On October 16th and 17th, 2012, educators Sarah McGuire and Jaclyn Miller, from the Chesapeake Bay National Estuarine Research Reserve in VA, visited all of Mr. Gaylord’s and Mr. Smith’s 7th grade science classes to instruct the students about the Chesapeake Bay watershed. Students spent time measuring and analyzing water quality samples from four different reserve locations along the York River. Afterwards, students learned about buoys and how they are used to help monitor water quality and weather data in the Chesapeake Bay.

Students measured the water quality by testing the following parameters: pH, turbidity, and salinity. The tool pictured above is a refractometer which is used to test the salinity, or the amount of salt in the water.
Once students understood the use of the buoys and accessed real-time buoy data via the Chesapeake Bay Interpretive Buoy System, they were tasked with building a buoy of their own. Students were put into teams of scientists and had to build a buoy out with PVC pipe that could: 1) float 2) have a platform attached 3) hold weight. Students tested their designs in the kiddie pool located in the school’s courtyard.
TESTING PHASE