



# STEAM Newsletter

## A Note From Mrs. Darroch

Dear Parents,

I believe that STEAM is an educational powerhouse. STEAM can make a difference in how students see the world and solve problems. It places 21st century skills in the hands of students. I am pleased to be teaching these skills to students at Highland and State Street Elementary Schools.

Sincerely,

Mrs. N. Darroch

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**Highland: A, C, D, E days**

**State Street: B day**

STEAM stands for Science, Technology, Engineering, Art and Mathematics. In the STEAM lab, students will connect their learning from all subject areas through cross-curricular projects. Our projects will be aligned to the PA Core Standards and will draw on inspiration from our McGraw-Hill Reading and Math series. We will strive to make real-world connections and provide

authentic learning experiences for students.

The STEAM lab will be a place where students are encouraged to make mistakes so they can learn and grow. We want to establish a classroom environment that gives students the freedom from fear of failure.

## Full STEAM Ahead!

Below is an overview of the projects we are doing this nine weeks!

**Kindergarten:** Students will be completing nursery rhyme STEAM challenges! Our first challenge is to build an egg protector for Humpty Dumpty!



*These kindergarten students created an egg protector for our STEAM Humpty Dumpty egg drop.*

**1st Grade:** Students are designing and building houses for the 3 Little Pigs. The structures should be strong enough to withstand a puff of air from Big Bad Wolf (a blowdryer)!



*These first grade girls constructed a house out of sticks to keep their pigs safe from the Big Bad Wolf.*

**2nd Grade:** Students are creating pet rocks and designing playground equipment that can hold their pet rocks. Students will work as a team to design and create a twisty slide, jungle gym, and other playground equipment.

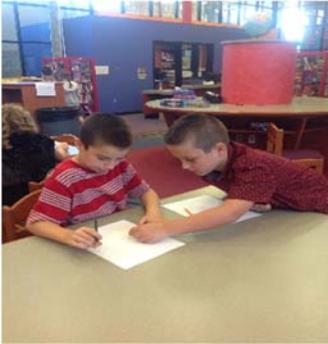


*These second graders are designing jungle gyms for their pet rocks.*



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**3rd Grade:** Students are learning about simple machines and will use this knowledge to create a Rube Goldberg invention.



*These third grade boys collaborate as they sketch ideas for their Rube Goldberg invention.*

**4th Grade:** Students are learning about Forces and Motion through the Hotwheels Speedometry curriculum.



*These fourth grade boys are using Hot Wheels cars and tracks to learn about potential and kinetic energy.*

**5th Grade:** Students are researching Native Americans and they are engineering models of Native American dwellings.



*These fifth graders are creating a wigwam.*

**6th Grade:** Students are researching earthquakes. They are designing an earthquake-proof structure. Students will work in teams and assume the role of architect, treasurer, or project manager.



*These sixth graders are building an earthquake-proof building out of spaghetti and marshmallows.*

**Visit Our Website**



<https://ambridgefullsteamahead.wordpress.com/>

**Donations Needed**

**Recyclable Materials**

Students may drop off these donations in the appropriate bins near the library.

- Empty cardboard tubes (paper towel/ t.p. rolls)
- Empty tissue boxes
- Masking tape
- Bubble Wrap & Packaging Peanuts
- Wooden Clothespins
- Legos (complete or incomplete sets)
- Dominoes (complete or incomplete sets)
- Jenga blocks (complete or incomplete sets)
- Wooden building blocks

Thank you for your support of our STEAM program!



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