

Erosion

—

Topic 3

Erosion

- Erosion is the movement of rock and mineral grains from one place to another
- This sediment is created through the breaking down of larger rocks, called **weathering**
- Rocks can be weathered mechanically, chemically or biologically



Mechanical Weathering

- Mechanical weathering is the physical break down of rocks
- Rocks falling down a slope, or bumping into other rocks in a stream are examples of mechanical weathering
- Temperature change can also cause mechanical weathering, through a process called frost wedging
- https://www.youtube.com/watch?v=_XnCTcjNpuc



Chemical And Biological Weathering

- Chemical weathering breaks down minerals through chemical reactions
- Rocks may react with water, gases in the air or chemicals dissolved in the rain
- Biological Weathering is the physical or chemical weathering of rock caused by living things
- The roots of a plant, or animal waste can break down rocks



How did these rocks get here?

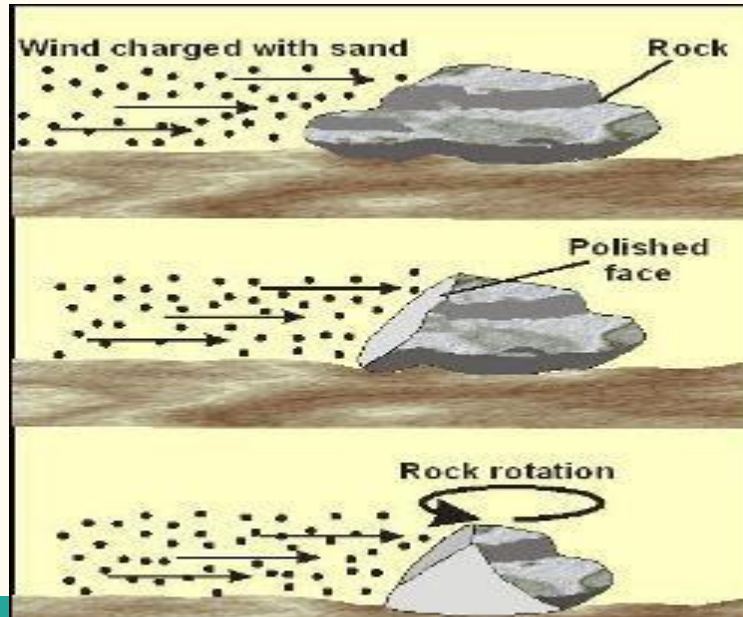


The Changing Surface

- Glaciers, wind, gravity and water are all able to erode rocks
- Many of these changes are small, and happen over thousands of years
- The melting and freezing of glaciers can create channels and move very large rocks



- Wind can erode rocks through abrasion
- The wind can carry small sand or silt particles
- These particles will hit other rocks and slowly break them down



Water in Motion

- Water is one of the most powerful causes of erosion
- Rocks that fall into streams will get tossed around and bump into other rocks
- Oceans, seas and lakes will also erode their coastlines, sometimes up to several meters a year

Questions

Page 380

1-3