

EXPLORING COLORS: WHAT TO MIX AND WHY

Learning Goal

Explore how a color wheel is organized by experimenting with color mixture and categorizing items around the house into their proper place on a Color Wheel.

Color is all around us every day! But there's so many of them, we need a special way to organize them all. Did you know that Sir Isaac Newton developed the first circular diagram of a color wheel over 300 years ago? A **color wheel** is a visual representation of colors arranged by their color relationships. Color wheels can be very big and complex, detailing every color you can imagine! But, they can also be very simple, only displaying primary and secondary colors. A **primary color** is one that can not be created by mixing any other colors together. Primary colors are **RED**, **BLUE** and **YELLOW**. **Secondary colors** are colors that are made by mixing the primary colors together!

RED + **BLUE** = **PURPLE**

YELLOW + **RED** = **ORANGE**

BLUE + **YELLOW** = **GREEN**

MAKING A COLOR WHEEL: INSTRUCTIONS

Materials:

Crayons/Markers/Colored Pencils, 2 - 3 Sheets of Plain White Paper

Optional:

Large Bowl

1. Use a pencil to draw a large circle on your white paper. You may want to use a large bowl to trace your circle! Draw three lines to divide your circle, making 6 triangles total.
2. Color in the first section **BLUE**. In the section across from **BLUE**, use **ORANGE**.
3. To the right of **BLUE**, use **GREEN**. Across from **GREEN**, use **RED**.



4. To the right of **GREEN**, use **YELLOW**. Across from **YELLOW**, fill the last space with **PURPLE**.
5. Notice that on your color wheel, **the primary colors are not next to one another**. They are separated by the secondary color that they create when the two primary colors mix!
6. But what about the colors that are across from each other on the color wheel? These are called **complimentary colors**. Mixing two complimentary colors together is a quick and easy way to make shades of brown and black!

MIXING COMPLIMENTARY COLORS: EXPERIMENT

1. Let's experiment with complimentary colors! Grab a new sheet of paper and mix **RED + GREEN**.
2. Now, on another part of your paper mix **BLUE + ORANGE**.
3. Finally, on another part of your paper mix **PURPLE + YELLOW**.
4. What do you notice about the three different color mixes? Did you make brown, black, or both?
5. Do they look like the same shades of brown and black? Or do some look different than others? If they do look different, why do you think that is?

COLOR WHEEL SCAVENGER HUNT

Materials:

15 - 30 Small or Medium Found Objects (Anything colorful you can find around your home! Solid-colored objects work best), Your Color Wheel

1. Go on a scavenger hunt around your house, looking for items that mostly look like the colors on your color wheel. Grab 3 - 5 objects of each of the 6 colors: **BLUE**, **RED**, **YELLOW**, **GREEN**, **ORANGE**, and **PURPLE**.
2. Using your found objects, fill in your color wheel. Its ok if the items don't fit inside your circle!

