我最喜欢的实验：不用嘴吹的气球

敬爱的老师、亲爱的同学们：大家好！今天我演讲的题目是《我最喜欢的实验：不用嘴吹的气球》。同学们，气球都是我们用嘴吹大的，对吧？可是有一次，我不用嘴，只用一个瓶子、一些白醋、一勺小苏打，就让气球自己鼓了起来，像一个慢慢深呼吸的胖娃娃。那是我最喜欢的一次实验。

这个实验的名字叫瓶子吹气球。那天晚上，爸爸把材料摆在餐桌上：一个空矿泉水瓶、一小袋白醋、一小勺白色粉末，还有一个瘪瘪的气球。白色粉末叫小苏打。爸爸让我把醋倒进气球肚子，再把气球口小心地套在瓶口上，让气球里的白粉末滑进瓶底的醋里。我屏住呼吸，把气球一提——粉末哗啦一下落进醋里。就在这一瞬间，瓶子里咕噜噜翻起白浪，越翻越快，而那个瘪气球，竟然一点一点地站起来了！它慢慢鼓圆、鼓圆，最后挺着大肚子立在瓶子顶上，怎么捏都不肯瘪。我拍手大喊：它自己吹起来的！它自己吹起来的！

爸爸问我：气球里没有嘴，是谁在吹？我想了半天想不出。爸爸告诉我，小苏打和白醋相遇，会变成一种看不见的气体，叫二氧化碳，是气体把气球撑大的。汽水里的气泡、面包里的小孔，也都是它。我盯着那个挺肚子的气球想：原来看不见的空气，也有这么大的力气。

这次实验给我的感受，我想用三个词来说。第一个词是惊讶。气球站起来的那一秒，我的心跳快了，像看魔术一样，可是这个魔术不需要道具师，需要的是我的双手。第二个词是明白。以前背科学词，二氧化碳四个字我总记不牢；现在不一样了，我一想到那个挺肚子的气球，四个字就自己蹦出来了。亲眼见过的道理，一辈子记得住。第三个词是分享。第二天我把实验讲给同桌听，他睁大了眼睛说：那明天咱俩也做一个！就这样，一个气球把科学传给了下一个人。

同学们，我多希望大家都能做一次瓶子吹气球。材料只要几块钱，快乐却装满了整个晚上。做的时候请大人帮忙倒醋，做完以后，把你的气球故事讲给同学听。下次班会，我们比一比谁的气球肚子最大！让我们一起动手，让好奇心像气体一样，把我们的脑袋撑得满满的、亮亮的。我的演讲完毕，谢谢大家！

My Favorite Experiment: The Balloon That Inflated Without My Mouth

Respected teachers, dear fellow students: good morning! Today my speech is titled My Favorite Experiment: The Balloon That Inflated Without My Mouth. Balloons are blown up with our mouths, right? But once, without using my mouth at all — with only a bottle, some white vinegar, and a spoonful of baking soda — I made a balloon swell up by itself, like a chubby baby taking a deep breath. That was my favorite experiment of all.

The experiment is called the Bottle That Blows Up a Balloon. That evening, my father laid the materials on the dinner table: an empty plastic bottle, a small bag of white vinegar, a small spoon of white powder, and a deflated balloon. The white

powder is called baking soda. He had me pour vinegar into the belly of the balloon, then carefully stretch the neck of the balloon over the mouth of the bottle, letting the white powder inside slide down into the vinegar at the bottom. I held my breath and lifted the balloon — the powder splashed into the vinegar. In that instant, white waves began churning in the bottle, faster and faster, and that flat balloon actually rose up, bit by bit! It swelled round and round until it stood on top of the bottle with a big belly, refusing to deflate no matter how I squeezed it. I clapped and shouted: It blew itself up! It blew itself up!

My father asked me: there is no mouth inside the balloon — who is blowing it? I thought and thought and could not answer. He told me that when baking soda meets white vinegar, they become an invisible gas called carbon dioxide, and the gas stretched the balloon open. The bubbles in soda and the little holes in bread are made of it too. I stared at the big-bellied balloon and thought: so invisible air can hold such great strength.

I want three words for what this experiment gave me. The first is astonishment. In the second the balloon rose, my heart raced as if I were watching magic — except this magic needs no stage crew, only my own hands. The second word is understanding. Before, I could never keep the word carbon dioxide in memory; now it is different. The moment I think of that big-bellied balloon, the word jumps out by itself. A truth seen with your own eyes is remembered for a lifetime. The third word is sharing. The next day I told my deskmate about the experiment, and his eyes went wide: then tomorrow the two of us will make one too! Just like that, one balloon passed science to the next person.

Fellow students, I hope every one of you will try the Bottle That Blows Up a Balloon. The materials cost only a few coins, but the joy fills a whole evening. Ask a grown-up to help pour the vinegar, and afterwards tell your classmates your balloon story. At the next class meeting, let us see whose balloon has the biggest belly! Let us work with our hands and let curiosity, like a gas, inflate our heads until they are full and shining. Thank you all!