

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)

Data Detectives

Grades: 6 - 8, 9 - 12

Capacity: 30 students

Length: 45 minutes

NGSS: MS-LS2-1, 2, 4, 5; MS-LS4-4; MS-ESS3-2, 3, 4; MS-ETS1-2, 3; HS-LS2-1, 2, 6, 7; HS-LS4-4, 6; HS-ETS1-2, 3

Students will:

- Explore different methods of data visualization and go on a data scavenger hunt
- Learn how to interpret and analyze data to draw conclusions

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

Owl Pellet Dissection*

Grades: 3 - 5

Capacity: 30 students

Length: 45 minutes

NGSS: 3-LS1, 3, 4; 4-LS1; 5-LS1

Students will:

- Learn about birds of prey and what they eat
- Use tools to dissect owl pellets
- Create a food web based on the findings

*This class has an additional lab fee of \$3 per student.

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

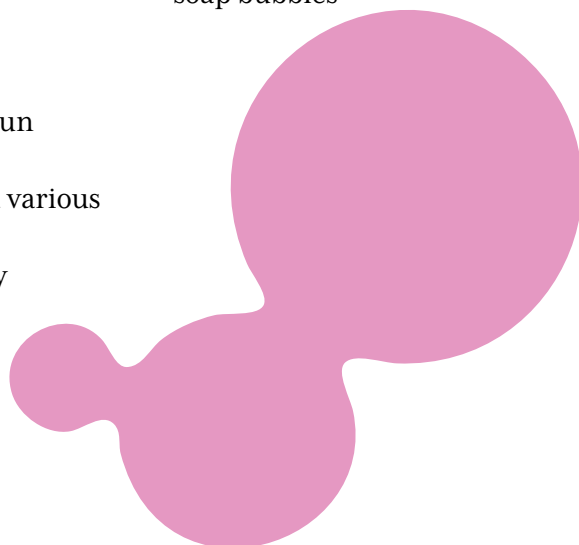
Capacity: 30 students

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

Storybook Builders

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?

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: MS-ETS1-1, 2, 3, 4;

HS-ETS 1-1, 2, 3

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; 3-5-ETS1-2

Students will:

- Conduct chemical reaction experiments
- Uncover how matter and energy are transformed
- Determine which chemicals are responsible for an exothermic reaction

