



*Watch in awe as the Mad Scientist creates numerous versions of erupting science with an assortment of experiments featuring both chemical and physical changes!*

### **SUMMARY:**

Are you ready for some fun science? Our Special Event, "Spin, Pop, Boom" is all about awesome experiments! You will be amazed when the Mad Scientist is able to defy gravity in this energetic and spectacular special event. Didgeridoo tubes, giant bubbles and steaming chemical reactions will introduce children to a world of exciting chemistry. You will marvel at our demonstrations as we release genies from bottles and spew massive columns of foam with the use of our catalysts! So, get ready to be amazed while you learn, because at Mad Science, all education is entertaining!

### **EDUCATIONAL VALUE:**

This program introduces children to chemistry with mysterious mixtures and surprising solutions. Gravity, inertia, and centripetal force are some key concepts they discover along the way. Children witness and participate in producing acoustic sounds using chemical reactions.

### **TAKE-HOME MESSAGE:**

- 1 A chemical change happens when mixed substances create something new.
- 2 Centripetal force makes objects move in a circle.
- 3 Vibrations create different sounds.

### **NORTH CAROLINA ESSENTIAL STANDARDS:**

- K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped).
- 1.P.1 Understand how forces (pushes or pulls) affect the motion of an object.
- 2.P.1.1 Illustrate how sound is produced by vibrating objects and columns of air.
- 3.P.1 Infer changes in speed or direction resulting from forces acting on an object.
- 3.P.2.2 Compare solids, liquids, and gases based on their basic properties.
- 4.P.3.1 Recognize the basic forms of energy (light, sound, heat, electrical, and magnetic) as the ability to cause motion or create change.
- 5.P.1.1 Explain how factors such as gravity, friction, and change in mass affect the motion of objects.
- 5.P.2.3 Summarize properties of original materials, and the new material(s) formed, to demonstrate that a change has occurred.

