

**Note-taking  
Worksheet**

# Weathering and Erosion

## Section 1 Weathering and Soil Formation

- A. Natural process that causes rocks to break down is called \_\_\_\_\_.
- B. \_\_\_\_\_—breaks rocks into smaller pieces without changing them chemically
- \_\_\_\_\_ is the freezing and thawing cycle that breaks rocks apart.
  - Plant \_\_\_\_\_ and burrowing \_\_\_\_\_ exert pressure on rocks.
- C. When the chemical composition of rock changes, \_\_\_\_\_ has occurred.
- \_\_\_\_\_, from water and carbon dioxide, reacts chemically with many rocks.
  - \_\_\_\_\_, formed from a plant's release of tannin, dissolves some rock minerals.
  - Oxygen can cause rocks containing iron to rust in the process of \_\_\_\_\_.
- D. \_\_\_\_\_—mixture of weathered rock, organic matter, water, and air that supports the growth of plant life
- The \_\_\_\_\_ affects what kind of soil develops.
  - \_\_\_\_\_ influences soil development.
  - The \_\_\_\_\_ in tropical regions increases the rate of weathering forming soil more quickly than in deserts.
  - Rocks take \_\_\_\_\_, perhaps thousands of years, to weather into soil.
  - \_\_\_\_\_ affect soil development.

**Note-taking Worksheet** (continued)**Section 2 Erosion of Earth's Surface**

- A. \_\_\_\_\_—wearing away and removal of rock; occurs because of gravity, ice, wind, and water
- B. \_\_\_\_\_—gravity pulls rock or sediment down slopes.
- \_\_\_\_\_—sediments move downhill slowly.
  - \_\_\_\_\_—rock or sediment moves downhill along a curved slope.
  - Rock layers break loose and slide downhill in a \_\_\_\_\_.
  - \_\_\_\_\_—mass of wet sediment that flows downhill over the ground surface
- C. \_\_\_\_\_ forms continental and valley glaciers.
- \_\_\_\_\_ can occur as glaciers remove loose pieces of rock or as dragged rock scratches rock underneath the glacier.
  - Glaciers can form \_\_\_\_\_ and steep peaks in mountains, create lakes, or totally remove rock from the surface.
  - Glaciers deposit \_\_\_\_\_.
    - \_\_\_\_\_, a mixture of different sized particles ranging from clay to boulders, is deposited directly from the bottom of a glacier.
    - \_\_\_\_\_ includes sand and gravel deposits moved by rivers from melting glaciers.
- D. Wind—blows small particles from Earth's surface in a process called \_\_\_\_\_
- \_\_\_\_\_ forms pits in rocks or polishes surfaces smooth as sediments are blown by strong winds.
  - \_\_\_\_\_ can form as the wind is slowed as it blows around irregular features such as rock or vegetation and deposits the sediment it carried.
  - \_\_\_\_\_, or fine silt, often collects downwind of large deserts or near glacial streams.

**Note-taking Worksheet** (continued)

- E. \_\_\_\_\_—water flowing on Earth’s surface causes erosion.
1. \_\_\_\_\_—when water flows downhill as a thin sheet often carrying loose sediment grains
  2. \_\_\_\_\_ and gullies are channels cut into Earth’s surface and are formed as runoff carries sediments along.
  3. Streams have water flowing through them \_\_\_\_\_; they eventually flow into the ocean or a large lake.
  4. \_\_\_\_\_ water in streams is the most important agent of erosion; streams shape more of Earth’s surface than ice, wind, or gravity.