Catch a Rainbow

For ages 5 and older.

Have you ever seen a rainbow in the sky? Rainbows happen when sunlight passes through raindrops in the sky. When this happens, light becomes separated into a rainbow of colors—red, orange, yellow, green, blue, indigo (blue-violet), and violet. In this activity, you can make your own rainbow.

You will need

• clear glass jar 3/4 filled with water
• a sunny day and a windowsill that receives direct sunlight
• sheets of white paper
• red, orange, yellow, green, blue, indigo (blue-violet), and violet crayons

What to do

1. Set the jar on a windowsill or a table in front of the window.
2. Look for the jar’s shadow in front of the jar.
3. Place the sheet of paper where you see color.
4. Watch the rainbow appear on the paper.
5. On another sheet of paper, draw a rainbow that has red, orange, yellow, green, blue, indigo (blue-violet), and violet. Label each band by the first letter of its color.
6. You can learn the colors of the rainbow by remembering the name ROY G BIV! Some people remember the colors by the phrase “Richard Of York Gave Battle In Vain.” Can you think of a phrase to help you remember the colors of the rainbow?

Learning More


Try This! Indoor Rainbow

www.nationalgeographic.com/ngkids/trythis/try6.html Details how to make a rainbow without the sun.

Newton and Light

Newton experimented with how colors of light pass through glass. He used a prism to learn that white light was actually made up of multiple colors. He did this by first using a prism to break light up into its component colors and then he used another prism to return all of those colors to white light.