



Creating stripes using water density

# **A BAD CASE OF STRIPES**

by David Shannon

Her mother ran into the room, and she screamed, too. "Oh my heavens!" she cried. "You're completely covered with stripes!"

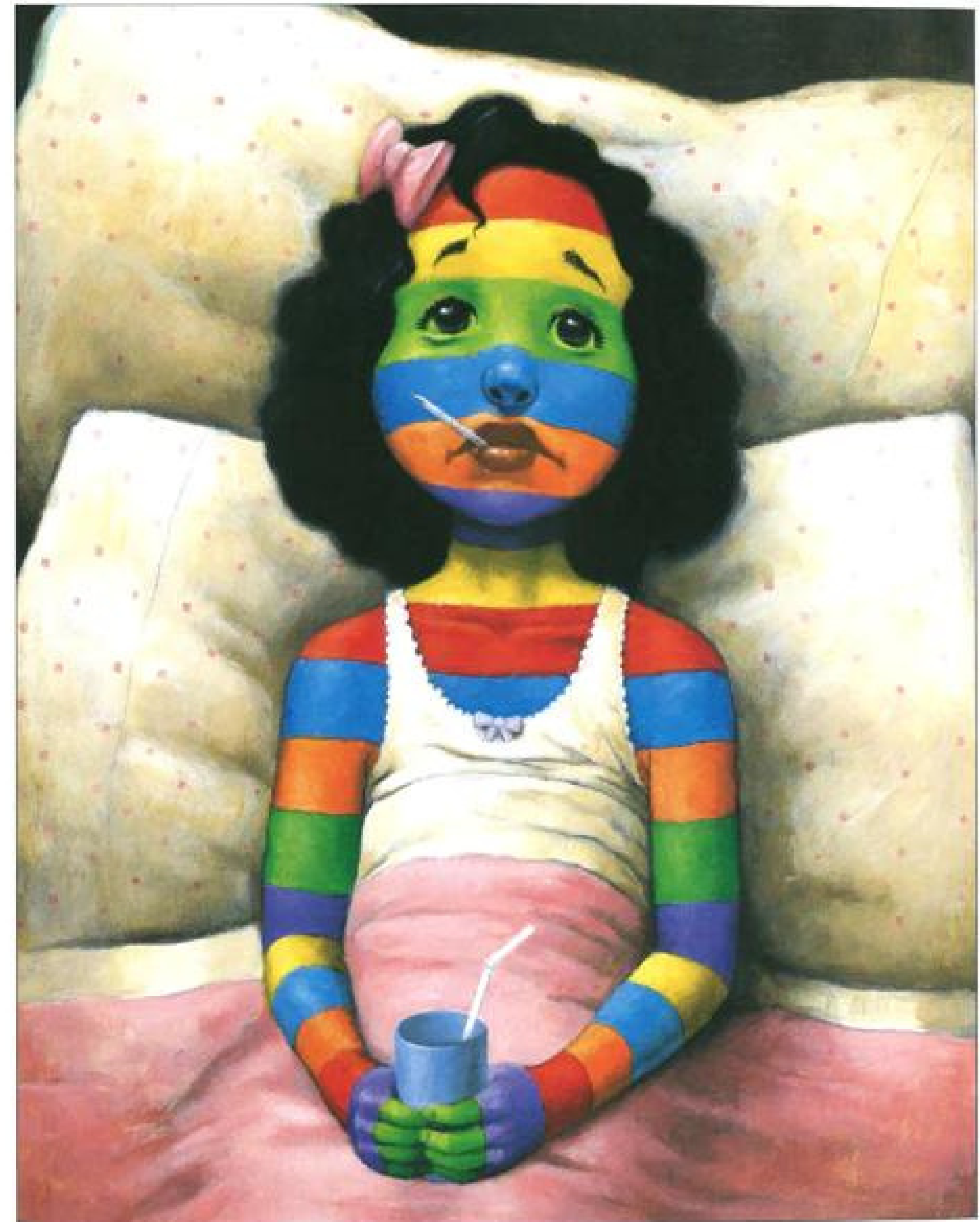
This was certainly true. Camilla was striped from head to toe. She looked like a rainbow.

Mrs. Cream felt Camilla's forehead. "Do you feel all right?" she asked.

"I feel fine," Camilla answered, "but just look at me!"

"You get back in bed this instant," her mother ordered. "You're not going to school today."

Camilla was relieved. She didn't want to miss the first day of school, but she was afraid of what the other kids would say. And she had no idea what to wear with those crazy stripes.





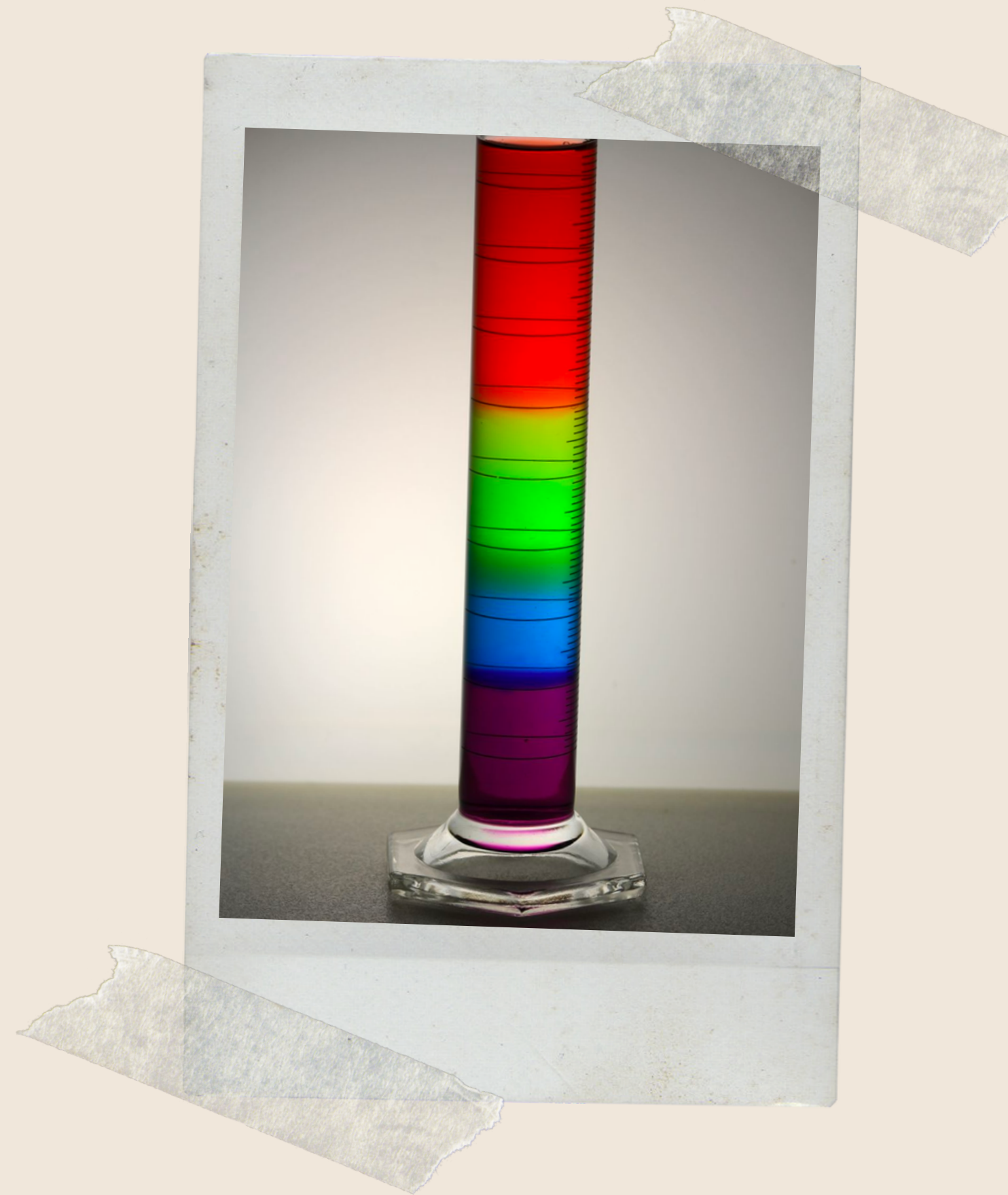
# NOW, SCIENCE!

**RAINBOW WATER DENSITY  
EXPERIMENT**



# WHAT YOU NEED

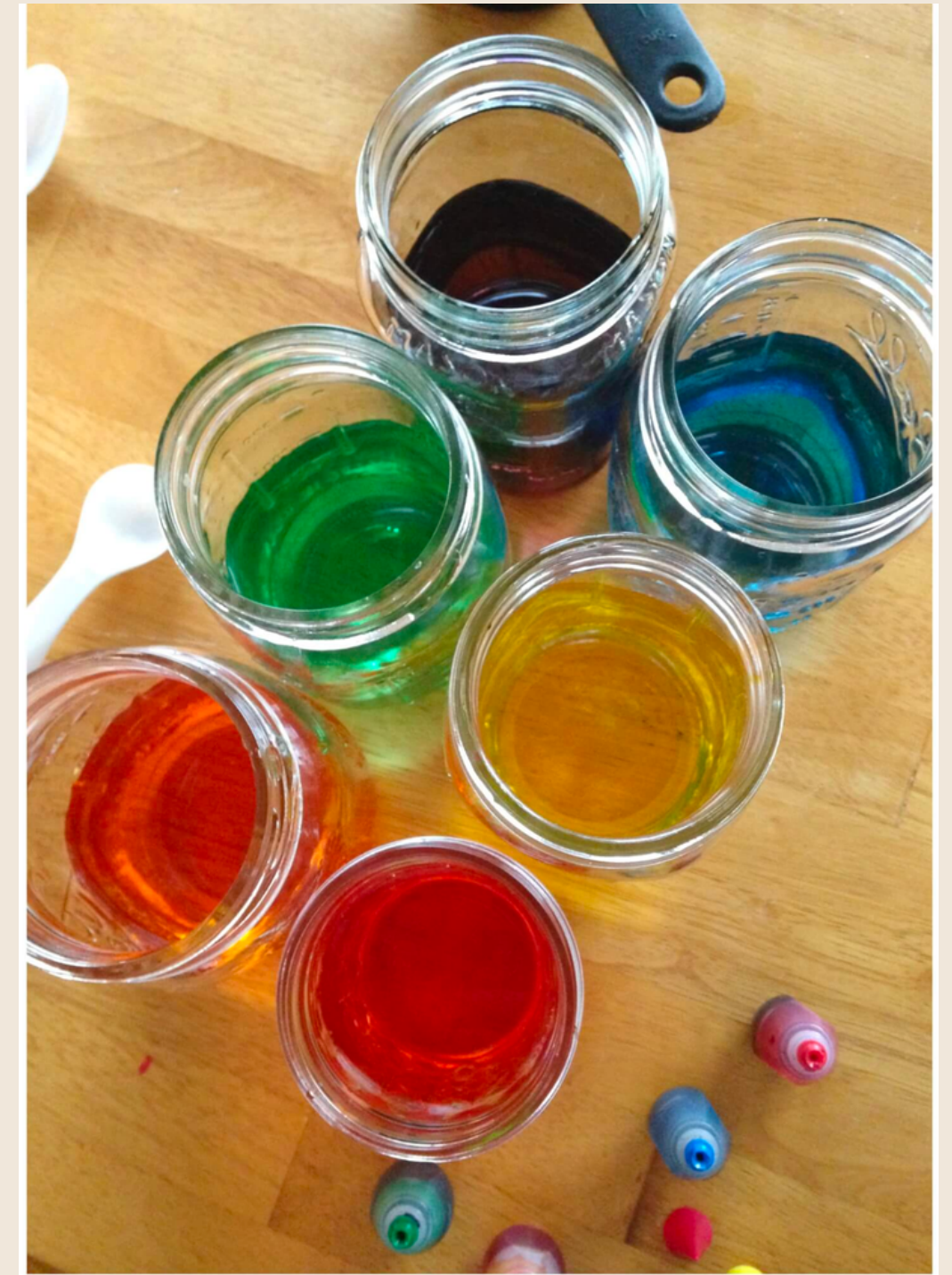
- 4 Cups
- Warm Water
- Sugar & Measuring Tsp
- Food Coloring
- Baster/Pipette
- Spoon
- Test Tubes





# STEP 1

Measure 1 cup of warm water and pour into each cup. Then, add 3-4 drops of different food coloring in each cup!

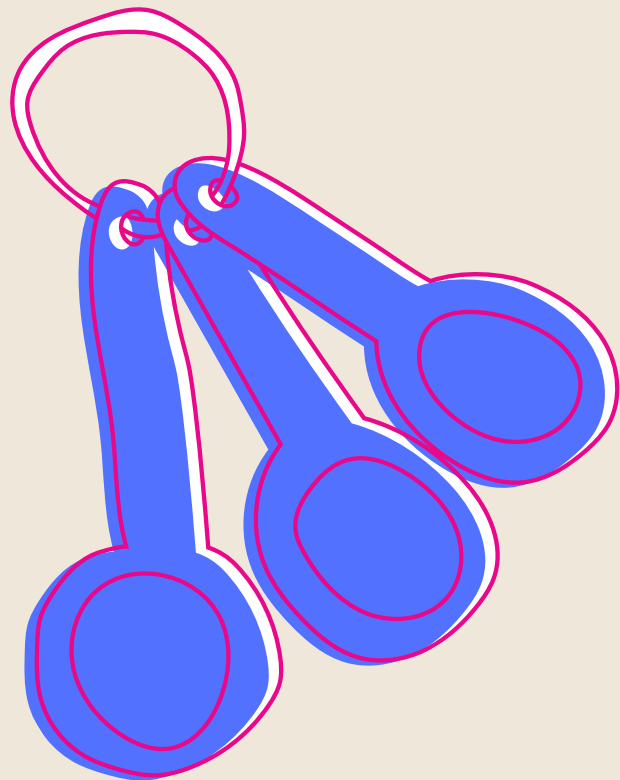




# STEP 2

Measure and mix different amounts of sugar  
into each cup, and stir, stir, stir!

COLOR	SUGAR (TBSP)
BLUE	2
GREEN	4
YELLOW	6
RED	8





# STEP 3

## LET'S CREATE OUR RAINBOW!

1. Squeeze the pipette/baster and put it in the red water. Release a little of the pressure to suck up some red water.
2. Keeping it squeezed, transfer to yellow, release a little more to suck up some yellow water.
3. Continue to do this for all the colors.





# RESULTS!!!

Once you put the waters in the test tube, it should look a little something like this:





# How Did We Get Stripes?

## A Lesson on Water Density

### What is Density?

Density is about the amount of stuff (mass) in a given space (volume). The more sugar in the water, the denser it is! The denser the substance, the more likely it'll sink!

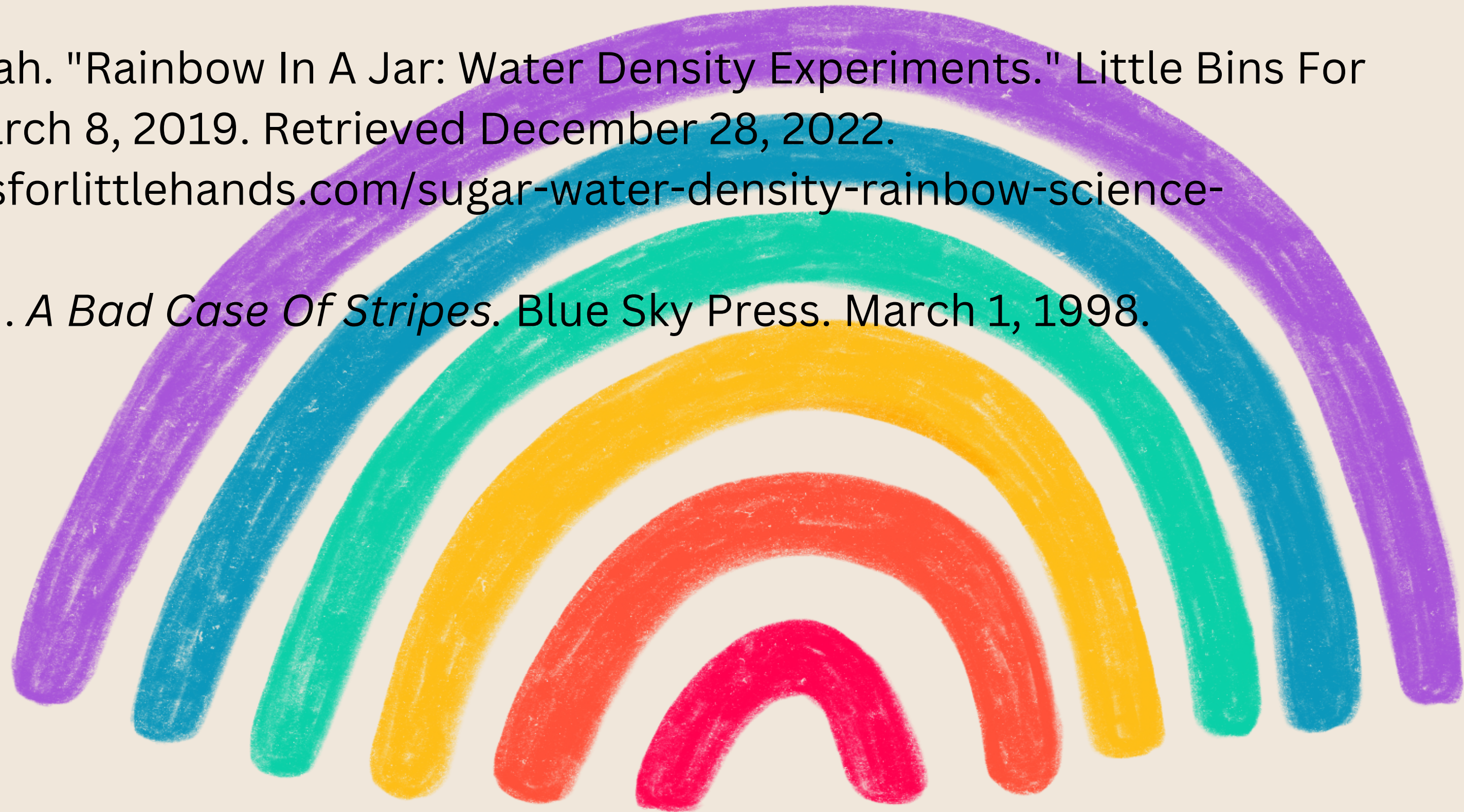
### How do the colors stack?

Keeping the volume of water constant, we put different amounts of sugar in each cup, creating solutions of increasing densities. Mixing these solutions gives us layers, which can be seen using different types of food coloring!



# Sources

- McClelland, Sarah. "Rainbow In A Jar: Water Density Experiments." Little Bins For Little Hands. March 8, 2019. Retrieved December 28, 2022.  
<https://littlebinsforlittlehands.com/sugar-water-density-rainbow-science-experiment/>
- Shannon, David. *A Bad Case Of Stripes*. Blue Sky Press. March 1, 1998.





THANK  
YOU!