Chemical and Physical Changes

The Scientific Frontiers Program is evolving and growing. K-9 students are exposed to physical and chemical properties of matter through active participation in demonstrations and experience-based learning revolving around observation and inference. More than 700 students from NYC schools have participated since inception of the Y2014 MRSEC Award.

New demonstrations launched in Y2016:

Elephant toothpaste!
Demonstrating the concept of exothermic reactions using hydrogen peroxide, soap and potassium iodide

“Who wrote the note and what pen did they use?”
Teaching chromatography and separations through fun exercises and detective work

Traffic light reactions
Demonstrating chemical reversibility through the reduction of a dye, methylene blue, and an alkaline solution of dextrose.

Dancing metals
Sodium flakes on water: Physical change or chemical change?

Brain foam….freezing flowers….more