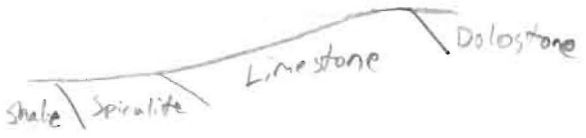
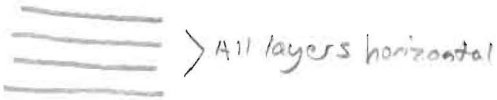
1. **Weathering:** The erosion of rocks by physical or chemical means.
    a. E.g. rain, wind, ice
2. **Clastic/Detrital:** Sedimentary rocks composed of small rock fragments cemented together.
    a. E.g. sandstone, conglomerate, siltstone
3. **Clay:** The smallest class of sediment grain size, measuring 2 microns or smaller.
4. **Sorting:** The grain size variation in a specific sample.
5. **Biochemical Sedimentary:** Sedimentary rocks comprised of biological matter, like seashells.
    a. E.g. coquina
6. **Chemical Sedimentary Rocks:** Sedimentary rocks comprised of precipitates, like calcite.
    a. E.g. limestone, halite
7. **Conglomerate vs. Breccia:** Conglomerates are comprised of rounded rock fragments, breccias are comprised of angular rock fragments. Both contain a significant matrix with rock fragments much larger than the matrix.
8. **Shale:** A sedimentary rock comprised of laminated layers of mud.
9. **Arkose:** A form of sandstone comprised mostly of quartz and potassium feldspar and usually has a red or pink color.
10. **Gray Wacke:** A form of sandstone that contains lots of feldspar and rock fragments and is usually coarse-grained and gray colored.
11. **Limestone:** A sedimentary rock of a dominantly calcium carbonate composition.
12. **Dolostone:** A sedimentary rock comprised mostly of the mineral dolomite.
13. **Coal:** A sedimentary rock formed from decomposing biological material in an anoxic environment.
14. **Chert:** A silica-rich rock comprised mostly of cryptocrystalline quartz.
15. **Sedimentary Structures:** Features in sedimentary rock created during deposition.
    a. E.g. ripples, cross-bedding
16. **Lithofacies-Biofacies:** An environment where factors relating to sediment deposition are all the same. Biofacies are similar but refer to areas with the same fossil record.
    a. E.g. a point bar vs. a river channel
17. **Bed vs. Lamina:** A lamination is a layer of congruent sediment that is 2 cm or thinner, while a bed is any sediment layer thicker than 2 cm.

18. **Paleocurrent Indicators:** Anything that can be used to determine the flow of fluids in the past.
    a. E.g. cross-bedding, flute casts, imbrication
19. **Fluvial:** Of, or pertaining to, a river.
20. **Lacustrine:** Of, or pertaining to, a lake.
21. **Carbonate Ramp:** A sloped layer of carbonaceous material usually deposited on the shore and extending out beyond the continental shelf

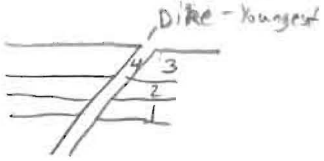


22. **Carbonate Compensation Depth:** The depth at which calcium carbonate is no longer able to keep up with the rate at which it dissolves, leading to an environment with no carbonate deposition.
23. **Stratigraphy:** The layering, and relationship, of sediment beds in cross-section.
    a. E.g. unconformities, faults, Walther's law
24. **Law of Original Horizontality:** Rock layers are originally deposited continuously in a horizontal fashion.



25. **Law of Uniformitarianism:** Geologic processes that are observable in the present occurred the same way in the past.
26. **Law of Superposition:** The rock layer on top is younger than the rock layer directly below it.

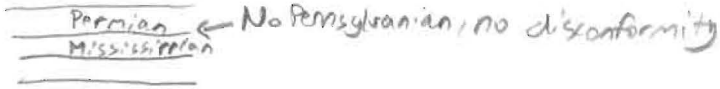
27. **Law of Cross-Cutting Relations:** A feature cutting through a rock layer is younger than the rock layer it is cutting through.



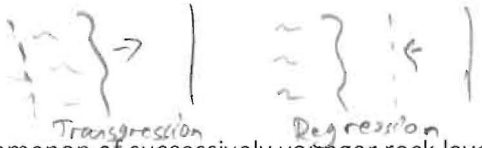
28. **Law of Lateral Continuity:** A rock layer's deposition will be laterally continuous within its facies.
    a. If a layer is seen on one side of a basin, it will be present at the same level on the other side unless alteration of the terrain has occurred, like faulting.
29. **Law of Floral and Faunal Succession:** If a fossil is present in the rock layer, their ages must correspond with each other.
30. **Walthers Law:** A rock layer adjacent to another in cross-section will also be adjacent on the surface.
    a. If a sandstone layer rests upon a mudstone layer, they will be observable next to each other on the surface.
31. **Paleozoic-Mesozoic-Cenozoic:** Time eras divided by major changes in history.
    a. Paleozoic – 570-230 Mya (Fish, insects, reptiles)
    b. Mesozoic – 230-65 Mya (Flowers, dinosaurs and their extinction)
    c. Cenozoic – 65 Mya-Present (Mammals)
32. **Lithostratigraphy-Chronostratigraphy-Biostratigraphy:** The division of rock layers by composition, time, or fossils.
    a. Lithostratigraphy includes looking at defined breaks in a rock strata, if by color, composition, or other physical features.
    b. Chronostratigraphy includes looking for evidence of time passed, by unconformities, soil horizons, erosion, or other indicators of a time progression.
    c. Biostratigraphy includes looking at time passed by observing the fossils present in a layer and the progression of a species as you move through the stratigraphy.

33. **Index Fossils**: Fossils in large abundance that can be found in the entire region that they once lived in over a relatively short period of time.
    a. E.g. ammonites went through quick evolutionary changes, making fossils from adjacent time periods easy to discern.
34. **Unconformity:** A break in the rock record.
    a. E.g. angular unconformities show rotation of layers and a period of erosion, disconformities show a break in deposition but no rotation, nonconformities show enough erosion to bring the rock strata close to a lithified igneous body
35. **Interfingering Strata:** A lateral change in the rock strata where two layers are interlocked with each other.

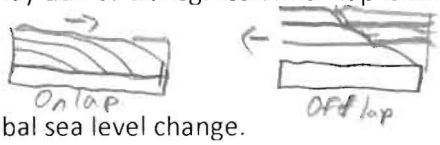
36. **Diastem:** A break in the deposition of sediment.
37. **Lacuna:** A missing part in the rock record.
38. **Paraconformity:** A known gap in the rock record with no record of a disconformity due to the remaining layers looking conformable.



39. **Trangression-Regression:** The trend of seawater moving up or falling back along the coastline .



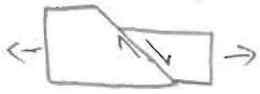
40. **Onlap-Offlap:** The phenomenon of successively younger rock layers progressing up an older eroded rock lay due to transgression. Offlap is the opposite.



41. **Eustacy:** Global sea level change.
42. **Rift Basin:** A basin caused by a spreading center due to extensional forces.

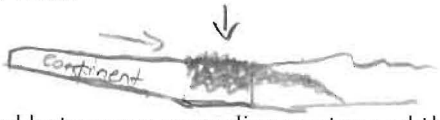
43. **Strike-Slip Basin:** A basin caused by multiple strike-slip faults leading to an overall extensional event.

44. **Normal Fault:** A fault caused by extension, where the hanging wall drops below the footwall.



45. **Reverse Fault:** A fault caused by compression, where the hanging wall rises above the footwall.

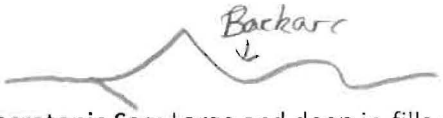
46. **Isostatic Subsidence:** The sinking of a part of a plate due to the loading of sediment in one region, like at the mouth of a river.



47. **Forearc Basin:** A basin located between a spreading center and the related volcanic arc.

48. **Foreland Basin:** A basin created behind the volcanic arc that is due to flexure from two plates colliding.

49. **Backarc Basin:** A basin located between the foreland and volcanic arc where sediments collect at the base of the volcano.



50. **Intracratonic Sag:** Large and deep in-fills on the craton filled with Paleozoic continental and shallow marine deposits, with large gaps between depositional events. It seems that these have relations to passive-margin geologic activity.

51. **Aulacogen:** A failed third arm of a continental rift.