



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

use the scientific method to understand density.

Supplies Required:

Syrup
Water
Cooking Oil
Rubbing Alcohol
Dish Soap
Large, Tall Jar

Video

Watch the video and learn how density works: <https://tinyurl.com/y889u3yk>.

Overview

We are going to learn how density work. We are going to compare the different density of liquids. Density is how much a matter is, for our purpose in, a liquid, per vloume. In other word how much matter is in a liquid for how much we have. Generally the more desinty something has the more heavier it tends to be. We our going to see this through our liquids that we are using.



Instructions

1. STEP 1: Problem: What do we want to solve? What will happen when put different liquids with different density in the same bottle?
2. STEP 2: Hypothesis: Make a prediction!
Draw your prediction.
3. STEP 3: Experiment: Test it out and make observations!
Put the heaviest to lightest: first syrup, then dish soap, then water, then oil, and
4. STEP 4: Analysis: Based on your observations what do we now know?
What happened to the liquid in the bottle?
5. STEP 5: Conclusion: Was your hypothesis correct or incorrect?

Additional Resources

1. Another Density Experiment: <https://tinyurl.com/gqwaoet>.
2. What is Buoyancy? <https://tinyurl.com/grqzpo5>

Share It Out

Share on social media: Share the results of your experiment with your friends and family on social media! Explain the steps of the scientific method in a video! Use the hashtags:

#ScientificMethod
#ProjectExploration
#StemAtHome

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634



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