# 我最喜欢的实验：会爬楼梯的彩色水

敬爱的老师、亲爱的同学们：大家好！我是三年级的学生，今天我演讲的题目是《我最喜欢的实验：会爬楼梯的彩色水》。同学们，你们做过实验吗？我以前觉得实验是电视里才有的事，直到上个月，我在自家餐桌上，亲眼看见彩色水会爬楼梯。

这个实验的名字叫毛细现象。材料特别简单：两个杯子、几张纸巾、一点食用色素。我在两个杯子里倒了同样多的水，左边滴红色色素，右边滴黄色色素，把纸巾折成一条小桥，一头插进红杯子，一头插进黄杯子，然后就开始等。第一个小时，什么也没发生，我都有点想放弃了。可是到了第二个小时，奇迹出现了：红色的水竟然顺着纸巾的小桥，一步一步往上爬，爬过桥顶，又往下走到黄杯子里去！黄色的水也在往红杯子爬！到了晚上，两个杯子都变成了橙色，那张白纸巾的桥，中间是橙色，两头一个红一个黄，像一道迷你的彩虹桥。

妈妈告诉我，纸巾里藏着无数看不见的小细缝，水最喜欢钻这种细缝，钻着钻着就往上爬，科学家把这叫毛细现象。植物能把地下的水送到高高的叶子上，也是靠这个本领。我听得入了迷：原来我天天看见的花草，身体里都在上演着同样的爬楼梯。

做这个实验的时候，我最深的感受有两个。第一个感受是：等一等，奇迹就会来。前面一个小时我急得直跺脚，差点去摇杯子，幸好忍住了。第二个感受是：原来普普通通的纸巾里，藏着这么大的秘密。一张两毛钱的纸巾，居然像森林里的树一样会送水。从那以后，我吃饭看见芹菜的茎、看见馒头冒热气，都会想：这里面是不是也有小细缝？

同学们，我真心希望你们也试一试这个实验，它便宜、安全，只需要一点耐心。做完以后，把你的杯子、你的彩虹桥讲给同学听。下个月班级分享会，我准备再带一张彩虹桥来，谁愿意跟我比一比，谁的桥爬得最快？让我们一起动手，一起发现，把快乐变成我们的科学课。我的演讲完毕，谢谢大家！

# My Favorite Experiment: The Colored Water That Climbs Stairs

Respected teachers, dear fellow students: good morning! I am a third-grader, and today my speech is titled My Favorite Experiment: The Colored Water That Climbs Stairs. Have you ever done an experiment, everyone? I used to think experiments only happened on television, until last month, at my own dinner table, I watched colored water climb stairs with my own eyes.

The experiment is called capillary action. The materials are wonderfully simple: two cups, a few paper towels, a little food coloring. I poured equal water into both cups, dropped red coloring into the left one and yellow into the right, folded a paper towel into a little bridge with one end in the red cup and the other in the yellow cup, and began to wait. For the first hour, nothing happened, and I almost

gave up. But in the second hour, the miracle appeared: the red water was actually climbing up the paper bridge step by step, crossing the top of the bridge, and walking down into the yellow cup! The yellow water was climbing toward the red cup too! By evening, both cups had turned orange, and the white paper bridge was orange in the middle, red at one end and yellow at the other, like a miniature rainbow bridge.

My mother told me that paper towels hide countless tiny invisible gaps, and water loves to squeeze through such gaps, climbing upward as it goes; scientists call this capillary action. Plants send water from the soil all the way up to their highest leaves by the same trick. I listened, spellbound: the flowers and grass I see every day are acting out this same stair-climbing inside their bodies.

Doing this experiment left me with two deep feelings. The first is: wait a little, and the miracle will come. In that first hour I stamped my feet and nearly shook the cups — luckily I held back. The second feeling is that an ordinary paper towel hides such a big secret. A towel worth a few cents can carry water the way trees in a forest do. Ever since, whenever I see a celery stalk at dinner or steam rising from a steamed bun, I wonder: are there tiny gaps inside that too?

Fellow students, I sincerely hope you will try this experiment. It is cheap, safe, and needs only a little patience. Afterwards, tell your classmates about your cups and your rainbow bridge. At the class sharing meeting next month, I will bring another rainbow bridge — who wants to race me and see whose bridge climbs fastest? Let us work with our hands and make discoveries together, turning joy into our science class. Thank you all!

# 我最喜欢的实验：锅里跳舞的玉米粒

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：锅里跳舞的玉米粒》。要说我最喜欢的一次实验，不是课本里的，也不是老师演示的，而是我在自家厨房里，用一把玉米粒跳出来的一场舞。

这个实验的名字叫跳舞的玉米粒。需要的东西厨房里全都有：一个玻璃杯、清水、食盐、小苏打、几粒爆米花用的干玉米粒。第一步，我把玉米粒丢进清水，它们扑通扑通全沉到了杯底，像几颗小石子睡大觉。第二步，我往水里加盐，一勺、两勺、三勺，搅到水有点发浑，奇迹发生了：一颗玉米粒慢吞吞地浮了起来，接着两颗、三颗，好几粒悬在水里，像潜水员停在了半路！第三步最精彩：我加了一小勺小苏打，水里立刻咕噜噜冒起小泡泡，泡泡粘在玉米粒身上，把它托上去，到了水面泡泡破了，玉米粒又掉下来。上去、下来、再上去、再下来——玉米粒真的在杯子里跳起舞来了！我激动得跑去喊妈妈：快来呀，玉米粒会跳舞！

后来我才知道道理：盐水比清水有劲儿，能把玉米粒托起来；小苏打和水里的白醋打架，产生好多小气泡，气泡像救生圈一样把玉米粒带上水面，气泡破了，救生圈没了，玉米粒就沉下去。一个杯子，上演了浮力的大戏。

做这个实验，我的感受特别深。第一个感受是开心，玉米粒跳舞的时候，我笑得肚子都疼了，原来科学可以这么好玩。第二个感受是了不起，这个实验是我自己做的，盐是我一勺一勺加的，玉米粒是我一颗一颗数的，答案是我自己发现的，不是别人塞给我的。那天晚上我在日记里写：今天，我当了一回科学家。

同学们，科学不在很远的地方，它就在我们家的厨房里，在盐罐子旁边，在汽水的泡泡里。我希望大家也回家试试跳舞的玉米粒，试完了来学校，把你的舞伴讲给我们听。说不定下次班会，我们班能开一场玉米粒舞会呢！让我们一起动手，让每一粒普通的日子，都跳起舞来。我的演讲完毕，谢谢大家！

# My Favorite Experiment: The Corn Kernels Dancing in the Pot

Respected teachers, dear fellow students: good morning! Today my speech is titled My Favorite Experiment: The Corn Kernels Dancing in the Pot. If I name my favorite experiment, it is not one from the textbook or one the teacher demonstrated — it is a dance I made with a handful of corn kernels, right in my own kitchen.

The experiment is called Dancing Corn Kernels. Everything it needs is already in the kitchen: a glass, water, table salt, baking soda, and a few dry popcorn kernels. Step one: I dropped the kernels into plain water, and they all plopped to the bottom, sleeping like little pebbles. Step two: I added salt to the water — one spoon, two spoons, three — stirring until the water grew cloudy, and the miracle happened: one kernel slowly floated up, then two, then three, several hanging in the middle of the water like divers pausing halfway! Step three was the best: I added a small spoonful of baking soda, and the water instantly began bubbling. The bubbles stuck to the kernels and lifted them up; at the surface the bubbles popped, and the kernels sank again. Up, down, up, down — the corn kernels were truly dancing inside the glass! I ran to call my mother, shouting: come quick, the corn is dancing!

Later I learned the reason: salt water is stronger than fresh water and can hold the kernels up; the baking soda reacts with the vinegar in the water to make many tiny bubbles, and the bubbles act like life rings, carrying kernels to the surface; when a bubble pops, the life ring is gone, and the kernel sinks. One glass staged a grand play about buoyancy.

This experiment touched me deeply. The first feeling was joy — when the kernels

danced, I laughed until my belly ached. Science can be this much fun. The second feeling was pride. I did the experiment myself: I added the salt spoon by spoon, counted the kernels one by one, and discovered the answer myself instead of having it stuffed into me. That night I wrote in my diary: today, I was a scientist for once.

Fellow students, science is not far away. It lives in our kitchens, beside the salt jar, inside the bubbles of soda. I hope you will try Dancing Corn Kernels at home, and then come back to school and tell us about your dance partners. Perhaps at the next class meeting our class can hold a corn kernel dance party! Let us work with our hands and let every ordinary day break into dance. Thank you all!

# 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!