Enrichment Experiences

Enrichment Experiences are small group, classroom-style programs designed to enhance our field trips by offering in-depth content and more hands-on examples of learning by doing. Advance registration is required. Programs available on the half hour from 10:30am to 1:30pm. See pricing info on page 4.

Circuit Solutions
Grades: 3 - 5, 6 - 8
Capacity: 30 students
Length: 45 minutes
NGSS: 4-PS3-2, 3, 4; 4-ESS3-1; MS-PS2-2
Students will:
- Assemble a working simple circuit
- Test insulators and conductors to learn about the transfer of energy (grades 3 - 5)
- Experiment with polarity and create a parallel circuit to study the strength of electric forces (grades 6 - 8)

DNA Discovery
Grades: 4 - 8
Capacity: 30 students
Length: 45 minutes
NGSS: MS-LS1-1, 2; MS-LS3-1, 2
Students will:
- Observe and analyze their personal genetic traits
- Translate genetic code into traits to make a unique creature
- Extract plant DNA to see what it looks like up close and in person

Engineered by Design
Grades: 3 - 8
Capacity: 30 students
Length: 45 minutes
NGSS: 3-5-ETS1-1, 2, 3; MS-ETS1-1, 3, 4
Students will:
- Explore the engineering design process (imagine, plan, create, test, improve)
- Use this process to produce a solution for a given task

Radical Reactions
Grades: 1 - 2
Capacity: 30 students
Length: 45 minutes
NGSS: 2-PS1-1, 2, 4
Students will:
- Use real science tools to run experiments
- Learn the science behind various chemical reactions
- Explore simple chemistry

SciLab Enrichment Experience
Grades: 3 - 12
Capacity: 30 students
Length: 45 minutes
NGSS: 5-PS1-3, 4; MS-PS1-1, 2; MS-LS1-2; HS-LS1-1
Students will:
- Gain knowledge and experience using laboratory equipment
- Follow lab procedures and protocols while observing chemical and biological phenomena
- Work in groups of six scientists and rotate through self-guided experiment stations

Soap Bubble Math
Grades: 2 - 3
Capacity: 30 students
Length: 45 minutes
NGSS: 1-PS4-1, 2; 3-5-ETS1-1, 2
Students will:
- Answer a real world problem using math
- Gather and share data through group participation
- Design a question and procedure, guided by standards, to determine measurable information about soap bubbles

Sudsy Science
Grades: K - 1
Capacity: 30 students
Length: 45 minutes
NGSS: K-2-ETS1-1
Students will:
- Experiment with various bubble wands and predict bubble shapes
- Combine materials to make a better bubble solution
- Use the scientific process to run experiments to prove or disprove predictions

Synthetic Biology
Grades: 9 - 12
Capacity: 30 students
Length: 45 minutes
NGSS: HS-LS1-1; HS-LS3-1
Students will:
- Survey ways that humans alter DNA to benefit themselves
- Explore the intersection of technology and society
- Discuss ethical issues related to engineered organisms

Storybook Builders
(New this year!)
Grades: PreK3 - 1
Capacity: 30 students
Length: 45 minutes
NGSS: K-2-ETS1-1, 2, 3
Students will:
- Participate in engineering activities inspired by classic fairy tale stories
- Act as the heroes of the story to overcome problems by engineering solutions
- Approach problem-solving using the engineering design process

What are the Odds?
(New this year!)
Grades: 6 - 8, 9 - 12
Capacity: 30 students
Length: 45 minutes
Students will:
- Collect data to answer statistical questions generated by toys and games
- Compare probabilities from a model to observed frequencies
- Describe data distribution and make decisions based on calculated probability

What is That?
Grades: 6 - 12
Capacity: 30 students
Length: 45 minutes
NGSS: 3-5-ETS1-1, 2, 3; MS-ETS1-1, 2, 3, 4
Students will:
- Use the scientific process to investigate mystery boxes
- Make hypotheses based on sensory perceptions and memories
- Defend their hypothesis using empirical evidence

Wind and Waves
Grades: 2 - 5, 6 - 8
Capacity: 30 students
Length: 45 minutes
NGSS: 4-PS3-2, 3; 4-ESS3-1; 3-5-ETS1-1, 2, 3; MS-PS3-2, 3, 5; MS-ETS1-1, 2
Students will:
- Determine what energy sources are derived from renewable and non-renewable resources and how their use affects the environment
- Create a model of an offshore wind and wave energy farm to maximize energy output then optimize your solution to tackle multiple challenges
- Create an efficient, cost effective design within a defined set of parameters (grade 6 - 8)

Ziplock Chemistry
Grades: 3 - 8
Capacity: 30 students
Length: 45 minutes
NGSS: 5-PS1-1, 4; MS-PS1-3, 4
Students will:
- Conduct chemical reaction experiments
- Uncover how matter and energy are transformed
- Determine which chemicals are responsible for an exothermic reaction