



Mad Science of the Mid-Hudson Special Event/Assembly Summary:



"Reactions in Action" "Fire & Ice"

This Mad Science Special Event program focuses specifically on chemistry and chemical reactions. Children are amazed by big, dramatic demonstrations...and yet their interest is piqued by the ordinary nature of the substances used.

The Mad Scientist starts by using Dry Ice to create the same colorful, bubbling potions seen on TV and in the movies. These are not actually chemical reactions, merely a physical change that creates a fantastic effect as the carbon dioxide phases from a solid to a gas.

Moving on to real chemistry, volunteers assist with color-changing potions in giant test tubes. Hydrogen peroxide is used with a catalyst to create giant clouds of steam and columns of foam 20 feet high.

Several different combustion reactions reveal the energy hiding inside fuels. Students see the possible dangers of using extreme fuels...balloons full of hydrogen appear to be normal but explode once a candle is placed alongside. Using common cooking ingredients, the Mad Scientist demonstrates that too much air can create a dangerous chemical reaction even if the fuel involved is not very flammable – and creates a fireball as proof.

This show has over 75 minutes of content, which allows the Mad Scientist to custom fit the demonstrations used in each 45-minute performance to the ages involved, from pre-K to 8th grade. Audience participation is stressed throughout the presentation.

