caused Yosemite Valley to form?** *The Yosemite Valley in California was created during the last ice age by an advancing glacier. It has the classic shape of a glacial-carved valley, with nearly vertical sides up to 3000' deep, and a nearly flat valley floor.*
- 9. What is "mass wasting"?** *Mass wasting is a kind of erosion where rock and soil slide down steep hill and mountain sides, due to the pull of gravity and flow of water.*
- 10. How do humans cause erosion?** *Humans cause erosion through activities that kill or disturb the surface vegetation that holds soil in place, and by breaking up rock in mining and construction activity.*