

Extracting Dye from Native Resources

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Synopsis

Where does color come from? Throughout history the use and sources of color has certainly changed. From the first artist painting on cave walls with earth and charcoal; to today's synthetic paints, plastics, and pigments, creating color is part of human life. This unit highlights the process of extracting dye pigments from natural resources for use on textiles. Looking at the different historical sources of color, the unit challenges students to find their own color source. Written through a scientific lens, the chemistry of the mordant (pre-treatment for fibers) is discussed and several different mordants are explained. Several mordants and dye materials are explained chemically, linking their elemental composition to their use as a pigment. This unit meets common core writing standards, next generation science standards, and Delaware visual art standard through the experimentation and explanation of dyeing fibers with native materials. Students will engage in sourcing their own pigments from the world around them, forming hypotheses, testing their samples, then finally analyzing and publishing their results in an artist statement. This unit is written and design around upper elementary students, with a focus on third grade.