

Pop Rocks® Science Worksheet

Data Table

Mass of Pop Rocks (g)	
Initial Volume of Gas in Centrifuge Tube (mL)	
Final Volume of Gas in Centrifuge Tube (mL)	
Final Color of Indicator Solution	

Post-Lab Questions and Calculations

1. What was the total volume of CO₂ collected in the centrifuge tube?
2. Explain the observed color change of the bromthymol blue indicator solution.
3. Why was it necessary to add 0.01 M sodium hydroxide to the indicator solution before starting the experiment?
4. How much CO₂ is released (in mL) per gram of Pop Rocks?
5. Based on the volume of CO₂, calculate the volume in liters of CO₂ that would be required to make a 10-kilogram batch of Pop Rocks?
6. Based on the answers to Questions 2–5, would you predict the actual volume of CO₂ originally added during manufacturing of 2.0 g of Pop Rocks more than, less than, or the same as the value calculated in Question 1?