



*Proud to present*  
**Dorothy Hamm Middle School**  
**Science Fair Finalists**  
**Jan. 25-27, 2022**

<b>Nathan Bastuscheck</b> <b>Grade 8</b>  Effect of Distraction on Response Time	<b>Kellan Dick</b> <b>Grade 8</b>  Decoding the EEG with Machine Learning	<b>Elisha Gooden</b> <b>Grade 8</b>  Resonant Response: The effect of string played on amount of time the other strings vibrate
<b>Erin Jacob and</b> <b>Noa Kammerman</b> <b>Grade 7</b>  Which worm makes the best composting soil using Arlington soil?	<b>Nadia Lach Hab</b> <b>Grade 8</b>  Effect of Amount of Microplastics on Survival Rate of Daphnia magna	<b>Sebastian Monroy</b> <b>Grade 8</b>  Effect of Nerf Gun Shooting Angle on Dart Distance
<b>Abbie Scally</b> <b>Grade 8</b>  Effect of Deicer Ingredients on Amount of Time it Takes for Ice to Melt	<b>Caroline South,</b> <b>Grade 8</b>  Effect of Over-the-Counter Medicine Coating on the Release Time of the Medicine in a low pH Environment (Stomach)	<b>Kaleb Taddesse</b> <b>Grade 8</b>  Digging Deep: Does the diet of an earthworm affect the enrichment of the soil?

# Participants and Research Projects

**Semiru Abraham, Grade 8**

Effect of Temperature on Cohesion of Water



**Nathan Bastuscheck, Grade 8**

Effect of Distraction on Response Time

**Anna Brodsky, Grade 8**

Effect of Water Location on Contaminants found in the Water

**Madeline Bushardt, Grade 7**

Yeast Reproduction in Sweeteners

**Matteo Caruso, Grade 7**

How Salty for it to Float?

**Max Chappell, Grade 8**

Hot Drones: How does changing the temperature affect drone speed?

**Vedica Chudiwale, Grade 8**

Effect of the Amount of Nutrients added on the Height of the Plant

**Henry DeNola, Grade 8**

Effect of Frequency on Muscle Movement



**Kellan Dick**

Decoding the EEG with Machine Learning: What is the correlation between EEG and Pattern Recognition Ability

**Sarah Freeman and Aanya Goel, Grade 7**

Seismic Architecture: Earthquake Safety Architecture Project



**Elisha Gooden**

Resonant Response: Effect of String Played on Amount of Time the other Strings Vibrate

**Matt Grundman, Grade 7**

Strawberry DNA Extraction

**Katie Hardwick, Grade 8**

Relationship between Animal Species and C-Value

**Mary Hardwick, Grade 8**

Effect of Type of Chemical on Solubility

**Jasmin Hazari, Grade 7**

Impact of Oceanic pH on Coral Reef

**Noah Hessling, Grade 8**

Effect of Router Blocking on WiFi Signal Speed



**Erin Jacob and Noa Kammerman, Grade 7**

Which worm makes the best composting soil using Arlington soil?



**Nadia Lach Hab, Grade 8**

Effect of Amount of Microplastics on Survival Rate of *Daphnia magna*

**Vivian Lee, Grade 7**

Effect of amount of sea water on water salinity



**Sebastian Monroy, Grade 8**

Effect of Nerf Gun Shooting Angle on Dart Distance

**Esperanza Piechowski, Grade 8**

Will your morning Joe help your plants grow?

Effect of Coffee Concentration on Plant Growth



**Abbie Scally, Grade 8**

Effect of Deicer Ingredients on Amount of Time it Takes for Ice to Melt

**Angelo Fox-Shin, Grade 7**

Comparing the effectiveness of soap and hand sanitizer

**Elliana Snyder, Grade 8**

Measuring the Circumference of the Earth using a Yardstick



**Caroline South, Grade 8**

Effect of Over-the-Counter Medicine Coating on the Release Time of the Medicine in a Low pH Environment (Stomach)

**Devesh Stansbury, Grade 8**

Learning Hungry: How do Food Insecurity Rates affect High School Graduation Rates Before and During the Pandemic?



**Kaleb Taddesse, Grade 8**

Digging Deep: Does the diet of an earthworm affect the enrichment of the soil?

**Rosalind Van Reken, Grade 8**

Effect of Meal Acquisition on Carbon Footprint: How the way you get your meal affects your CO<sub>2</sub> emissions