## **ROCK DESCRIPTION CHART A — IGNEOUS ROCKS**

Rock Name	Minerals Present	Color	Particle Size	Layers- Foliation	Other Features
Granite	Quartz, Pink or White Feldspar and Dark Colored iron rich Minerals are present	White, Light gray, Pink, or Yellow	Coarse to fine grained feldspar crystals	No layers	Sometimes has large feldspar crystals
Diabase	Dark-colored minerals and Feldspar	Dark gray to black, Sometimes with dark green tint	Fine crystals, (small crystals are visible)	No layers	Somewhat dense

## **ROCK DESCRIPTION CHART B — METAMORPHIC ROCKS**

Rock Name	Minerals Present	Color	Particle Size	Layers- Foliation	Other Features
Slate	Mica, Quartz and other minerals	Bluish-gray, Gray-green, or Red maroon	Very fine crystals Crystals difficult to see	Shows foliation in side view	Breaks In flat sheets, harder than shale, Has a luster/sheen
Gneiss	White feldspar, Black mica, or Silvery mica	Light-to-medium gray	Medium-to-large crystals	Well foliated	Parallel bands of white and dark minerals, Very hard

## ROCK DESCRIPTION CHART C — SEDIMENTARY ROCKS

Rock Name	Composition	Color	Particle Size	Layers- Foliation	Other Features
Conglomerate	Rounded pebbles cemented together	Generally light, Sometimes with rusty colors	Pebbles the size of peas -with sand filling in between	No layers easily seen	Pebbles may be of all colors and rock types.
Breccia	Angular pebbles cemented together	Colors vary considerably	Rock fragments, angular, not rounded - with finer material between	No layers easily seen	Breccias formed by collapsed caves may have white calcite crystals cementing the rock together.
Sandstone	Quartz sand grains	White, Tan, Red, or Brown	Fine to medium grains	Found in layers, but not visible in many samples	Feels like sandpaper, Grains may rub off, Sometimes has fossils, Red sandstones are cemented with rust
Limestone	Calcite (calcium carbonate – lime)	White to light gray to black	Very fine grained, Grains not visible	Found in layers, but not visible in many samples	Soft fizzes in acid, Sometimes has fossils
Shale	Clays, mud, and fine silt	Red, Gray, Brown, or Black,	Very fine grained, some fragments may be visible	Thin layers may be visible from the side	Flat, Breaks into layers Soft, Sometimes contains fossils
Coal	Mostly carbon – squeezed and heated ancient plant material.	Black to shiny black	Grains not usually visible	Layering not always visible in samples	A little bit "light for its size" (lower density than many common rocks) Brittle, easily broken

## MINERAL DESCRIPTION CHART D

Mineral Name	Primary Elements	Color	Luster	Other Features
Quartz	Silica is primary element which forms most of earths crust	Generally clear or milky colored	Glassy and transparent or translucent	Forms nice crystals that are clear and pretty common.
Feldspar	Primary mineral of Granite Rocks Aluminum and Silica are primary elements with Potassium, Sodium and Calcium as secondary elements	May be while, light gray to pink or flesh colored	Generally opaque or slightly translucent	Changes to clay when exposed to air and water over a long period of time