Geology 100 Notes on Planet Earth version 3.0

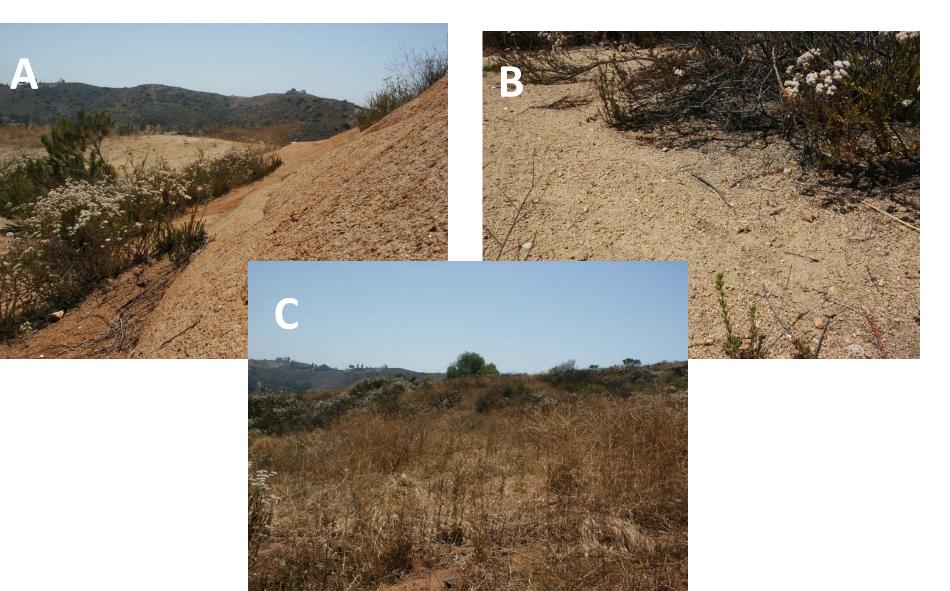
Review - Exam 2 Chapter 4

Chapter 4 - Weathering

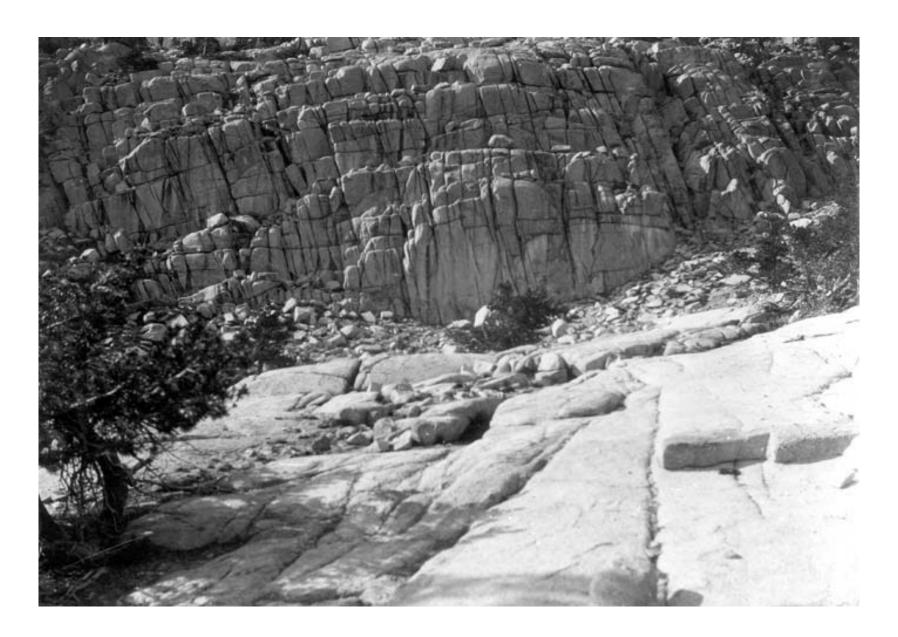




Do you understand the significance of the following images?



What are these?



When it settles into a crack and freezes, it expands, wedging or forcing the rock apart. If this happens often, then this process can break rocks into smaller and smaller pieces

As particles transported by wind, water, or ice impact or rub against each other or solid rock, they fragment and break into smaller and smaller pieces.

- Jointing
- Root growth
- Abrasion
- Ice wedging
- Formation of hematite
- Dissolution of calcite
- Oxidation of iron during weathering of biotite

What is this mineral?





Streak

$$4Fe^{++} + 3O_2 = 2Fe_2O_3$$

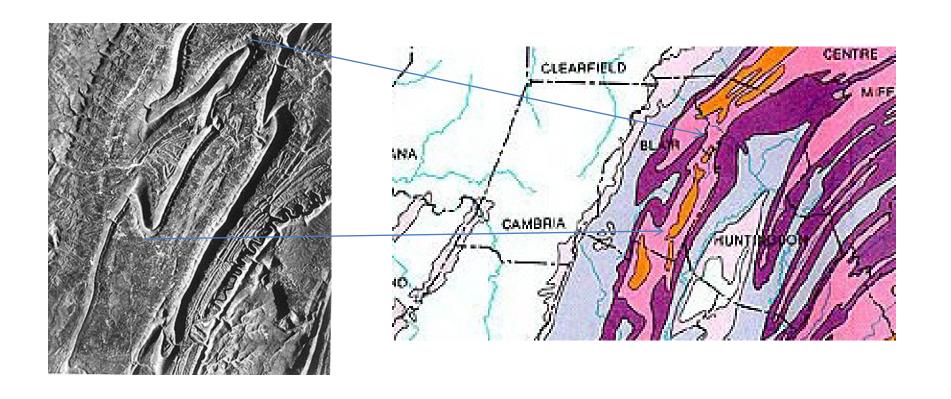
What does the above chemical equation describe?

$$CO_2 + H_2O = H_2CO_3$$

- Can you identify the chemical constituents in the above equation?
- Why is this reaction important?

$$CaCO_3 + H_2CO_3 = Ca^{++} + 2HCO_3^{-}$$

- Can you identify the chemical constituents in the above chemical equation?
- What does the above equation describe?



Blue = limestone Purple = quartzite