气球吸起了碎纸屑

十二月二日 星期四 阴有小雪

今天外面冷，放学回家我哪儿都不想去，就想做科学作业里那个吸纸屑的实验。我在客厅茶几上准备材料：一个气球，几张旧报纸，一把塑料尺，还有我自己身上这件粗毛衣。材料不多，我数了两遍，怕少带一样做不成。报纸是我撕的，撕成指甲盖那么大的小片，堆在茶几中间，像一小堆雪。

我把气球吹大，扎住口。先试了一下没蹭过毛衣的气球：把气球靠近纸屑，纸屑躺着不动，一点面子都不给。我又拿塑料尺在头发上蹭了蹭去吸，也只吸起来两片，还马上掉了。我心里想，难道书上写错了？

然后我照书上的办法，把气球在毛衣上蹭，一下、两下……我数到二十下，越蹭越快，气球表面蹭得有点发热。我把气球慢慢靠近那堆纸屑，不敢碰它们，就停在上面一寸的地方。纸屑动了。先是两三片跳起来，贴在气球底下，接着哗一下，一大半纸屑都往上跳，像有一双看不见的手从下面把它们托起来。我举着气球走，纸屑跟着我走，掉下去的又再跳上来。我乐得在客厅转圈，气球像拖着一串小尾巴。

我把妈妈从厨房喊出来。妈妈手上还拿着锅铲，她问我怎么了，我把气球举到她面前，底下挂着一排纸屑。我说妈妈你看，气球吸住纸了！妈妈说哪有吸力，你偷偷抹糨糊了吧。我说才没有，我摘给你看。我把纸屑抖掉，重新在毛衣上蹭二十下，又在妈妈眼前吸起来。妈妈哦了一声，说这下信了。我说这叫静电，毛衣和气球互相蹭，气球身上就攒了电，电把轻的纸屑拽上来，重的书它拽不动，我还试过，吸不起来。

我还发现塑料尺蹭头发也能吸，就是吸得少，蹭十下只吸起来三四片。我把这个也写进日记。原来电这个东西，头发里也有，毛衣里也有，平时看不见，一蹭就跳出来干活。

今天手有点忙，心里很满。明天我想蹭三十下试试，会不会吸得更多。

The Balloon Picked Up the Paper Bits

Thursday, December 2. Cloudy with light snow.

It was cold outside today, and after school I did not want to go anywhere. I just wanted to do the paper-picking experiment from our science homework. I set up my materials on the living room table: one balloon, some old newspapers, a plastic ruler, and the chunky sweater I was already wearing. Not many materials, and I counted them twice, afraid that missing one thing would ruin it. I tore the newspaper myself into pieces the size of a fingernail and piled them in the middle of the table, like a little heap of snow.

I blew up the balloon and tied it. First I tried the balloon without rubbing it on anything: I brought it near the paper bits, and they lay there, not giving me a

single bit of face. Then I rubbed the plastic ruler on my hair and tried that, but it only picked up two pieces, and they fell right off. I started to wonder, is the book wrong?

So I did what the book said. I rubbed the balloon on my sweater: one time, two times, and I counted to twenty, rubbing faster and faster until the balloon felt a little warm. I moved it slowly toward the pile of paper, not touching, stopping one inch above. The paper moved. First two or three pieces jumped up and stuck to the bottom of the balloon, then whoosh, most of them jumped, as if a pair of invisible hands were lifting them from below. I walked around holding the balloon, and the paper walked with me; the pieces that fell jumped back up again. I spun around the living room laughing, the balloon dragging a little train of paper behind it.

I shouted Mom out of the kitchen. She still had the spatula in her hand and asked what was wrong. I held the balloon in front of her with a row of paper hanging under it. I said, Mom look, the balloon is holding the paper! She said there is no such pulling force, you must have secretly smeared paste. I said no way, watch me redo it. I shook the paper off, rubbed the balloon twenty times on my sweater again, and picked the paper up right in front of her eyes. Mom said oh, and believed me. I said this is called static electricity. When the sweater and the balloon rub each other, the balloon collects electricity, and the electricity pulls up light paper. It cannot pull up a heavy book; I tried, and it failed.

I also found that the plastic ruler rubbed on hair works too, just weaker: ten rubs picked up only three or four pieces. I wrote that in my diary as well. So electricity hides in hair and in sweaters all the time, invisible, until a little rubbing calls it out to work.

My hands were busy today, and my heart is full. Tomorrow I want to try thirty rubs and see if it picks up even more.