



Rock type:	Igneous Rock
Formation Environment:	Underground deep under a continental volcano
Description:	100% visible, large, interlocking crystals -- Quartz, K-Feldspar, Muscovite, Biotite (light colored and low density)
Name:	Granite
Source of picture	K. Wiese



Rock type:	Igneous Rock
Formation Environment:	Surface eruption of an oceanic volcano
Description:	Most crystals too small to see -- Dark colored and high density
Name:	Basalt
Source of picture	K. Wiese



Rock type:	Metamorphic Rock
Formation Environment:	Hydrothermal metamorphism of mantle rock under a seafloor spreading center
Description:	Mottled green color -- Smooth, slick sides - - Looks like squished watermelon seeds --
Name:	Serpentine
Source of picture	K. Wiese



Rock type:	Chemically precipitated sedimentary rock
Formation Environment:	Deep ocean floor under areas of upwelling (surface waters cool and nutrient rich), where silica shells from dead diatoms and/or radiolarian collect.
Description:	Chemical (Smooth and glassy) -- 100% SiO ₂ composition (doesn't react with acid)
Name:	Chert
Source of picture	K. Wiese



Rock type:	Clastic sedimentary rock (rock fragments)
Formation Environment:	Deep ocean floor or outer continental shelf or near-shore stillwater lagoon
Description:	Mud-sized rock and mineral fragments
Name:	Mudstone
Source of picture	K. Wiese



Rock type:	Clastic sedimentary rock (rock fragments)
Formation Environment:	Inner continental shelf, beach, or submarine canyon – could be shore sand dunes
Description:	Sand-sized rock and mineral fragments -- Grains are mostly quartz
Name:	Quartz Sandstone
Source of picture	K. Wiese



Rock type:	Clastic sedimentary rock (rock fragments)
Formation Environment:	Inner continental shelf, beach, or submarine canyon – could be shore sand dunes
Description:	Sand-sized rock and mineral fragments -- Grains are mostly rock fragments
Name:	Graywacke sandstone
Source of picture	K. Wiese



Rock type:	Clastic sedimentary rock (rock fragments)
Formation Environment:	Base of rock avalanche, rock fall, or landslide. Or along fault zone. Area where rocks shatter and there's no water to smooth the rough edges.
Description:	Gravel-, sand-, and mud-sized rock and mineral fragments – angular grains -- grains are a mixture of rock fragments and minerals
Name:	Breccia
Source of picture	K. Wiese



Rock type:	Clastic sedimentary rock (rock fragments)
Formation Environment:	Rocky headland with high wave action (to round the gravels) or base of cliff along river.
Description:	Gravel-, sand-, and mud-sized rock and mineral fragments – rounded grains -- grains are a mixture of rock fragments and minerals
Name:	Conglomerate
Source of picture	K. Wiese