Rock type:	Chemically precipitated sedimentary rock
Formation Environment:	Shallow super-salty ponds in hot dry regions where evaporation rates are high or surface seeps where underground water supersaturated in $CaCO_3$ exits and precipitates crystals in layers.
Description:	Interlocking and layered crystals of calcite (precipitated from water) – 100% $CaCO_3$ composition (reacts with acid)
Name:	Evaporitic or crystalline limestone
Source of picture	K. Wiese

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Rock type:	Chemically precipitated sedimentary rock
Formation Environment:	Shallow coastline near reef where water is supersaturated in $CaCO_3$ – waves precipitate minerals around sand grains and round them with constant motion of waves.
Description:	100% $CaCO_3$ beads cemented together (reacts with acid)
Name:	Oolitic Limestone
Source of picture	K. Wiese

Rock type:	Chemically precipitated sedimentary rock
Formation Environment:	Ocean floor shallower than 3500 m under areas of high biological activity where calcareous shells from dead forams and/or coccolithophores collect.
Description:	Chemical (Smooth and glassy) -- 100% $CaCO_3$ composition (reacts with acid)
Name:	Limestone
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:	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:	Chemically precipitated sedimentary rock
Formation Environment:	Recrystallization of glass spicules and shells inside reef deposits (chert “nodule” surrounded by chalk).
Description:	Chemical (Smooth and glassy) -- 100% SiO_2 composition (doesn't react with acid) – Black with white chalky rind.
Name:	Flint (variety of Cerht)
Source of picture	K. Wiese

Rock type:	Clastic sedimentary rock (shells)
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:	Clastic mud-sized shells -- 100% SiO_2 composition (white – doesn’t react with acid) – loosely consolidated
Name:	Diatomite
Source of picture	K. Wiese

Rock type:	Clastic sedimentary rock (shells)
Formation Environment:	Ocean floor shallower than 3500 m under areas of high biological activity where calcareous shells from dead forams and/or coccolithophores collect.
Description:	Clastic Shells -- 100% $CaCO_3$ composition (white -- reacts with acid) -- Mud-sized shells – loosely consolidated
Name:	Chalk
Source of picture	K. Wiese

Rock type:	Clastic sedimentary rock (shells)
Formation Environment:	Shallow coral reef area – warm tropical waters.
Description:	Clastic sand-sized shells -- 100% $CaCO_3$ composition (reacts with acid)
Name:	Calcarenite
Source of picture	K. Wiese

Rock type:	Clastic sedimentary rock (shells)
Formation Environment:	Shallow coral reef area – warm tropical waters.
Description:	Clastic gravel-sized shells -- 100% $CaCO_3$ composition (reacts with acid) – loosely consolidated
Name:	Coquina
Source of picture	K. Wiese

Rock type:	Clastic detrital sedimentary rock
Formation Environment:	Deep ocean floor or outer continental shelf or near-shore stillwater lagoon
Description:	Mud-sized rock and mineral fragments -- NOT white -- NOT white -- doesn't break in layers
Name:	Mudstone
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 -- NOT white -- NOT white -- doesn't break in layers
Name:	Mudstone
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 -- NOT white -- breaks in layers
Name:	Shale
Source of picture	K. Wiese

Rock type:	Clastic sedimentary rock (rock fragments)
Formation Environment:	Inner continental shelf, beach, or submarine canyon.
Description:	Sand-sized rock and mineral fragments -- Grains contain a lot of potassium feldspar.
Name:	Arkose 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 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