

Goodman's classification of rocks

GROUPS OF ROCKS		Typical rocks
I Crystalline texture		
A.	Soluble carbonate rocks and salts	Limestone, dolomite, marble, rock salt, gypsum
B.	Schistose rocks	Mica schist, chlorite schist, talc schist, graphite schist
C.	Banded rocks	Gneiss (and amphibolite?)
D.	Homogenous, medium to coarse-grained rocks	Granite, diorite, gabbro, syenite
E.	Homogenous, fine-grained rocks	Basalt, rhyolite, other volcanic rocks
F.	Highly sheared rocks	Mylonite, some serpentinites
		Quartzite, greenstone
II Clastic texture		
A.	Stably cemented	Silica-cemented sandstones and limonite sandstones (and siltstones?)
B.	With slightly soluble cement	Calcite-cemented sandstone and conglomerate
C.	With highly soluble cement	Gypsum-cemented sandstones and conglomerates
D.	Incompletely or weakly cemented	Friable sandstone, tuff
E.	Uncemented	Clay-bound sandstones
III Very fine-grained rocks		
A.	Isotropic, hard rocks	Hornfels, some basalts
B.	Anisotropic on a macro scale, but microscopically isotropic hard rocks	Cemented shales, flagstones
C.	Microscopically anisotropic, hard rocks	Slate, phyllite
D.	Soft, soil-like rocks	Compaction shale, chalk, marl
IV Organic rocks		
A.	Soft coal	
B.	Hard coal	
C.	'Oil shale'	Lignite and bituminous coal
D.	Bituminous shale	
E.	Tar sand	

from Goodman R.E. (1989): Introduction to rock mechanics. John Wiley & Sons, New York, 561 pp.