



Color Mixing

Standard Connection:

- ELA.SL.PK4.3
- ELA.RF.PK4.2e
- M.CC.PK4.4
- M.CC.PK4.4a
- S.PS.PK4.1
- PD.FM.PK4.1
- VA.CR1a.1.PK
- VA.CR2a.1.PK

Enduring Understanding(s):

- There is an infinite variety of colors.
- Colors can be mixed to make new colors.

Essential Question(s):

- How are colors used to communicate ideas, thoughts, and feelings?

Materials	Vocabulary	Books
<ul style="list-style-type: none"> • <i>Dog's Colorful Day</i> • eyedroppers/pipettes • coffee filters or white paper towels • small spoons • small containers (yogurt cups, cereal cups) • diluted tempera paint or liquid watercolor • tape • trays • smocks 	<p>experiment: to explore by trying different things</p> <p>mix: putting different things together so that they become one</p> <p>predict: to make your best guess</p> <p>stain: a spot or colored mark</p> <p>separate: not connected or attached</p>	

Intro to Centers	
Preparation: <i>Set up materials.</i>	
“In <i>Dog's Colorful Day</i> , Dog went for a walk. What do you notice?”	Show illustrations. Children respond.
“The stains from the green grass, the purple marker, and the other things that dripped on his coat were colorful. But none of the colors mixed together, they stayed separate from each other.”	Show illustrations.
“Today in Science, you can experiment with colors using these materials. What do you notice?”	Show materials. Children respond.
“We will keep the colors in separate containers and mix them together.”	Model.
“What do you predict will happen if I mix red with yellow?”	Model. Children respond.

During Centers:

Compare and contrast the colors children create to the stains on Dog's coat in *Dog's Colorful Day*. Encourage children to name and label their colors. Support children in recording "formulas" for their colors ("2 drops of red, and 2 drops of blue makes purple", etc.). Compare color mixing formulas to recipes.

Guiding Questions During Centers:

- How did you create the colors on your coffee filter/ paper towel?
- How are the colors you created similar to or different from the stains on Dog's coat in *Dog's Colorful Day*?
- Where have you seen a color similar to the one(s) you created?
- How are the stains on Dog's coat similar to or different from the stains on Max's dragon shirt?

Thinking and Feedback:

Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

Documentation:

Collect samples of the children's work as well as photographs of their processes; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Display children's coffee filters/paper towels window to see the effects of sunlight on the colors. Compare and contrast to their observations to their observations of Color Fading experiment.

Differentiation/Accommodation:

For Intro to Centers, children with limited verbal skills can use a pre-programmed voice output device to answer questions about the story. (Keep in mind these will likely be closed-ended questions, as those are easiest to program into devices.) This can also be used to help students answer Guiding Questions. During Centers, strategically partner children so they can help each other with this activity. Provide color cards that children can use to help them remember what they mixed together.