# East Broadway Bright Ideas Convention

After a 2 year hiatus, East Broadway hosted a night of science and innovation on May 18, 2022.



# **Bright Ideas Convention**

- ★ Bright Ideas Convention is a night of science.
- ★ Students in grades K -5 are encouraged to investigate a science topic that interests them.



# **Student Participation**

- ★ 52 students participated in the spring.
- ★ Students conducted their investigations on their own time.
- ★ Their work was based on their own interests and wonderings.
- **★** 3 Categories:
  - Upcycling
  - Scientific Method
  - STEAM



## **Mollie Stalzer**

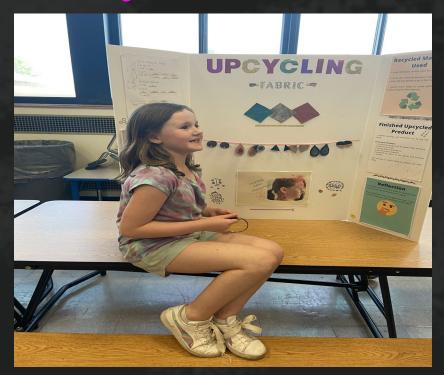
★ Grade 1

- **★** Upcycling
- ★ Recycled cups to to make ring dishes



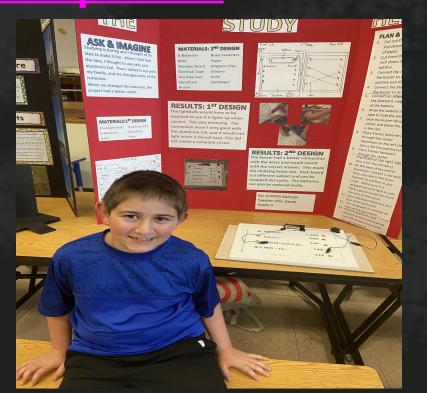
# Mia Many

- ★ Grade 3
- **★** Upcycling
- ★ Recycled fabric to make earrings



# **Hunter Kaplan**

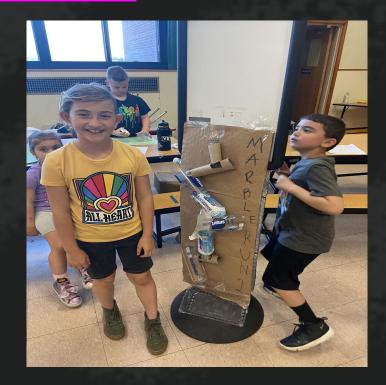
- ★ Grade 4
- **★** STEAM
- ★ Created a game board to help study



# Elena Herz

★ Grade 5

- **★** Upcycling
- ★ Recycled cardboard and plastic bottles to create a marble run

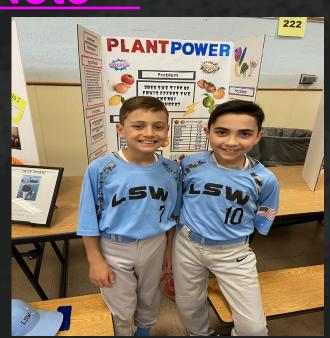


# Christopher Lauro Nicholas Noto

★ Grade 5

**★** Scientific Method

★ Tested the energy in fruits & vegetables



# **Bright Ideas Convention**



#### **New York State P-12 Science Learning Standards**

#### K-2.Engineering Design

Students who demonstrate understanding can:

- K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
- K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education:

#### New York State P-12 Science Learning Standards

#### 3-5. Engineering Design

Students who demonstrate understanding can:

- 3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

# Webb's Depth of Knowledge

DOK 2

SKILLS &

CONCEPTS · Compare · Basic reasoning

#### DOK 4

#### DOK 3

#### THINKING

- ·Planning

### STRATEGIC

- · Complex reasoning

#### DOK 1

#### RECALL & REPRODUCTION

- · Recall of facts
- · Definition of procedure

#### EXTENDED THINKING

- · Synthesis of information
- · Interpretation of data to solve problem

# Next Steps...

- ★ Encourage each class to submit a project.
- ★ Expand to two rooms
- ★ Increase attendance at event