

## STEM Around Us: Day 4

We are surrounded by science, technology, engineering, and mathematics (STEM) every day. We do not always realize the extent that they play a role in our lives, but no matter your career or hobbies, STEM is involved. The more young scientists understand about STEM, the better their critical thinking, their passion, and their interest. This week, your young scientist will have opportunities to explore the connections between STEM and the world, beginning with bird wings and flight.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the <a href="Introduction to Weekday Wonders">Introduction to Weekday Wonders</a>.



# Question of the Day How can we explore color in the world around us?

### **Daily Nature Journal**

Have your young scientist go out and complete a daily nature journal entry. Doing daily nature journaling helps your scientist notice things about nature that s/he may not have seen before. The <u>Guide to Nature Journaling</u> will help you to support your scientist in what to include in each daily entry.

#### **Color Scavenger Hunt**

Give your scientist the template on page 4 or draw a similar one. Have your scientist go on a walk outside and find living things that are each color. For younger scientist, have them find just one living thing for each color, while for older scientists, you might suggest they find three or more for each color.

After your scientist completes the scavenger hunt, have him or her tell you about their observations. Ask which living things exist in only one color, such as grass, and which come in many different colors, such as flowers.

### **Walking Water Rainbow**

Gather six glass cups or jars (small mason jars work best). Fill three with water and leave three empty. Have your scientist add yellow food coloring to the water in one filled jar, red food coloring to the second, and blue food coloring to the third. Mix the food coloring so it is spread evenly throughout the water.

Take six paper towels and fold each in half lengthwise, twice. This should give you six long folded strips. Place the six jars in a circle, alternating between water-filled jars and empty jars. Place one end of a paper towel strip into a jar with water and the other end into an empty jar beside it. Repeat until there is a paper towel strip between each jar around the circle and the jar next to it.

Ask your scientist to observe the setup for a few minutes. What does s/he notice happening? Ask him or her to make a prediction about what the setup might look like in a couple of hours. Then have your scientist observe again after some time has passed. Prompt your scientist to discuss if the prediction was correct, what happened, and why there are new colors in some jars.

#### **Extension:**

Have your scientist repeat the Weekday Wonders activity <u>Celery Colors</u> (page 2). Ask him or her to share what is similar between the walking water rainbow and the celery activity.

#### Make a Rainbow

Offer your scientist a spray bottle of water or the hose outside. If s/he is going to use the hose, show him or her how to make it spray drops of water, either using a nozzle or a thumb over the opening. Challenge your scientist to try to make a rainbow by spraying water in to the air. (This activity will work better on a reasonably sunny day.)

Once your scientist is able to reliably make a rainbow, ask him or her to consider where s/he is, where the sun is, and where the water is. Your scientist should find that his or her back is to the sun with the water spray in front. The next time it rains and the sun comes out quickly afterwards, remind your scientist of this activity and know just where to look for a rainbow!

#### **A Color Poem**

Ask your scientist to list the colors of the rainbow in his or her nature journal or print out another copy of the template on page 4. For each color, have your scientist list things that are that color, how that color makes him or her feel, or other words that start with the same letter and describe the color.

Once your scientist has listed words or objects for each color, have him or her put them together into a poem with one of the following formats.

**Red** is the color of cherries, watermelon, and the best lollipops.

**Orange** colors the sun at sunset, juicy fruit, and bright flowers.

Yellow makes lemonade in summer.

...

**Red** makes me feel rosy and radiant.

**Orange** is optimistic and original.

Yellow feels young, like I want to yell with joy.

...

# **Color Scavenger Hunt**

Red	
Orange	
Yellow	
Green	
Blue	
Indigo	
Violet	