



# FACILITATED EDUCATIONAL PROGRAMS

## STEM CLASSROOM PROGRAMS

Classroom programs enrich learning and compliment free exploration of the exhibit hall floor. This curriculum has been developed by our educational staff and is based on current educational standards in Pennsylvania. *Each program may be 25, 45, or 60 minutes in length. Maximum 25 students per program. Subject to educator availability.*

## ENGINEERING: THINK LIKE AN ENGINEER

*Ideal for Grades 3-8*  
Students will be presented with multiple design and building problems where they must “think like an engineer” to solve them.

## ENGINEERING: 2D TO 3D THINKING

*Ideal for Grades K-8*  
Students are given a two-dimensional diagram and must use spatial reasoning to construct a three-dimensional structure from it.

## TECHNOLOGY AND PHYSICS: CLICK, SNAP, CIRCUITS!

*Ideal for Grades 3-8*  
Students learn about Electricity and Circuits while building a variety of different complete circuits from simple to complex.

## TECHNOLOGY: YOU BE THE ROBOT, A CODING INTRODUCTION

*Ideal for Grades K-2*  
Students get to play Programmer or Robot while learning the basis of C++ and Block Programming

## CHEMISTRY: SUGAR MOLECULE COMPOUND BUILDER

*Ideal for Grades K-8*  
Students learn about Molecules like Oxygen ( $O_2$ ) and Chemical Compounds like Salt ( $NaCl$ ) while building them out of candy and toothpicks



## CLASSROOM PROGRAM PRICES

25 minute - \$80.00  
45 minute - \$115.00  
60 minute - \$132.00

# MAKER SPACE PROGRAMS

Add a one-of-a-kind Maker Space experience to your field trip! Students will get hands-on in one of a variety of facilitated workshops related to making, designing, or coding. This curriculum has been developed by our educational staff and is based on current educational standards in Pennsylvania. *Each program may be 25, 45, or 60 minutes in length. Maximum 25 students per program. Subject to educator availability.*

## ENERGY FLOW

*Program can be tiered based on grade level.* Students will learn how energy flow changes forms by building and interacting with circuits.

## ROBOTICS

*Program can be tiered based on grade level.* Students will learn the basics of robotics and programming while interacting with Edison and Lego Mindstorm robots.

## ENGINEERING DESIGN

*Program can be tiered based on grade level.* Students will use an assortment of tools and materials to actively engage in the Engineering Design process. They will be prompted to construct an item that fulfills a specific design challenge. Possible outcomes include sailboats, windmills, hydraulic systems, and truss bridges.

*90 minute intensives on these topics and more are available by request!*

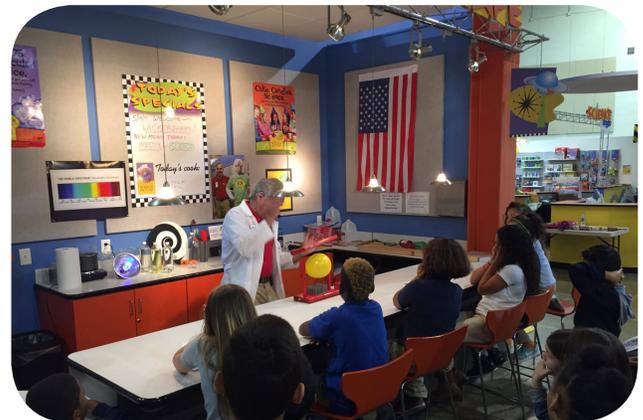
## MAKER SPACE PROGRAM PRICES

25 minute - \$80.00  
45 minute - \$115.00  
60 minute - \$132.00

## EXTEND THE FUN WITH A DEMONSTRATION AT OUR SCIENCE CAFE!

Schedule a private, hands-on STEM program for your group at our Science Cafe! Programs will feature 2 engaging mini-labs lead by our STEM Educator.

Students will be active participants in the demonstrations that reinforce one of the following topics:



**CHEMISTRY:** Oh Ah Experiments!

**PHYSICS:** Newton's Laws of Motion

**PHYSICS:** Electricity

Add one or more 15-minute Science Cafe programs to your trip for just \$38.00 each! *Maximum 15 students per program. Subject to educator availability.*