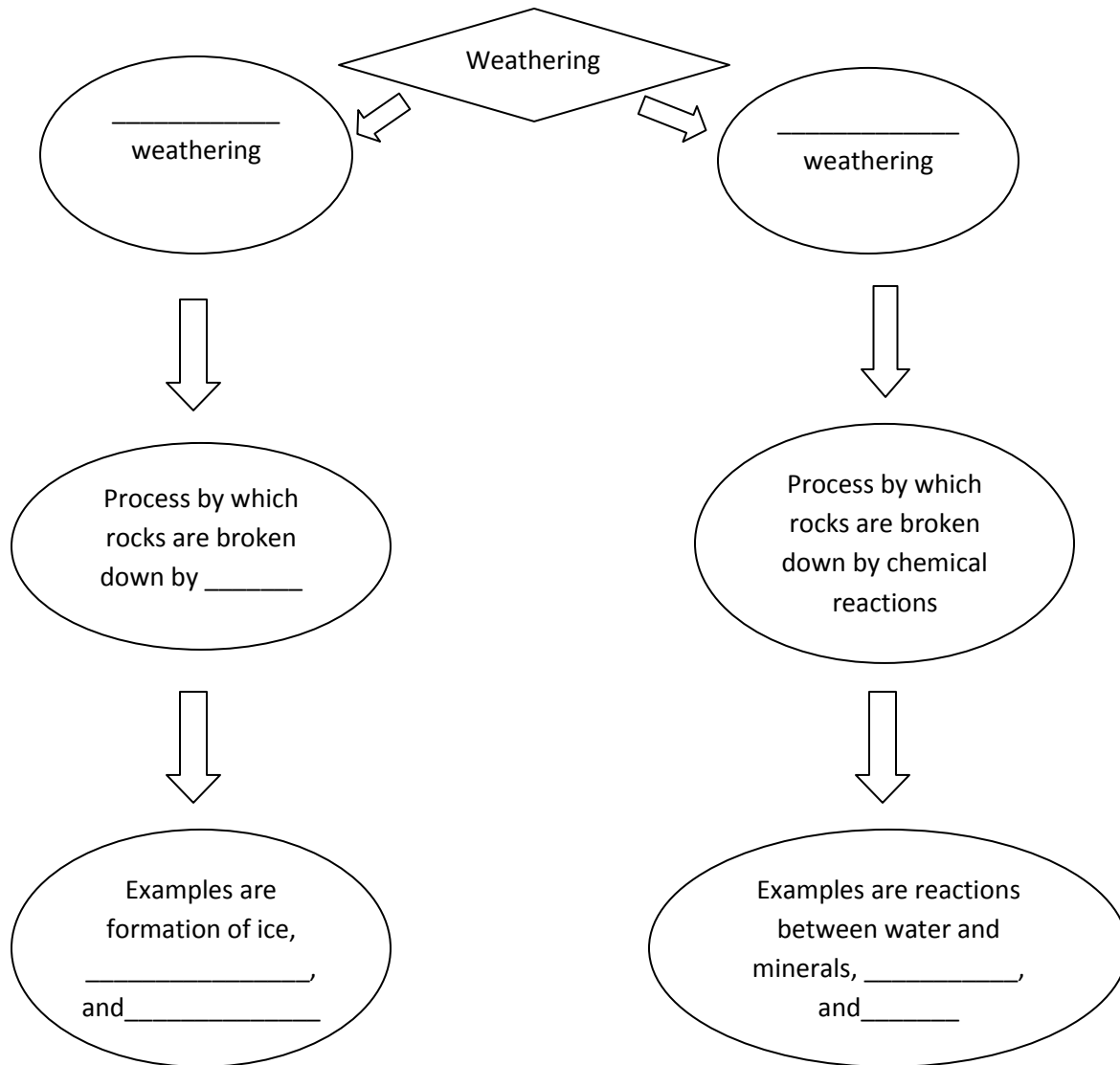


Chapter 23 Section 1 Guided Reading

1. Weathering is the process of breaking down rocks and minerals in place. Name several types of weathering.
2. Bits of material that has been broken down by weather processes are called \_\_\_\_\_.
3. There are four ways sediments may be moved through erosion. Name the four processes.
4. Complete the web diagram below.



5. Soil quality depends on the
  - a) geography
  - b) parent material
  - c) plant material

6. Frost wedging occurs when
- Salt crystals grow in a coastal environment
  - Animals dig into soil, or underground
  - Water fills cracks in rocks and the temperature drops to 0° C
7. Salt crystals cause weathering because their formation and \_\_\_\_\_ within pores or cracks in rocks causes them to weather.
8. \_\_\_\_\_ is a process of mechanical weathering that occurs when rocks are heated and cooled repeatedly and ends up cracking on the outermost layer due to the high temperature.
9. The process known as \_\_\_\_\_ is caused by pressure differences that cause expansion of the rock leading to cracking.
10. Describe at least 3 types of biological weathering.
11. How does acid rain cause weathering?
12. Oxygen combines with \_\_\_\_\_ to cause a change in the minerals.
13. Both forms of \_\_\_\_\_ act together to affect rocks.
14. Name 4 main factors that affect the rate at which weathering occurs.
15. Chemical weathering is slowest in \_\_\_\_\_, \_\_\_\_\_ climates.
- Wet, cold
  - Dry, cold
  - Dry, warm
16. The (*greater, less*) surface area of a rock or mineral compared to its volume, the (*faster, slower*) it will weather.
17. Weathering is a (*positive, negative*) process because it releases important minerals into the soil that plants, animals, and ultimately humans use.
18. How do water and wind move sediments?
19. \_\_\_\_\_ is a form of erosion that involves downhill movement of large amounts of rock and sediment due to gravity.
20. Match each process of erosion with the correct name.

Landslides	a large amount of rock and sediment mixed with water flows downhill
Rockfalls	a large mass of soil or rock slides down a steep slope
Mudflow	weathering breaks rock of an outcrop
Slumping	loose soil becomes wet and slides or slumps