

Part 1.

1. Modern geology is said to begin in _____ with Scots geologist _____.
2. He is famous for his doctrine of _____.
3. In your own words, explain Hutton's doctrine.

Part 2.

4. Describe the three types of rocks.

Part 3.

5. Hot magma which pours out of the crust in a volcanic eruption is called _____.
6. Igneous rock which doesn't reach the surface, but instead is trapped in cracks between other rock is called _____. Another term for this rock is _____.
7. Volcanic rocks are similar to _____ rocks, but they lack distinct _____.

Part 4.

8. Magma is a hot _____ of _____.
9. There are two types of magma, differing in _____ composition.
10. One of the most frequently occurring type of magma is called _____ because of the

high percentage of _____. It is _____ moving, and forms _____ coloured rock when it cools.

11. The second type of frequently occurring lava is _____ moving, is called _____ because of the high percentage of _____, and cools to _____ coloured rock.

Part 5.

12. Describe the three main sources of sedimentary rock.

Part 6.

13. Describe the process of clastic rock formation.

Part 7.

14. Describe the process of sediment sorting.

Part 8.

15. Describe the differences between *conglomerate*, *sandstone*, and *shale*.

Part 9.

16. Describe the process of chemical sedimentation.

Part 10.

17. Describe how organic sedimentary rocks are formed.

Part 11.

18. What is stratification?

19. The layers in stratified rock are separated by _____.

Part 12.

20. What are fossils?

Part 13.

21. Describe how ripple marks and mud cracks develop.

Part 14.

22. Rock which is neither igneous nor sedimentary is called _____.

23. Define *metamorphism*.

Part 15.

24. Describe what *dynamic metamorphism* is.

Part 16.

25. Describe *thermal metamorphism*.

Part 17.

26. In the space below, draw and label the rock cycle.