Activity Description

Pigments are substances that produce a color in natural materials such as minerals, plants, or animal tissues. The dyes made from these pigments can be used to color yarn and fabrics.

Until the mid-19th Century, plants were the primary source of dye. The process for natural dyeing became obsolete once it was discovered that dye pigments could be produced using modern chemistry. Today, natural sources of dyes are used primarily by artisans and crafters. Natural dyes can contain “impurities” when compared to chemical dyes and can lead to rich and unexpected colors. Therefore, artworks created with natural dyes and pigments are truly one-of-a-kind!

Materials

- Soft plant materials (vegetables, berries, flowers, leaves, roots, etc.)
- Mud, dirt, or clay (for paintbrushes)
- Container of water
- Soft Mallet
- White or light-colored cardstock or paper
- Paintbrushes
- Hard surface
- Newspaper to cover workspace (optional)

Preparation and Safety

Make sure to avoid areas that may have poison ivy or poison oak when collecting your natural materials. Review proper use of a mallet to avoid smashing fingers or breaking objects near your workspace.

Procedure

1. Head outside and collect various natural materials. You can find materials in your yard or take a walk to find some things with a variety of colors like leaves, flowers, berries, mud or dirt, and roots.
2. Check your refrigerator for natural materials too, such as ripe berries, vegetables, or fruits.
3. Return to your work area with your collected materials. You may want to cover your work area with old newspaper or paper towels as painting may get messy!
**Procedure (continued)**

4. Fold your paper in half and then open it like a book.

5. Select some of your natural materials and arrange them only on one side of your folded paper. You can spread materials out or layer them - be creative!

6. Fold your paper closed, and then cover it with a towel or paper towel.

7. Use your mallet to smash your closed paper and the natural materials inside.

8. Now open your paper and see what pigments you extracted and the art that you created!

9. If you have areas on your paper that are particularly wet after smashing, you can use the paintbrush to spread out some of the color.

10. If you have dry materials, like mud or clay, use your paintbrush to add a little water and paint with them.

**NOTE:** There is a video that goes with this activity. If you would like ideas or are having trouble with any steps, check out the video linked below.

**Extensions or Adaptations**

- For younger learners, try finger painting with the natural materials, just remember to not taste the natural materials they are working with. This is a great fine motor skills activity and a way to experience texture.
- Experiment with the colors created by smashing and mixing them together to see if you can create new colors.
- Try grinding down the natural materials and add a bit of water to see what pigments you extract.

**Nature Painting Video**

[Little Lab @ Home Favorites: Nature Painting by the Museum of Life and Science](https://www.lifeandscience.org)