Natural Pigments

**Summary:** Students will explore natural pigment sources on campus and learn ways to harvest, process and use them, which will help them draw connections between the natural world, art, and concepts of stewardship.

**Goals:**

* Appreciate the natural world and cultural history of the area.
* Understand the connections between art, science and history.

**Objectives:**

***Students will be able to:***

* Describe what “pigments” are, what they are used for, and what some of their natural sources are.
* Process and use at least three pigments.
* Explain connections between this lesson and the rest of their week at IslandWood (soil investigation, team building, stewardship, E1T1, ecosystems explorations).
* Recognize that they’re using both scientific and artistic skills.

**Connection to the Process:**

* Introduction of components of ecosystems
* Relating human relationships and influences within ecosystems
* Deeper understanding of stewardship

Activity

**Station 1: Berries and plants**

1. Students will be introduced to the different kinds of berries (using field guides, E1T1 cards, etc.) Some of this can be done in the field, as well. Explain where on campus and when these were harvested.
2. Students will take turns using a mortar and pestle to crush the different berries into a powder pigment. Depending on seeds and skins, it may not be possible to get a very find powder (it may be kind of lumpy). The goal is to get as much powder as possible. Transfer the powder pigment into small bowls. You can either keep the berry types separate to compare the colors, or mix them together for a composite pigment.

**Station 2: Rocks & Minerals**

1. Students will be introduced to the different types of rocks and minerals (using field guides and additional resources- there is a great book in the IslandWood Library). Talk about where on campus these were gathered.
2. Students will take turns processing the rocks using a mortar and pestle, until they are a fine crushed powder. The best way to do this is to kind of smash them (safely) with the pestle. If they don’t break after two or three smacks with the pestle, then they are not a good candidate for pigment. Soft rocks will crumble fairly easily, then it will be able to crush them further until they are a fine powder. Transfer the pigment into small bowls.

NOTE: red rocks create the most beautiful pigments

**Station 3: Soil & Clay**

1. Students will use grating and screening to sift the clay and soil until all chunks of organic matter are removed and only fine powder remains. If there are still chunks, they can use a mortar and pestle to grind it into a finer powder. Transfer the pigment into small bowls.
2. You may use the soil from your soil investigation, as well
3. Charcoal creates a beautiful pigment too. It can be harvested from the lightening tree on the Team’s Course Trail, or at Friendship Circle.

* Come together as a large group. Allow time for students to pair and share about the processing (“Was it harder or easier than you expected?” “What was your favorite part?” “Which of the pigments are you most excited to use?” “Can you think of other methods to process these pigments?”) Have everyone fill out the “Processing Notes” section in their Sample Booklet with things they want to remember about processing (the order we did things in, the tools used, etc.) \*\*summative assessment

**Additional Art Project Using the Pigments**

1. Draw one of the pigment sources and use the pigments to watercolor the picture (like a page from a field guide).
2. Draw a map of IslandWood and label the different pigment sources on campus. Use the pigments to watercolor the picture.
3. Have them use these pigments later in the week for another watercolor project.
4. Use pigments to print with leaves and ferns.

**REFERENCE**

<http://www.aboriginalarts.co.uk/ochre_earth_pigments.htm>

<http://www.aboriginalartonline.com/methods/methods.php>

<http://wiki.islandwood.org/index.php?title=Natural_Pigments>