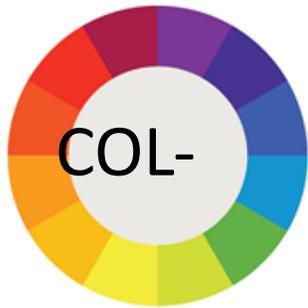


Discovery All Around!

Hands-on Exploration Fun



Salem Public Library

Winter 2020

As the Salem Public Library moves into its temporary location at 1400 Broadway NE, several of our most popular programs have had to go on hiatus. In the children's area, the most dearly missed is easily the Discovery Room, where kids use all of their senses, *and* their imagination, to learn about their world in hands-on exploration. Until we're back in our bright newly updated space the library would like to provide some suggestions for Discovery Room type activities you can create in your own home with simple tools, enthusiasm, imagination and curious minds.

Welcome!

FOR PRESCHOOLERS

A child's world is full of color. For a preschooler, learning colors may be one of your little scientist's first lessons. That color knowledge can be a way to learn sorting skills, pattern making, and practice fine motor skills.

Color Scavenger Hunt & Rainbow Play

Prepare containers with colored labels attached. Send your preschooler around to collect items that match the color on the container. An outdoor collecting jaunt can add to the fun, especially when lots of colors abound. Once you have a collection of items, together you can create your own rainbow with each curve filled with items of the appropriate color. If you're lucky, look for a rainbow of your own outdoors or through a crystal to see the order the colors come in!

Sorting games are a great way to practice observation, notice differences and group like things: all basic early literacy and science skills.

Colored Pasta

An inexpensive way of bringing color games into your home is with a batch of colored pasta. In a small bowl or ziplock bag, mix some food coloring (you can use the fancy gel coloring for really bright colors) and a teaspoon of vinegar. Add pasta, seal (really tightly!) and let your child shake it up. When the color looks right, dry out on a rack in a sunny place. In addition to



sorting games and sensory bins, colored tube pasta is perfect for stringing, a great way to practice fine motor skills

and learn about patterning. Both are important early literacy practices.

Shaving Cream Finger

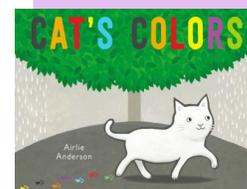
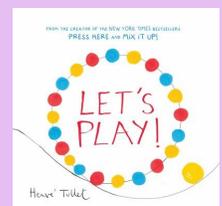
Add some fun tactile play to your color exploration with a can of shaving cream (a dollar store is a good source) and washable paint or food coloring. You can easily turn a simple sensory experience into a science experiment by predicting which color will result when mixing two primary colors together and then testing your hypothesis. And it feels so good!

COLORFUL PICTURE BOOKS!!



Red House, Tree House, Little Bitty Brown Mouse
by Jane Godwin

Let's Play
by Hervé Tullet



Cat's Colors
by Airlie Anderson



Image from coffeecupsandcrayons.com/



ELEMENTARY STEM EXPERIMENTS

Traveling Color

Here's a fun Color Theory experiment to try. It only takes six small clear glasses or jars, a set of food colors and a roll of narrow sheet paper towels! Take six paper towels and fold each in half lengthwise, then once again lengthwise, then bend your strips in half. Fold down tight and trim ends so each towel is twice as long as each cup is tall. (Should look like thick letter Vs.) Put your six containers next to each other in a circle, and fill **every other one** half full with water. (Three should be empty.) Put a few drops of food coloring in each cup with water (blue in one, yellow in one, red in the last cup.) Place your paper towels strips linked over from one cup to the next. Now watch what happens. The colors from each cup will combine in the empty cups as the water crawls up the paper towel and over into the empty cup. Color mixing theory and capillary action all in one!



Image from thestemlaboratory.com/

Dancing Milk

For a cool chemical reaction experiment and color play, cover the bottom of a shallow tray with 2% or whole milk. Put single drops of various food colors in a few spots in the tray. Now for the fun. Dip a cotton swab into dishwashing liquid and push the swab

straight down into the milk. Watch the colors start to dance. This is a chemical reaction between the fat in the milk and the soap. A longer explanation of the chemistry is at www.stevespanglerscience.com/lab/experiments/milk-color-explosion/



Image from onelittleproject.com

Color Spinner

Making a color spinner is another way to combine color theory with science. Trace a circle on a piece of recycled cardboard. Cut out and cover with paper. You can trace smaller circles inside and/or draw lines dividing your circle into quarters. Create a pattern of alternating colors with markers or paints. Finally poke two holes about 1/2" apart in the center (with adult help) and thread with about 30" of string, tying the ends. Swing the circle around until the string is wound up, then quickly stretch the string taut. This will make the disc twirl and the colors blend. Primary colors will create secondary colors, while if you include all six primary and secondary colors, when spun, your wheel just might turn nearly white!

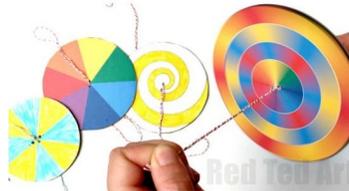


Image from redtedart.com

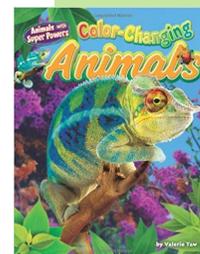
Rainbows

Rainbows appear in the sky when there is bright sunlight and rain. Sunlight is actually a mixture of colors. Rainbows happen when sunlight is broken and reflected through raindrops. It takes many raindrops to produce the brilliant colors of a rainbow. You can only see a rainbow if the sun is behind you and the rain in front. You can even make your own rainbow with a garden hose or water sprinkler on a sunny day.

COLOR IN THE NATURAL WORLD

Rain Forest Colors

By Janet Lawler



Color Changing Animals

By Valerie Yaw

