Adapted to STEMAZing ECE Format by Amanda McPherson and DaNel Hogan



DaNel.Hogan@schools.pima.gov Director of The STEMAZing Project

Paint Sample Scavenger Hunt

NOTE: Children should always be given ample time to experiment, notice, and wonder before they are provided an explanation.

Always engage children with our two favorite questions:

What do you notice? What do you wonder?

Resist the urge to answer any questions children have while exploring. Instead, respond back with questions to children and let them make sense of the world. Sample questions you might use: What do you think? Do you



notice any patterns? What could we change? Can we test something else? What can we try next? If children ask a testable question, which they could answer by doing an experiment, talk through with them how they might design a test to help answer their question. As much as possible and within reason, let them actually test their questions by trying the experiments they propose.

Learning Objectives

STEMAZ

Children will...

- identify items that match the paint samples (red, orange, green, blue, purple, yellow).
- graph the total amount of objects they have matched to the paint samples.

Vocabulary (See What the heck? Explanation of Math at the end for definitions.)

Match

Graph

Materials

Paint sample cards (red, orange, green, blue, purple, yellow)

Hole punch Book ring (1" or bigger) Paint Sample Scavenger Hunt Graph (laminated)

Key Question

Can you discover items that match the color of the paint samples?



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Advanced Teacher Preparation

- 1. Print out and laminate the Paint Sample Scavenger Hunt Graph.
- 2. Cut the paint sample card in half long ways to make two sets of paint samples.
- Punch a hole in the corner of the paint sample cards. (Try to preserve the name of the color. Those are always fun to read.)
- 4. In whatever order you would like, loop the paint sample cards onto the book ring and click it shut.

Notice and Wonder Developmentally Appropriate Practice

- 1. Give children the paint sample rings and let them start matching to objects they can find in the classroom or around their house.
- 2. As they find a match, they get to put a marker above that color on the graph.
- 3. Make a note about which color fills up first.
- 4. Try the activity again outside.
- You could also take the paint samples off the ring and give each child a color. They could then search for objects in just that color.

Children should notice...

- it is easier to find certain colors and not so easy to find other colors.
- Which color has the most? Which color has the least?











Differentiating Developmentally Appropriate Practice

For younger students use only one paint sample at a time.

For older students this could be a great prompt before a series of art lessons about creating a range of hues of one color. You can also be pickier about the match.

Extensions for Additional Learning

As always, ask the children throughout the experiment what they notice and what they wonder. If their wonder questions are testable, as much as possible and within reason, let them actually test their questions by trying new experiments.

See below for examples of what they might wonder and experiments they might do to test their wonderings.

- I wonder if it is harder to find colors inside or outside?
- I wonder if how many blue objects I can find?
- I wonder which color would fill up the fastest in my bedroom?
- I wonder which color would be easier to find around a specific holiday?
 Let them try it!

#STEMAZingPictureBook Recommendations:

Pantone: Colors Board Book by Pantone

My Favorite Color: I Can Only Pick One? By Aaron Becker

Connections to the activity:

Create an entire paint sample color scavenger hunt using different shades of one color. It would be a challenge to find different shades of the same color.

Have children use paint sample cards to make patterns.

SAFETY CONCERNS

n/a

AZ Early Learning Standards

Math Standard - Strand 2: Operations & Algebraic Thinking- Concept 2: Patterning The child recognizes, fixes, duplicates, extends, describes, and creates patterns.

Math Standard - Strand 3: Measurement & Data - Concept 1: Sorts & Classifies The child sorts and groups objects by a variety of attributes.

Math Standard - Strand 3: Measurement & Data - Concept 2: Data Analysis With prompting and support the child collects, organizes, displays, and describes relevant data.







Paint Sample Scavenger Hunt

What the heck? Explanation of the Math (Vocabulary in bold.)

A variety of factors will affect which color fills up first on the graph. Finding an object to **match** the color of the paint sample card is the point of this activity. To match, they colors need to be identical (or fairly close). It should be easier to match greens when you are outside. Deciding how closely the paint sample card needs to match the object should vary with age. Blue is blue is blue for younger children but the hues can be more nuanced for older children.

The **graph** should be explained to children as a way of keeping track of and displaying the information or data we collect. The objects that we match our paint sample cards to around the room are represented on the graph using markers of some kind.

Some interesting facts about colors from https://color-wheel-artist.com/hue/:

Color, hue, shade, tone, and ting might be used interchangeably outside the art realm but inside the painter's world, these all have different and very specific meanings.

COLOR is the general term we use to describe every hue, tint, tone or shade we see. White, Black and Gray are often referred to as a color.

A HUE refers to the dominant Color Family of the specific color we're looking at. White, Black and Grey are never referred to as a Hue.

Hue refers to the origin of the color we see. Think of the Hue as one of the six Primary and Secondary colors. In other words, the underlying base color of the mixture you're looking at is either Red, Green, Blue, Cyan, Yellow, or Magenta. (Corrected to REAL primary colors.)

In painting, the word COLOR is the general term for everything we see. However, the word HUE refers to the brightest 6 - 12 pure, unmixed pigment families on the {REAL} Color Wheel.

A TINT is any Hue with White added. The color remains the same only lighter.

A TONE is any pure Hue with Neutral Gray added. The color remains the same only less vibrant.

A SHADE is any pure Hue with Black added. The color remains the same only darker.

A note from STEMAZing: Because you are using paint colors, it is important to note the REAL primary colors are NOT red, yellow, and blue. They are red, green and blue for light and cyan, yellow, and magenta for paint. We have lots of lessons on the REAL primary colors which can be found here: <u>https://stemazing.org/primary-colors/</u>



Paint Sample Scavenger Hunt Graph