

# 7TH GRADERS EXTRACT DNA FROM STRAWBERRIES!

Our 7th graders stepped into the role of real scientists this week as they completed one of the most exciting labs of the school year—extracting DNA from strawberries! Using simple household materials like a zip-top bag, cheesecloth, cold alcohol, and a salt-and-soap buffer solution, students learned how to break open plant cells and separate out long strands of real DNA. Because strawberries contain eight copies of each chromosome, they produce a large and visible amount of DNA—perfect for middle school scientists to investigate.

The lab followed a full scientific procedure, from forming hypotheses to crushing strawberries by hand, filtering the mixture, carefully layering alcohol, and finally using a glass stirring rod to spool the DNA. Students were amazed when cloudy, string-like clumps began to appear—proof that DNA is a real, physical molecule and not just something found in textbooks. This hands-on experience helped them understand that DNA in non-dividing cells is long, thread-like, and tightly packed.

The students' reactions captured the excitement of discovery. "Probably my favorite part was pouring the liquid into the strawberry juice," Trevin shared. "Why? Satisfaction." Sophia said her favorite step was "smashing up the strawberries, 'cause I got to see all the big chunks go into smaller pieces and become juice—which was pretty disgusting, but cool to look at." When asked what they learned, she added, "Everything has living DNA cells...and you get to see the little strings that make up the DNA." Trevin summed it up simply and enthusiastically: "Mixing alcohol with strawberries gives you this...DNA! Oh my gosh—very cool."

This unforgettable lab helped students bring together key concepts in life science—cell structure, chemical reactions, and the universality of DNA in living things. It also ignited curiosity and confidence as they carried out a real biotechnology technique used by scientists around the world. Our 7th graders didn't just learn about DNA—they held it in their hands.

