Earth science education through the preparation of mineral pigments

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I tried the making of pigment (mineral colors) as an earth science experiment for primary and secondary students. A tool and the workflow are as follows,
- Hammer and anvil, iron mortar, porcelain mortar, wood glue, palette, drawing paper, paintbrush, weighing paper, soil color chart, worksheet for review of the work, microscope.
- The sample for pigment; limestone, volcanic glass, pumice, scoria, fossil shells, coal, weathering soil, lazurite, turquoise, malachite, red coral, fault gouge.
- wear down by hammer, iron mortar and porcelain mortar -> check for particle size by microscope and wear down by porcelain mortar again if coarse -> add wood glue after 5 times dilution with water, then make a paint paste form -> record the characteristic of the sample and the work to worksheet -> challenge some simple sketch.

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