

Chapter 2 Review #1-22, 24-26

1. b = metamorphic rock
2. c = ice wedging
3. b = loam
4. a = subsoil
5. d = decomposers
6. Minerals and rocks are considered nonrenewable resources, which means it takes a very long **time** for them to form and they cannot be **replaced** when they are used up.
7. One-way rock breaks down is through mechanical weathering, which is any physical process that breaks down rocks.
8. Rock that is **permeable** weathers easily because the rock has a lot of open spaces into which water can seep.
9. Fertile soil is rich in **humus**, which is material that makes soil fertile because it contains organic decomposed matter such as litter and dead animals.
10. In conservation plowing, farmers conserve soil fertility by disturbing the soil and its plant cover as little as possible.
11. A crystal is a solid made of particles that form a repeating pattern.
12. Both granite and basalt are igneous rocks that form when molten material cools and hardens. Granite has large mineral grains because the material from which it forms cools slowly deep within earth. Basalt has very small mineral grains because the molten material from which it forms cools very quickly at Earth's surface.
13. **Mining**: Strip mines expose soil, which can lead to erosion. Plants may not be able to grow in strip-mined areas for years. **Smelting**: releases harmful substances into the air and water.
14. The principle of uniformitarianism states that the same processes that operate today operated in the past.

15. Plants are an agent of mechanical weathering when their roots pry open cracks in rock. Plants are an agent of chemical weathering when their roots produce weak acids that slowly dissolve rock.
16. Oxygen combines with iron in a process called oxidation, which results in rust. Carbon dioxide dissolves in water to form carbonic acid, which weathers rock.