科学课作业：盯着一窝蚂蚁看三天

科学老师布置了一项作业：选一个小动物，连续观察三天，每天写一条记录，还要写出自己的发现。别的同学选蜗牛、选金鱼，我选了我们教室门口台阶下的蚂蚁窝，因为它每天都在，我随时能看。我在本子上写下第一天的问题：这个洞里到底有多少只蚂蚁？这个问题我当然知道一天答不完，但我可以先数一数门口忙活的有多少。下课铃一响我就蹲到台阶下，盯着洞口数，进出一次算一只，可数到三十几就乱了，老有蚂蚁从别的缝里钻出来。我换了个办法：在洞口旁边放一片树叶当记号，看蚂蚁走哪条线。数出来的结果是，光我蹲着的十分钟里，从那个洞口进出的蚂蚁有五十多只。我在记录里写：洞里的蚂蚁肯定比这多得多，我数的只是出来干活的。

第二天我带着问题去：它们到底爱吃什么？我摆了三样东西在离洞口一样远的地方：一粒米饭、一小块糖、一小片肉干。然后上课去了，课间跑回来看。糖那里围的蚂蚁最多，米粒那儿只有两三只，肉干边上有一只大蚂蚁绕着转，转了半天，走了。我下午放学又去看，肉干那儿反而来了十几只，正一小块一小块往下掰。我在记录里写：它们先找到甜的，后来才发现肉。蚂蚁选食物不是一次就选完的，它们会一直找，找到新的就改主意。我把三样东西的位置记了下来，还画了个简图，标出哪条线最热闹。

第三天，我想试试它们的路是怎么认的。我趁早读课没下课，用手指把台阶下那条蚂蚁线从头到尾抹了一遍，指纹蹭过的地方土都平了。我有点心虚，怕把它们害惨了。结果第二节课间去看，蚂蚁全乱了：有的原地转圈，触角举得高高的，有的干脆贴着台阶边重新走。到了中午，一条新线慢慢成形，绕开了我抹过的那一段，改从地砖缝里走。更让我没想到的是，傍晚我再看，老线上又有蚂蚁走了，像重新铺好了一样。我在第三天的记录里写：抹掉路，它们会迷路一阵，但一定能再找出来。它们认路靠的不是眼睛看见的那条线。这个结论后面我画了个问号，因为老师说过蚂蚁靠气味认路，我打算再做个实验：用酒精棉球擦一段路，看它们还找不找得到。

Science Class Homework: Watch One Ant Nest for Three Days

Our science teacher assigned a project: pick a small animal, observe it for three days in a row, write one record each day, and note what you discover. Other classmates chose snails or goldfish. I chose the ant nest under the steps outside our classroom, because it is there every day and I can look any time. On the first day I wrote my question in the notebook: exactly how many ants live in that hole? I knew one day would not answer it, but I could at least count how many are busy at the entrance. When the bell rang I squatted under the steps and counted the ants going in and out, one per trip, but I lost count past thirty, since ants kept coming out of other cracks too. I switched methods: I placed a leaf beside the hole as a marker and watched which line they used. The result was that in the ten minutes I squatted there, more than fifty ants passed through that opening. I wrote in my record: there must be far more ants inside than that; I only counted the ones out working.

On day two I went with a new question: what do they actually like to eat? I set

three things at equal distance from the hole: a grain of rice, a small piece of sugar, a sliver of dried meat. Then I went to class and ran back at break. The sugar had the most ants swarming it, the rice had only two or three, and one big ant circled the meat for a while, then left. After school I checked again, and by then a dozen ants had come to the meat, breaking off tiny pieces. I wrote in my record: they found the sweet thing first and discovered the meat later. Ants do not finish choosing their food at once; they keep searching, and when they find something new they change their minds. I noted the positions of the three items and drew a simple map marking the busiest line.

On day three, I wanted to test how they recognize their road. During morning reading class, I dragged my finger along the whole ant line under the steps, flattening the soil wherever my fingerprint passed. I felt a little guilty, afraid I had ruined them. At the break after second class, the ants were in chaos: some spun in circles on the spot with their antennae held high, some simply walked along the edge of the steps. By noon, a new line slowly took shape, avoiding the section I had smeared, detouring through the gap between the floor tiles. What surprised me even more: when I looked again in the evening, ants were walking the old line again, as if it had been relaid. In my third record I wrote: erase their road and they get lost for a while, but they always find a way out. They do not rely on the line their eyes see. I drew a question mark after that conclusion, because our teacher once said ants navigate by scent. I plan to run one more test: wipe a section of their road with an alcohol swab and see whether they can still find it.