ANSWER KEY

GOL 106 Igneous Rocks Identification Worksheet

Determine the composition, texture, and cooling history to classify the following igneous rocks, and indicate whether the rock likely formed in a continental or oceanic setting.

Composition	Texture	Cooling	Rock Classification	Environment
1. Felsic	Phaneritic	Slow	Granite	Continental
2. Mafic	Phaneritic	Slow	Gabbro	Oceanic
3. Felsic	Aphanitic	Rapid	Rhyolite	Continental
4. Mafic	Aphanitic	Rapid	Basalt	Oceanic
5. Felsic to mafic	Glassy	Rapid	Obsidian	Oceanic
6. Intermediate	Phaneritic	Slow	Diorite	Continental
7. Intermediate	Aphanitic Porphyritic	Rapid Two-stage	Andesite	Continental
8. Felsic	Pegmatitic	Slow	Pegmatitic granite	Continental
9. Felsic to intermediate	Vesicular	Rapid	Pumice	Continental
10. Mafic	Vesicular	Rapid	Scoria	Oceanic
11. Mafic	Vesicular	Rapid	Vesicular basalt	Oceanic
12. Felsic to mafic	Pyroclastic	Rapid	Volcanic breccia	Continental

Composition	Texture	Cooling	Environment
Felsic Intermediate Mafic	Pegmatitic Phaneritic Porphyritic Aphanitic Glassy Vesicular Pyroclastic	Slow Rapid Two-stage	Continental (convergent plate boundary) Oceanic (divergent plate boundary/hot spot)