

Program Name: Paige Ahlenius

Artist: The Magic of Science

Special Requirements:

Worktables or large open space for students to work. Artist needs 15 – 20 minutes to set up supplies for the workshop. If two or more workshops are scheduled, students need to come to the room where the artist is. Teachers must be present at all times during workshops.

Special Points of Interest

Workshop Description

This customizable workshop allows students to explore the world of science through visual arts.

Your students will work on one of the following projects:

- Design your own crystal garden
- Investigate properties of matter by creating a lava lamp
- Learn the secrets of invisible ink
- Design and build a gravity carousel (3rd-8th grade)

Discoveries abound when you put the arts and sciences together!

 **S.T.E.M.** (Science, Technology, Engineering & Math)

 **Fine Arts**

Educational Objectives & Standards

Students can:

- Work in groups to design and build structures.
- Learn trial and error and learn from their mistakes.
- Learn basic engineering principals.
- Engage in active listening.
- Collaborate in the creation of differing artistic expressions



Artist Bio:

Paige Ahlenius holds a Masters of Fine Arts in Scene Design from the University of Virginia and has been investing in the Kansas City arts community since 1999.

A KCYA Teaching Artist since 2008, Paige has developed various process-based art, social arts integration programs

for students ages 3 through 18. Some of them include Construction Physics, The Magic of Science, Galimotos and Portraits for Social Justice. Paige also facilitates STEM + Arts Integration workshops for students and professional development sessions for teachers.

Vocabulary

Experiment: an attempt to do something new or see what will happen: use of repeated tests and trials: the use of tests and trials in order to make discoveries.

Design: a plan or drawing produced to show the look and function or workings of an object before it is built or made

Investigate: carry out research or study into a subject so as to discover facts or information

Predict: say or estimate that a specified thing will happen in the future or will be a consequence of something

Solid: firm and stable in shape

Liquid: a substance that flows freely but is of constant volume, having a consistency like that of water or oil

Gas: a substance in a state in which it will expand freely to fill the whole of a container, having no fixed shape and no fixed volume

Crystal: a homogeneous solid substance having a natural geometrically regular form with symmetrically arranged plane faces. Three-dimensional aggregation of atoms or molecules.

Lava: hot molten or semi fluid rock

Post-Workshop Activities

1. Make a parachute! Grab a plastic bag and cut out an octagon. Cut a small hole near the edge of each side. Attach 8 pieces of string of the same length to each of the holes. Tie the pieces of string to an object that could be used as a weight. Stand on a chair to drop your parachute and test how well it worked (it should fall slowly).

2. Use the following web resources for follow up activities that explore engineering and physics concepts.

- pbskids.org/designsquad/parentseducators/
- www.teachengineering.org/
- Childrensengineering.org

Contact KCYA for more information about this and other programs

816.531.4022
KCYA.org