

Rainbow in Your House

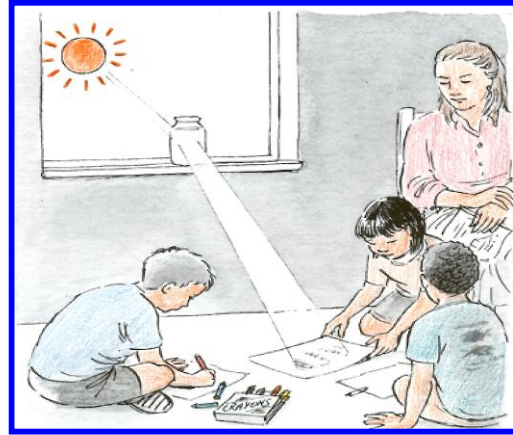
All of us have seen rainbows in the sky. Have you observed that the colors of the rainbow are always in the same order? What kind of weather is best to see a rainbow? In this activity you will make a rainbow in your home or school. You will need a sunny window.

What You Will Need

clear glass or jar
white paper
crayons, markers or colored pencils

What To Do

1. Fill a clear glass or jar with water.
2. Place the glass or jar in a sunny window. The sun must be visible as shown in the illustration to the right.
3. You can also place the glass or jar on a table in front of the window.
4. To see the rainbow, you might have to raise the glass or jar up or down or move it forward or backward.
5. Place the white paper where you see the rainbow.



Courtesy of NOVA

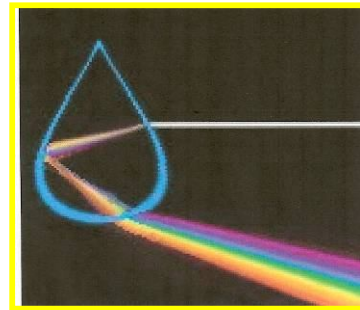
What Do You Observe

Observe the rainbow on the paper. The colors will be in this order: **Red, Orange, Yellow, Green, Blue, Indigo, Violet**. The arrangement of colors can be abbreviated as **ROYGBIV**.

Since the colors blend together, you may not be able to see all of them clearly separated from each other.

How Rainbows Form

The best time to observe a rainbow is in the spring right after a rainfall and the sun is starting to shine through the clouds. Even though the rain has stopped, raindrops remain in the sky. The sun is now shining through the drops. So where do the colors come from? White light from the sun is a mixture of the above colors. Sunlight shines through the drops as shown above. It separates into color bands. The color bands hit the back of the raindrop and they change direction. They change direction again as they come out of the drop. These color bands make the rainbow.



Courtesy of Fidcal Techzone