

# STEM NEWS

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**SPECIAL POINTS  
OF INTEREST:**

- **What is the Engineering Design Process?**

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ISSUE:**

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Linares' Class**

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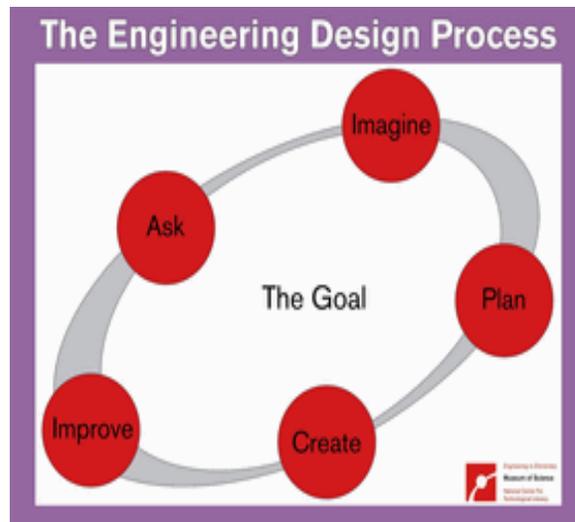
**Quote of the 4  
Month**

## What is the Engineering Design Process?

The Engineering design process is a series of steps that engineers follow to come up with a solution to a problem. Many times the solution involves designing a product (like a machine or computer code) or a process that meets certain criteria and/ or accomplishes a certain task.

It is a method by which teams of engineers and scientists work together to develop solutions to problems. As with scientific investigations, it is important to first identify the problem that needs to be addressed. Within the engineering design Process, it is also necessary to consider the design constraints that must be met and the overall desired outcome of the final product. A major step in the design process is the testing and modifications that a model or prototype must undergo until the final design is approved. Within the steps of the engineering design process it is often necessary to return to previous steps and readdress the problem from a different angle.

Engineers do not always follow the engineering design process steps in order, one after another. It is very common to design something, test it, find a problem, and then go back to an earlier step to make a modification or change to your design.



## Grade 1

Mrs. Linares' Class 1-210 has a pet tadpole and are using their inquiry skills to make and record their observations. Stop by their class room to meet "Froggy" and see how much it has grown.

In math class, they are learning about 3D shapes. The class was challenged to create a 3D home for their marshmallow bunny out of marshmallows and pretzel sticks.



## Project Green Reach

The students in Mrs. Stephen & Ms. Delpriore's classes learned what a botanist does. They visited the Botanical Garden to learn about Kitchen Botanists. The trip was followed by a classroom visit where... First, they used some of their senses to observe carrots by examining what they looked like, what they smell like, and what they feel like. Students then recorded their findings on a worksheet. Next, the students examined the inside of their carrots. Recording their findings a second time. They compared and contrast their two findings.



The scientist is not a person who gives the right answers, he's one who asks the right questions.

Claude Lévi-Strauss

thepeopleproject.com

# Engineering with Mrs. Campanella

**Engineering with Mrs. Campanella:** The students in the 5th grade are currently learning about Earthquake Engineering and the job of Earthquake Engineers. They have been researching facts, asking questions, and conduct-

ing explorations. One exploration consisted of washcloths and slinkys to demonstrate the response of buildings to lateral vibrations produced by earthquakes. The goal of this unit is for the students to build earthquake proof buildings out of milk car-

tons (collected by the 5th graders and the Pre-K). Stay tuned...



## Grade 8 Scientists!

**In science class with Ms. Dumay and Mrs. Jacobsen:** Students in grade 8 are learning about the solar system. They used clay to represent the parts of the sun and made

models of constellations out of toothpicks and marshmallows. Stop by room 513 to see the galaxy they are creating!



## SCHOOL WIDE STEM EVENTS

### Earth Week with Some Creativity!!!

Earth Day Door Decorating Contest

“Design A Solution to Pollution”

The week of Monday April 18-Friday April 22, 2016

\*Design classroom door using only RECYCLED Materials to demonstrate how we can solve the Earth’s Pollution Problem!!!!

Judging will take place on April 22, 2016



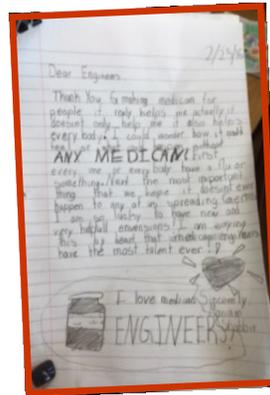
# STEM Highlights Around Our School!

During National Engineer Week.....

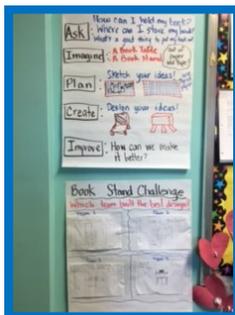
Class 2-301 wrote letters about why they are

Thankful for Engineers.

Class 2-309 Compared different types of engineers and jotted down important facts.



Class 3-302 Made a math connection by drawing a building and finding the are and perimeter of that building.



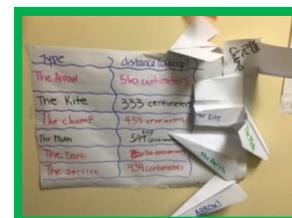
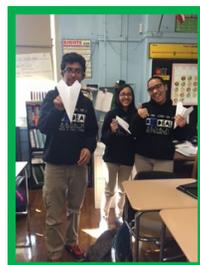
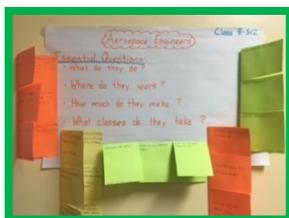
Class 3-303 Students created book stands by using the Engineering Design process .



Class 3-311 Read "Rosie Revere, Engineer".



The 8th Graders studied Aerospace Engineers and made different types of paper planes and flew them. They then recorded the distance they traveled.



## Quote of the Month:

**"I have not failed. I've found 10,000 ways that won't work" -Thomas Edison**

\*\*If you have any questions on how to incorporate STEM into your classroom, please do not hesitate to ask a member of the STEM Committee.

\*\*Visit our STEM website: [www.STEM192.weebly.com](http://www.STEM192.weebly.com)