

CHAPTER 02

A list of bullet points with important information is given to help you learn the subject matter of this chapter.

1. Chromite layers form in large basaltic intrusions.
2. Precious- and base-metal vein deposits generally form from hydrothermal fluids.
3. The gold found in placer deposits are grains weathered out of pre-existing deposits and washed down the streams.
4. The principal mineral constituted of mid-latitude beaches along the coasts of most continents is quartz.
5. The reefs and beach sands, such as the Bahamas, forming in tropical seas are composed nearly entirely of calcite.
6. The principal mineral deposited when sea water evaporates is halite.
7. Marbles form as a result of the metamorphism of limestone.
8. The fossil fuels (coal, oil, natural gas) form where organic matter is trapped in sediments.
9. Deep tropical weathering of rocks and soils has led to the formation of the major ores of aluminum.
10. The quartz sand that forms most middle latitude beaches is composed of grains weathered out of rocks on the continents.
11. Most ground water that can be extracted from wells has seeped into the ground from rain water.
12. Modern day "black smokers" are essentially the precursors, of what we now see as volcanogenic massive sulfide deposits.
13. Regional metamorphism of mudstones and shales generally results in the formation of slates.
14. Contact metamorphic ore deposits generally form best where intrusions cut across limestones.
15. Coal beds form as the result of the burial of terrestrial organic matter.
16. Petroleum forms the burial of marine organic matter.
17. Large metal-bearing porphyry deposits typically form at subducting plate boundaries.
18. Fluid inclusions (1) are droplets of fluids trapped in minerals; and (2) can often yield information about the conditions under which they form.
19. Pegmatites generally form in granitic intrusions.
20. Large bedded phosphate deposits form on shallow continental shelves.
21. Gossans form as a result of the weathering of sulfide minerals and are useful as exploration guides for ore deposits.
22. The principal source of the heat in the Earth's interior is radioactive decay..
23. Salt domes may rise from thick salt beds and then migrate up through sediments because the salt has a lower density than the overlying sediments.
24. Fluid inclusions have proven to be especially useful in the study of mineral resources because they can provide information about the solutions from which the minerals formed.
25. Black smokers form most often at spreading plate boundaries.
26. Large porphyritic intrusions, rich in copper and gold have formed at plate subduction zones.
27. Placer accumulation has served to be an important means of forming reserves of gold.
28. The thick salt beds that occur under parts of the Gulf Coastal region of the

- United States formed as the result of evaporation of sea water.
29. Halite forms from evaporation of sea water
 30. Marble forms from the metamorphism of common marine sediments (limestone).
 31. Chromium originates from the crystallization of large basaltic intrusions.
 32. Bauxite from intense tropical weathering and leaching.
 33. Gold forms from hot water flowing outward from granites.
 34. Coal originates from the accumulation and burial of land plants.
 35. Sand weather and erosion of average rocks.