KANSAS CITY YOUNG AUDIENCES

An Affiliate of Young Audiences Arts for Learning

Teacher Program Guide

Program Name: Professor I Drop, the Juggling Scientist

Artist: Laughing Matters

Special Requirements:

Two 6' tables

Special Points of Interest:

Jay chose the name "Professor I Drop" in part because scientists use eyedroppers. The other reason? To quote Jay, "Sometimes I juggle, and sometimes I drop."

Other Programs by this Ensemble:

-How Freedom Works
-All Hands on Math
-One, Two, Learning with You
-Juggling the Earth's Resources
-Aesop's Fables
-Read It Right Now
-Sum of Our Favorite Numbers
-Letters, Numbers, Shapes and Colors

Workshop Description

Jay Cady of Laughing Matters combines two of his passions, juggling and science, in this entertaining interactive workshop.

Jay shares poems he wrote about famous scientists and their accomplishments. Each poem has a juggling trick or mime illusion that goes with it.

Next is a discussion of two kinds of energy—kinetic energy and potential energy. Jay gives examples of both kinds of energy.

At first, he uses ordinary objects such as rubber bands and balloons. Then he moves to juggling props—bean bags, spinning plate, and Chinese yo-yo.

In addition to explaining the science, Jay also stresses that the way to learn any skill is to be willing to make mistakes and learn from them.

The workshop concludes with students making up experiments to solve "The Four Box Mystery". The class must discover which object is in which box without opening them. This develops their creative problem-solving skills.

Educational Objectives & Standards

Students will:

- Learn about famous scientists and their accomplishments.
- Understand kinetic energy and potential energy.
- Create experiments to solve a mystery.

Standards addressed:

- Knows that the position and motion of an object can be changed by pushing or pulling.
- Understands the structure and properties of matter.

Artist Bio: Jay Cady

Leslie and Jay Cady have been full-time performing artists since 1980. They have performed their engaging blend of juggling, mime, magic, and wacky dialogue in 32 states and seven foreign countries.

Jay and Leslie enjoy using their big bag of tricks to illustrate and reinforce curriculum concepts. Their infectious sense of fun is a hit with students, teachers, and administrators.

In 1984 they studied with legendary mime Marcel Marceau. They were two of 60 students chosen to study with Marceau in the first two-week workshop he taught in the United States.

They have two daughters who join the act in the summer. When Jay and Leslie were PTA Cultural Arts Chairpersons they saw the need for school assemblies that reinforce curriculum.

Jay and Leslie have twice been nominated for the "Best of Kansas City Theater Awards". They have performed for ESPN, the National Theater of Guatemala, and the U.S. Department of Defense Overseas Tours.

List of Resources:

Books:
How We Found Out About Energy
Asimov, Isaac (Longman, How We Found Out About Series, 1982)

Videos:
October Sky
(Universal Pictures, 1999)
Excellent feature film about a teenager inspired to teach himself rocketry after the launch of Sputnik in 1958.

Online Resources:
www.juggle.org
Website of the International Jugglers Association

www.sciencenewsforkids.org
New games, puzzles, articles, and projects every week

Vocabulary

Kinetic Energy: If something moves, it has kinetic energy.

Potential Energy: Stored up energy that can be released as kinetic energy.

Experiment: A test to find out what you need to know.

Hypothesis: A guess that you can test with an experiment.

George Washington Carver: American scientist who discovered hundreds of uses for peanuts, including peanut butter.

Nutrient: A property of soil that provides food for growing plants.

Glider: A craft similar to an airplane with no engine or propeller.

Chinese yo-yo: An hourglass shaped juggling prop manipulated with a string attached to two handsticks. It is also called a diabolo.

Post-Workshop Activities

1. Students can make up poems about other scientists. Jay's poems were in a five line limerick format where lines 1, 2, and 5 rhyme and lines 3 and 4 rhyme. Other rhyming schemes could be used instead.

2. Energy is often in the news. Clip articles from the newspaper about energy and discuss how they affect politics and the environment.

3. Learn to juggle! Besides being fun it is proven to increase academic achievement because it stimulates both sides of the brain. Anyone can get started with easily found objects and instructions that can be found online (see Resources above).

4. Create your own box mystery. Find some identical boxes and put different things in them and challenge others to find out what is in each box without opening them.

5. In Jay's workshop, objects were identified by shaking the boxes, weighing the boxes, and trying to pick up the boxes with a magnet. Perhaps you can think of other properties that can be discovered through making up experiments.

Contact KCYA for more information about this and other programs

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