

Baylis Blast

4th Grade Field Trips with Brookhaven National Lab

Fall 2013

On October 24, 2013 fourth grade students went on a trip to Brookhaven National Lab's Science Learning Center. There were numerous exhibits, designed to support the science curriculum. Our classes participated in three activities: transfer of energy, magnetism, and electricity. Children rolled cars down ramps at different heights, and recorded data for three trials at each height. They shared the data to discover that the distance the cars rolled increased as the height of the ramp increased. To learn about magnetism, students created a "Mag-Lev," or "train," that levitated on magnetic tracks, by using the magnet's ability to attract and repel. To learn about electricity, students linked pinky fingers and created a "human" closed circuit to make a bulb light up! They then hypothesized about, and tested a variety of objects to discover which materials were conductors or insulators.



On November 12, 2013, Brookhaven Labs conducted the “Magnets to Go” program here at Baylis Elementary School. The hour long workshop was designed to teach fourth graders about magnetism through hands-on activities. Pairs of students were given objects to test for magnetism. After making their hypotheses, and testing objects, students discovered that not all metals were magnetic! An acronym, “CoINS,” describes the four metals that are magnetic- cobalt, iron, nickel, and steel! Next, students used strong magnets to see magnetic fields by placing magnets into a container of iron filings and observing where filings were attracted to the magnet. They then used electricity running through coiled copper wire, or solenoids, to make a magnet! When they unplugged the solenoid, they used a magnet to make enough electricity to light up a bulb! It was an exciting learning experience for all!

