



HOW TO MAKE RAINBOW PAPER



A fun science project for your kids to do, rain or shine

Everybody loves rainbows! They're one of the most beautiful natural wonders and cheer us up on even the rainiest of days. Wouldn't it be great if you had a rainbow that you could bring inside?

Rainbows are created when sunlight reflects off of raindrops, causing the light to split into a display of different colors. But you won't need any rain for this project – you'll just use nail polish and water to create a rainbow effect on a piece of paper. When you're done, your child will have their own piece of the rainbow – without having to put on their raincoat.

GATHER THIS:

- A bowl filled with water
- Clear nail polish
- Small pieces of black construction paper (quarter sheets work well)
- Paper towels for drying your artwork

THEN DO THIS:

1. Add 1 drop of clear nail polish to the bowl of water. Watch it spread over the surface of the water.
2. Quickly dip the paper into the water on top of the nail polish.
3. Set the paper on a paper towel to dry.
4. Once the nail polish is dry (this only takes a few minutes), tilt the paper at different angles to see the rainbow patterns appear. It's easiest to see next to a sunny window, and the colors will look even more vibrant as the paper dries.

ASK THIS:

- What colors are you seeing in the rainbow?
- How does light affect what you see?

WHAT IS HAPPENING?

When you dip the paper into the water it gets coated with a thin layer of nail polish, and the rainbow colors you see are caused by a process called “thin film interference.” This is the same effect you will see when oil mixes with water on the road on rainy days!

WHAT THIS TEACHES:

Skills: Fine motor skills, observation, scientific method

Themes: Reflection & refraction of light waves, thin film interference

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