



TEAM Tox visit to Linus Pauling Middle School

October 30, 2012

Led by Diana Rohlman and McKay Allred

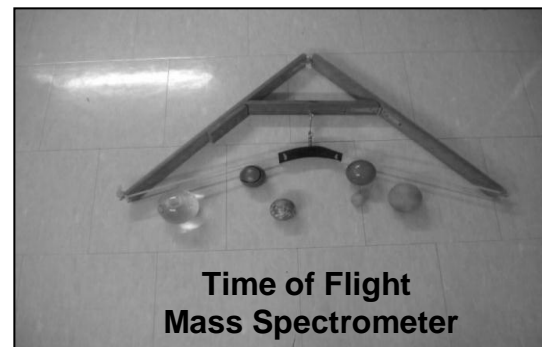
Following the Explorations in Toxicology workshop, one of the participating teachers at Linus Pauling Middle School contacted TEAM Tox, students to speak to her 8th grade Science classes, who had recently completed a module about the impacts of oil spills.

TEAM Tox taught 4 8th grade classes about how mass spectrometry can be used to identify chemical mixtures. This was followed by a hands-on activity using the mock mass spectrometer developed in the Winter 2011 EMT Seminar (shown on the right). Using balls of different known mass to represent different chemicals, we measured the time it took each ball to travel 20 feet. The students then deployed a ball of unknown mass, and estimated the mass of the unknown by using the standard curve.

In total, four classes of 8th graders (120 students) and two 8th grade teachers participated in the event.



McKay Allred led a discussion about the use of mass spectrometry to identify pollutants in the water after the Gulf Oil Spill



Students used a Time of Flight device to simulate a mass spectrometer. The device was originally developed in the 2011 EMT seminar, and refined by Dr. Jennifer Field