

ANSWER KEY

GOL 106 Metamorphic Rocks Identification Worksheet

Use texture, mineral composition, and other interesting properties to classify these metamorphic rocks and their protoliths.

Texture	Mineral Composition Other Properties	Rock Classification	Protolith
1. Foliated Fine-grained Slaty cleavage	Dull luster Slaty cleavage	Slate	Shale
2. Foliated Fine-grained	Shiny luster / sheen	Phyllite	Slate
3. Foliated Schistose Coarse-grained	Muscovite Sparkly or fish-scale look	(Muscovite) Schist	Phyllite
4. Foliated Gneissic banding Coarse-grained	Alternating light and dark layers	Gneiss	Schist
5. Non-foliated Coarse-grained Sandy texture	Light color Fused quartz grains "Sugary" appearance	Quartzite	Quartz sandstone
6. Non-foliated Coarse-grained	Fizzes on contact with HCl	Marble	Limestone
7. Non-foliated Fine-grained	Glossy Light Conchoidal fracture	Anthracite	Bituminous coal
8. Foliated Fine-grained	Dull luster Slaty cleavage	Slate	Shale
9. Foliated Fine-grained	Shiny luster	Phyllite	Slate
10. Foliated Schistose Coarse-grained	Muscovite Garnet Sparkly or fish-scale look	(Garnet mica) Schist	Phyllite
11. Foliated Schistose Coarse-grained	Biotite Sparkly or fish-scale look	(Biotite) Schist	Phyllite
12. Foliated Schistose Coarse-grained	Fine mica greens Garnet Shiny luster / sheen	(Garnet) Schist	Phyllite