What’s happening in the Science lab:

Students in the 6th grade have experimented with density using scientific equipment (triple beam balance and graduated cylinders) to make measurements of mass and volume.

In Mr. Esposito’s class, students tested out their creative abilities as aerospace engineers. Students worked collaboratively designing Space Station Landing equipment using household items. Students experienced the challenges engineers face in designing equipment with constraints on access to materials. Students shared their designs and tested their effectiveness.

Ms. Finnegan’s class made a scale model of the solar system. Students learned how to use a scale to make a model that compared the size differences between the planets in our solar system. Students showed how they could use their math skills to accomplish a task. It was impressive to see the students bring math to life when they used their calculations to create scale sized planets. We were amazed to see how truly GIANT the gas giant planets are and noticed that Earth is really tiny compared to the gas giant planets.

In 4th grade Mrs. McVetty’s class concluded their energy transformation unit by building Lego robots and thinking about all the energy transformations that occurred in the process. Students used Ipads to record their energy transformation observations. At the end of the project, we will see just how many energy transformations we can identify!

The 3rd grade’s interdisciplinary inquiry by design unit ended with students going to the lab to make volcanoes which erupted. The unit included a close read of an article about Mt. Vesuvius. Students generated questions the article brought to mind and they researched the answers, which were then shared with their classmates. Students worked on their map skills by learning where various volcanoes were located and learned about the different types of volcanoes.
Mr. Hiscox’s 5th grade Art Class

Mr. Hiscox’s fifth grade classes learned about the famous architect Frank Lloyd Wright. Frank Lloyd Wright’s buildings amazed people with the brilliant combination of artistic vision and engineering skill. Mr. Hiscox’s students will be creating mechanical drawings in the style of Frank Lloyd Wright’s glass designs. They will be using tools such as the T-square, triangle and circle templates to enable them to create their own technically challenging designs.

Backpack Activities:
At Jack Abrams STEM Magnet School we are not only committed to inquiry-based learning experiences at school but in January we will be offering BACKPACK SCIENCE activities that students will be able to take home and share with their families. A very big thank you to HFEE for funding this. There will be four activities offered:

- Cartesian Diver – students & families will experiment using Pascal’s Principle
- Floating Paper Clip – students & families will explore the properties of surface tension of water
- Layering Liquids – students & families will experiment with the density of liquids
- Exploding Lunch Bag – students & families will learn about the power of chemical reactions

Each activity will contain all the materials needed to perform the experiment as well as books, articles and journals which can be used to extend student/family learning and share experiences with other students/families.

The annual Turkey Trot was held during Physical Education classes in the days before Thanksgiving. Mr. Walsh and Ms. Bergman had their classes run for twelve (12) minutes around a 528 foot “track” they created outdoors. Students recorded the number of laps completed. They then calculated the total number of feet they ran, and converted it to miles. Congratulations to our winners!

**Top 3 Turkey Trot Class Winners**

1. **Ms. McVetty/Ms. Lawrence’s Class:** 141 Laps 24.2 Miles
2. **Ms. Telesco’s Class:** 241 Laps 24.1 Miles
3. **Ms. Curtin/Ms. Roseto’s Class:** 220 Laps 22 Miles

**Top Trotters**

**3rd Grade:**
- Ms. Baldanza: Lars Galvin, Peter Leavy
- Ms. McManus: Theodore Leavy, Ella O’Heir

**4th Grade:**
- Ms. Audia: Ian Husselbeck, Pierre Leroy, Jillian Panos
- Ms. McVetty/Ms. Lawrence: Brody Gordon, Michael Kline, Nikolai Seferian
- Mr. Dierking: Kiernan Husselbeck, Sophie Bradford

**5th Grade:**
- Ms. Curtin/Ms. Roseto: Jahiem Hawkins, Teddy Tiliakos
- Ms. Telesco: Caelan Clayton, Liam Lennon

**6th Grade:**
- Mr. Esposito: Nate Coulter, Moises Villatoro
- Ms. Finnegan: Nate Ribando, Osiris Shepherd
- Ms. Pancir: Jose Flores Flores, Dennis Perez Aguilar, Joshua Santana Lopez, Jeydi Ulloa Flores
4th Grade Field Trip:

Our fourth grade students took a trip to the Long Island Science Museum in Manhasset, NY on November 18. They participated in two hands-on activities – Kitchen Chemistry, where they learned about chemical reactions using everyday household items and Simple Machines, where they learned how our lives are made easier by using levers, inclined planes, screws, pulleys, wheels and wedges! Experiential learning was fun for all!!

The Tinker Room

One of the classrooms at Jack Abrams has been turned into our very own Tinker Room! Ms. Montesano's vision was to create a place where students could go to collaborate with their peers and let their creative juices flow. Presently, we have kits that students can use to work with, but we are looking for all kinds of other materials as well: Legos, Lincoln logs, blocks, etc. If you have anything at home that you would like to donate to the Tinker Room, we would be most appreciative. Everything is washed and cleaned before it goes in. Donations can be brought to the main office.

Music at STEM:

The music hallway has been filled with the sounds of horns, violins, and singing. Students have been busy practicing for their winter concerts. Thank you Ms. Adams, Ms. Castaneda, Ms. Jablon, Mr. Malle, and Dr. Masear for helping our students prepare. We are looking forward to the concerts and hope to see everyone there!

6th Grade Winter Concert: 12/9 7:30 pm HHS Auditorium
5th Grade Winter Concert: 12/11 7:30 pm HHS Auditorium
3/4th Grade Winger Songfest: 12/19 2:00 pm JAS Auditorium

NASA's Beautiful Earth Program

The Jack Abrams STEM Magnet school was one of six schools selected by NASA to participate in their Beautiful Earth program. The multi-media program combined live performances by Kenji Williams, and a visual show of images of Earth from space with interactive discussions with NASA scientists and Native American Educators. Many astronauts speak of the “life changing power” of seeing the Earth from space. Mr. Williams wanted to simulate this and explore the relationship between humans and nature throughout time and space. The one hour program consisted of three parts, hosted by two NASA scientists. Our students were able to ask them questions after each segment. Special thanks to Ms. Moro for arranging this.

Mrs. Telesco's class used their knowledge of parachutes, atmospheres, and the Engineering Design Process to design a parachute that met a specific criteria for drop speed and parachute size. They "imagined", "planned", "created", "tested", and "improved" their parachute designs. It was a great learning experienced that was enjoyed by all.
Upcoming Events

1/12  PARP begins
1/21  PTA meeting 7:30  JAS  Cafeteria
1/28  3rd Grade Parents – Meet the Instrument  Night HHS 7:30
2/10-2/13  6th Grade Greenkill Trip
2/5  4th Grade Winter Concert – HHS 7:30
2/6  HFEE Gala

School Wide Food Drive

A huge THANK YOU to everyone who sent in food for the annual K-6 food drive. We collected many packages of brownies, stuffing mix, potato dishes, as well as cereals, juices, canned fruits and vegetables. A member of the Helping Hands Rescue Mission came to collect the donations. The food was used in their Thanksgiving baskets which were distributed to local families.

WE NEED YOUR HELP!

We have had an increasing number of students arriving late each day. When a student arrives to class late, he/she misses important information and learning, as well as disrupting the learning of the entire class. Please do your very best to ensure that your students are at school by 8:40 so they can begin the day on time. Thank you for your cooperation.

Thank Yous

Fall Festival Activities—all class parents
Candy contest – Sue LoScalzo
Book Fair – Christina Ackerman and Erin Vidota
Christopher’s – Liz Cordeiro, Norma Gorecki and Teri Zahn
Applebee’s – Eileen Fucci and Shari Harris
Bulletin Boards – Deb Chin and Shaki Coulter

Parent Workshop – 3/3/15  7 pm
STEM Family Night – 4/17/15  7 pm
Over 200 people gathered in the Jack Abrams Cafeteria for this year’s first STEM Family Night. Families worked together to determine how soap affected the surface tension of water. Using tap water as a control, each person predicted how many drops of water they could fit on a penny. They then conducted five trials and averaged their results. Next they predicted how adding soap to the water would affect the number of drops that would fit on the penny. They tested their hypothesis by again doing five trials and finding the average. Results were compared an a conclusion drawn. Families were then challenged to use the engineering process to create a Puff Mobile, a car using one 3 straws, 4 lifesavers, 1 sheet of paper, 2 paper clips, tape and scissors. Families counted how many puffs (breaths) it took to move the Puff Mobile 1 meter. They were then asked to evaluate their design and make suggestions to make it better. From little ones to our STEM students and parents, as well as grandparents, had a great time.