EARTH SCIENCE

SESSION 3: ROCKS

1. What are the three major rock typses?
2. What are rocks made of?
3. Igneous rocks formed from solidifying hot molten rock (magma.
4. Sedimentary rocks on the surface of the earth from weathering, transport and deposition or precipitation of earth materials.
5. Metamorphic rocks are the result of chemical and physical changes to pre-existing rocks through the agents of pressure, temperature, fluid migration and other factors.
6. What is rock texture?
7. What is rock composition?
8. Explain the rock cycle
9. Differentiate between extrusive and intrusive magmas
10. How do extrusive rocks differ from intrusive rocks in terms of location of formation, visibility of crystals, and grain size?
11. How does silica content change between felsic, intermediate and mafic igneous rocks?
12. What percentage of the earth’s surface are sedimentary rocks?
13. Process involved in sedimentary rock formation include
14. Erosion
15. Transportation by wind, water or ice
16. Deposition
17. Lithification
18. Compaction
19. Cementation
20. Describe clastic, chemical and biogenic sediments
21. Gravel lithifies to become conglomerate
22. Sand lithifies to become sandstone
23. Silt lithifies to become siltstone
24. Clay lithifies to become shale
25. Evaporites form from chemical precipitation: example salt
26. Gypsum, Halite and Limestone are chemical precipitates
27. Limestone is precipitated through biological action
28. Sediments form layers
29. Layers for strata
30. Boundaries between strata are bedding surfaces
31. Bioclastic sediments are fossil limestone, coquina and chalk
32. Metamorphic rocks are formed not by melting but by solid state transformation
33. Two types of metamorphism are contact and regional
34. Distinguish between high and low pressure metamorphism
35. Describe convection, conduction, condensation and condominium
36. What is the geothermal gradient?
37. How does pressure increase with depth?