



RAINBOW

Discover density by creating a rainbow in a glass!



1. PREDICTION

What do you think will happen when we pour the liquids into the glass?



3. OBSERVATIONS

What did you see? What happened?



4. WHAT DID I LEARN?

Why do you think the liquids stayed in separate layers?



2. DRAW YOUR EXPERIMENT

Draw what you see after adding each liquid.



5. CHALLENGE QUESTION

What would happen if you changed the order of the liquids?

MATERIALS



DIRECTIONS

- 1 Add purple food coloring to the honey (or mix red and blue to make purple).
- 2 Slowly pour the honey into the glass.
- 3 Tilt the glass and carefully pour in the dish soap. (You can add blue food coloring if needed.)
- 4 Mix green food coloring with water and gently pour it into the glass.
- 5 Repeat the process with the oil.
- 6 Finally, pour in the alcohol with red food coloring.
- 7 Look closely at your rainbow layers!

WHY IS THIS HAPPENING?

Each liquid has a different density (thickness). Honey is the most dense and stays at the bottom. Alcohol is the least dense and stays on top. This creates the layered effect you see—like a rainbow!



EXTRA QUESTION

What would happen if we used more honey?
What if we used more water?

NOTE

Be sure to add the same amount of each liquid and pour slowly in the correct order for the layers to form properly!

