## Color Matching in Nature

Description: Participants match colors with natural features.

## Overview:

Spring is finally here, and colors are starting to pop up everywhere! Are you looking for ways to get your little ones outside? Nature color matching is a fun way to get children not only outside but engaged in their surroundings. This activity is fun for teens and parents, as well.

Although we used this activity during a class at Duke Farms, it can be done in anywhere! It is as enjoyable in a backyard as it is on a city street.

## Objectives:

The learner will be able to:

- Identify colors from a palette and match them to natural features;
- Collect, record and share observations;
- Analyze and interpret data to reach scientific conclusions;
- Compare measurable attributes of natural features;
- Represent data through graphing;
- Use sequencing mechanisms through individualized narratives

Materials: Paint swatches or color wheels. Here is a printable color wheel.

## Procedure:

Bring your color wheels with you outside in your backyard (or on your favorite trail) and try to match your colors to things in the environment around you.

## Guiding Questions:

1. Using questions such as these will encourage your investigation:
2. What colors do you see?
3. Are you finding different shades of these colors?
4. What is your favorite color? Why?
5. Do any of these colors remind you of anything? Explain.

Examples of Color Matching of Natural Features: Below are some pictures from a day of exploration and nature color matching at Duke Farms.


Duke Farms

## Extensions

## Create your own color palette:

If you enjoy working on your computer, you may like this bonus activity.
Bring your camera with you to take the investigation a step further. You can make your own color palettes with photos taken outdoors. All you need to do is upload a nature photo to Publisher or PowerPoint. Then, insert and align however many boxes you'd like on any side of the picture. After they're formatted (same size and spacing), color fill each box with a different color using a sample color from your photo. Additionally, participants can name each color, too!

These color palettes were designed by Duke Farms Visitor Education Associate, Abby Schmid, from photos taken on the property.


Multi-disciplinary Extensions: Here are some ideas on how this activity might be expanded.

## Writing Prompts

1. The "I Am the Color $\qquad$ " Nature Story. After your walk, select a color and write a story about what it's like being that color. For example, if you are "Green" you could describe how difficult it is having so many shades and also being so popular. Selecting the color "Purple" may be about how you are often left out of the landscape.
2. Sequencing. Make a list of each of the things you saw and then place them in order from first to last. Write a description of this journey using sequencing words that help readers understand the order of events. These are often called "signal words and phrases." Examples include: first, in the beginning, next, suddenly, second, then, after that, afterward, eventually, lastly, finally, in the end.


Duke Farms

## Math:

Keep a running tally of the colors you discover and where they are located. Which is the highest number? Which is the lowest number? Can you rank them in order from smallest to largest? This data can be easily transferred to a bar graph.

## Map Skills:

On the map of Duke Farms, can you find the locations named in Abby's palette? (Sycamore Allee, Central Way, Hay Barn, Hay Barn Meadow) Which ones did you find, and which ones aren't shown on the property map? (The Sycamore Allee is not marked, but it is along Central Way.)

## Vocabulary

- Allee - A walkway or pathway that is lined with trees of the same species. This is a formal design element.
- Sycamore - Sycamores are distinctive trees that have a peeling bark that provides a patchy or flaky appearance. They can have large trunk diameters, zigzagging branches and five distinctive lobes on each leaf. These trees that grow to be quite large, are very commonly found in NJ.
- Color Palette - Color palettes may be designed and shown in various ways to display a range or assortment of colors.


## Sample Student Learning Standards that may align to your lesson.

## Next Generation Science Standards

## K-LS1: From Molecules to Organisms

Science and Engineering Practices. Analyzing and Interpreting Data. Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Use observations to describe patterns in the natural world in order to answer scientific questions.

## NJ English Language Arts

W.4.3: Write narratives to develop real or imagined experiences or events using narrative techniques, descriptive detail, and clear event sequences. (A) Orient the reader by establishing a situation ...: organize an event sequence that unfolds naturally. (C) Use a variety of transitional words and phrases to manage the sequence of events (D) Use concrete words and phrases and sensory details to convey experiences and events precisely.
W.K. 7 Conduct short as well as more sustained research projects, utilizing an inquiry-based research process...

## NJ Mathematics

K.CC B: Count to tell the number of objects (5) Count to answer "how many" ...
K.MD A (2): Directly compare two objects with a measurable attribute in common to see which object has "more than/less than" the attribute.


Duke Farms

## Color Matching in Nature

1.MD C: Represent and Interpret Data ...how many in each category, and how many more or less are in one category than in another
3.MD B: Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.

This lesson may also be used in Social Studies, Art, and other content areas and can be modified for additional grade levels.

If the weather is forbidding, try the activity indoors matching household items first as a practice, and then go outside when the weather permits.

If you have questions or need ideas, contact Kate Reilly, Manager of Education at kreilly@dukefarms.org

Duke Farms

