

Name: _____ Date: _____ Period: _____

Igneous Rocks Worksheet

Use your Earth Science Reference Tables, to answer the following questions.

1. Name four felsic igneous rocks.

2. Name four mafic igneous rocks. _____
3. Name a plutonic, mafic igneous rock. _____
4. Which igneous rock cooled slowly under ground and contains mostly quartz and potassium feldspar?

5. As igneous rocks become more mafic, they also become (color) _____
6. As igneous rocks become more felsic, they also become (density) _____
7. Which igneous rock is fine-grained and has a lot of pyroxene? _____
8. Name a coarse-grained igneous rock composed mainly of olivine. _____
9. Name an intrusive, dense and dark-colored igneous rock.

10. Igneous rocks are classified mainly by their

11. One can determine where an igneous rock formed by observing the _____
12. What is the texture of granite? _____
13. What is the grain size of granite?

14. Is granite intrusive or extrusive?

15. Plutonic is also referred to as (intrusive) (extrusive).
16. Estimate the percentage of each mineral in gabbro (look the first "b" in gabbro).

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Olivine _____%

Pyroxene _____%

Plagioclase feldspar _____%

Biotite mica _____%

Amphiboles (hornblende) _____%

17. List the minerals present in andesite.

18. What is the texture of granite? _____

19. Name a fine-grained igneous rock with no pyroxene. _____

20. Name a coarse-grained igneous rock with no pyroxene. _____

21. Which mineral is present in much greater quantities in peridotite than in gabbro?

22. What is the difference between an igneous rock with a glassy texture and a fine texture? What causes this? _____

23. Compare rhyolite to basalt (answer in one word only):

Which has a lower density? _____

Which has a lighter color? _____

Which has a more mafic composition? _____

Which has a greater percentage of biotite in it? _____

Which contains Quartz? _____

24. Name a felsic, intrusive rock.

25. Name a light-colored, plutonic igneous rock.

26. Felsic igneous rocks generally have a _____ color.

27. Mafic igneous rocks generally have a _____ density.

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28. Intrusive igneous rocks have (large) (small) mineral crystals because of (fast) (slow) cooling.

Use your Earth Science Reference Tables to fill in the blank spaces in the table.

Rock	Formed from...	Cooling rate	Crystal size	Texture
Rhyolite	Lava		Small	
Gabbro		Slow		Coarse
Basalt		Fast		Fine
Pumice	Lava		No crystals	
Obsidian		Very fast		Glassy
Granite	Magma		Large	