背对太阳，也能把彩虹请出来

尊敬的老师们、亲爱的同学们：早上好！今天我国旗下讲话的题目是《背对太阳，也能把彩虹请出来》。同学们，雨后的彩虹人人爱看，可是有人想过吗：彩虹能不能不靠下雨，由我们自己造出来？三个月前的一个下午，我们班的同学就真的在操场上，造出了一道小小的彩虹。

那天体育课自由活动时，一位同学拿着喷水壶朝空中浇水雾，忽然喊：快看，有彩虹！好几个同学围过去，果然，水雾里挂着一小段七彩的弧。可是第二天大家再去喷，彩虹不见了。为什么昨天有、今天没有？同学们你一言我一语：有人说太阳的位置不一样，有人说风把雾吹散了，还有人说，也许要背对着太阳才看得见。科学老师听说后，把我们的疑问变成了全班的大任务。我们分小组连续观察了一周：背对太阳喷、侧着身子喷、上午喷、傍晚喷，把每次能不能看到彩虹、太阳在什么位置，全都记在记录单上。一周以后结论浮出来了：要背对太阳、太阳低低的、水雾细细的，三个条件都满足，彩虹才会出现。后来我们还在自然课上验证了它的原理——白光里藏着七种颜色，小水珠把光拆开，彩虹就出来了。从一声惊喜的喊，到一条被我们亲手验证的规律，只隔着一周的好奇。

同学们，这道小小的彩虹，教会我们三件关于科学精神的事。第一，好奇是起点。如果那天没有人多问一句为什么昨天有今天没有，彩虹就只是一次好运。第二，观察要讲证据。我们不是猜出答案的，是用一周的记录单把答案请出来的。第三，科学属于每一个人。造彩虹不需要昂贵的仪器，只需要一只喷水壶、一片阳光和一颗不肯走开的好奇心。

今天，在庄严的国旗下，我代表全体同学向全校发出号召：愿我们做追光的人，也做造光的人。第一，遇到惊奇，多留一步。看见彩虹、看见影子、看见水洼里的油花发亮，别急着走开，停下来问一句为什么。第二，把疑问交给观察和实验。用记录单、用对比、用重复，让事实开口说话。第三，把好奇分享出去。学校下个月将举办校园科学节，每个班都可以展示一个小实验，欢迎同学们把自家的喷水壶、放大镜、小磁铁带来，让全校一起造彩虹、一起提问题。也欢迎老师们加入，和我们一起惊讶、一起求证。

同学们，彩虹要背对太阳才能看见，探索路上也常有这样的提醒：换一个方向，光就来了。愿我们永远保有一颗好奇的心，像水珠拆光那样，把世界拆开看清楚；愿好奇心带我们探索，从操场上的小彩虹，走向未来大大的世界。我的讲话完毕，谢谢大家！

Turn Your Back to the Sun, and You Can Still Invite Out a Rainbow

Respected teachers, dear fellow students: good morning! Today my speech under the flag is titled Turn Your Back to the Sun, and You Can Still Invite Out a Rainbow. Everyone loves to see a rainbow after rain, but have you ever wondered: can a rainbow be made by ourselves, without waiting for rain? On one afternoon three months ago, students in our class really did make a small rainbow on the playground.

During free time in P.E. class, a classmate was spraying water mist into the air

with a watering bottle when she suddenly shouted: look, a rainbow! Several classmates rushed over, and sure enough, a small colored arc hung inside the mist. But the next day, when they sprayed again, the rainbow was gone. Why yesterday but not today? Opinions flew: maybe the sun was in a different place; maybe the wind blew the mist away; maybe you have to stand with your back to the sun to see it. When our science teacher heard, she turned our question into a whole-class mission. By groups, we observed for a full week: spraying with our backs to the sun, spraying sideways, spraying in the morning, spraying at dusk, recording every time whether the rainbow appeared and where the sun stood. A week later the conclusion surfaced: back to the sun, sun low, mist fine — only when all three conditions are met does the rainbow appear. Later in science class we verified the principle: white light hides seven colors, and tiny water droplets split the light apart — out comes the rainbow. From one shout of delight to a law we verified with our own hands, only one week of curiosity stood in between.

Fellow students, this small rainbow taught us three things about the scientific spirit. First, curiosity is the starting point. If nobody had asked that day why it appeared yesterday but not today, the rainbow would have been nothing but good luck. Second, observation demands evidence. We did not guess the answer; we invited it out with a week of record sheets. Third, science belongs to everyone. Making a rainbow needs no expensive instruments — only a spray bottle, a patch of sunlight, and a curious heart unwilling to walk away.

Today, beneath this solemn flag, on behalf of all students I call upon our whole school: may we be people who chase light, and also people who make light. First, when you meet something wonderful, stay one step longer. See a rainbow, a shadow, an oil slick glittering in a puddle — do not hurry off; stop and ask one why. Second, hand your questions over to observation and experiment. Use record sheets, comparisons, repetition, and let the facts speak. Third, share your curiosity. Next month our school will hold a Science Festival; every class may present one small experiment. Bring your spray bottles, magnifying glasses, and small magnets, and let the whole school make rainbows and ask questions together. Teachers, you are welcome too — come be astonished and verify with us.

Fellow students, a rainbow can only be seen with your back to the sun, and along the road of exploration there is often the same reminder: change your direction, and the light arrives. May we always keep a curious heart, taking the world apart to see it clearly the way water droplets split light; may curiosity lead us to explore, from the little rainbow on the playground to the great world of the future. That concludes my speech. Thank you!