

ORIGIN OF IGNEOUS ROCKS

Match the rock names to the samples and to the conditions of formation.

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|--------------------------------|---|
| 1 Granite | A Very rapid cooling of lava followed by very slow crystallisation of patches |
| 2 Pegmatite | B Very rapid cooling of magma |
| 3 Tuff | C Explosive eruption but bubbles not broken |
| 4 Rhyolite | D Rapid cooling of lava with some exsolution and trapping of gas |
| 5 Microgranite | E Very slow cooling of basic magma underground |
| 6 Obsidian | F Very slow cooling of water rich magma |
| 7 Pumice | G Very explosive eruption |
| 8 Graphic granite acid | H Two periods of cooling, slow, then fast of magma |
| 9 Snow flake obsidian | I Rapid cooling of a lava flow |
| 10 Flow banded obsidian | J Moderately slow cooling underground |
| 11 Obsidian with vesicles with | K Very rapid cooling of a lava flow alignment of microcrystals |
| 12 Quartz porphyry | L Slow cooling of volatile magma at eutectic point |
| 13 Gabbro | M Rapid cooling as a lava flow of basic magma |
| 14 Dolerite | N Rapid cooling as lava flow with some trapped gas of basic magma |
| 15 Basalt | O Moderate rate of cooling as a dyke or sill |

