



Lighthouse News @Scholars

A Note from the Principal

Parents and Students:

We are well underway into the school year with many projects and learning opportunities. This newsletter highlights some of the happenings in the program.

I strongly encourage all parents and students to become a member of the REMIND app so you can stay connected to the Scholars Academy program and announcements. See instructions below.

In addition, I highly rec-

ommend the following websites that will keep you up to date with opportunities for students in the gifted and talented community.

National Association for Gifted Children

www.nagc.org

New Jersey Association for Gifted Children

www.njagc.org

Montclair University programs

[48 Essential Links for Parents of Gifted Children](#)

all students are expected to maintain academic excellence at their Home Schools with A's and B's. Grades are monitored for support. Finally, you can follow me on Twitter for a variety of GT topics, articles, and network with the latest and greatest in GT education! Follow me on Twitter at Principal_KM



Remember that

REMIND app!

As promised at our Back to School night, we now have a way to communicate with you on a daily basis! Please download the app: REMIND onto your phone to receive notifications about our website, special announcements, and so much more! On your iPhone or Android phone, open your web browser and go to the following link: rmd.at/263egc. Follow the instructions to sign up for Remind. You'll be prompted to download the mobile app.

If you don't have a smartphone, get text notifications. Text the message @263egc to the number 81010.

En tu iPhone o telefono Android, obre el navegador y usa este enlace: rmd.at/263egc. Sigue las instrucciones para inscribirte en Remind. Se te pedira descargar la aplicacion movil.

Si no tienes un telefono inteligente, obten avisos de texto. Envia el mensaje @263egc al numero 81010.



Fall/Winter 2016

2nd Annual Gifted and Talented Student Expo!

Thursday, June 8, 2017

Scholars' Academy

268 Capuchin Way

3rd GT Floor

(Please note, there is no elevator access)

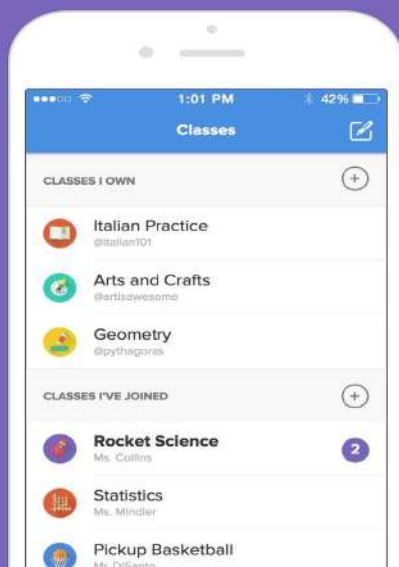
GT Students must arrive by 5:45 pm

Doors open for guests at 6:00. Guests may wait in the OASA café.

Exhibits open until 7:30 pm

remind

Safe. Simple. Free.





Science—Mr. Baer



The Science Core students have been hard at work this year on their Individual Research Projects and the Heredity Unit. Looking at what we have accomplished so far this year, I am looking forward to our GT Expo at the end of the year so our young scientists can present all of their outstanding research to everyone. Here are some of the highlights of our year so far....

In our Heredity Unit the students have been investigating the inheritance and variation of traits in different organisms. This unit covers the Next Generation Science Standard's Disciplinary Core Ideas LS3-A and LS3-B which can be viewed at www.nextgenscience.org. These

DCI's require the students to create models, analyze and interpret data, and create arguments based on evidence to support their understanding of the inheritance and variation of traits. The students are also using CPO's Crazy Traits Kit to help them visualize key understandings including: genes, alleles, dominant and recessive traits, DNA, Punnett Squares, and the relationship between traits and the environment.

As you can see, even our 1st and 2nd grade students enjoy working with the Crazy Trait creatures:

In addition to the Heredity Unit, the Science Core students have been making great progress on their Individual Research Projects.

Each year the Science Core students get to choose an area in science that they want to investigate in-depth. These projects display the student's true passion for science as they get to research a topic of their own choosing and in their own way. This year's IRP's include: life science topics such as anatomical studies with dissections of frogs, fetal pigs, rats, bats, and turtles, the behavior and interaction of microorganisms, disease causing microorganisms, the life cycle of bullfrogs (see our tadpole below!), the effects of energy drinks on the human body, nutritional analysis of fruits and vegetables, chemistry projects on chemical bonding, organic vs. inorganic chemistry, analyzing chemical properties using flame tests, the synthesis of aspirin, the chemistry of invisible inks, and

Tadpoles!!!



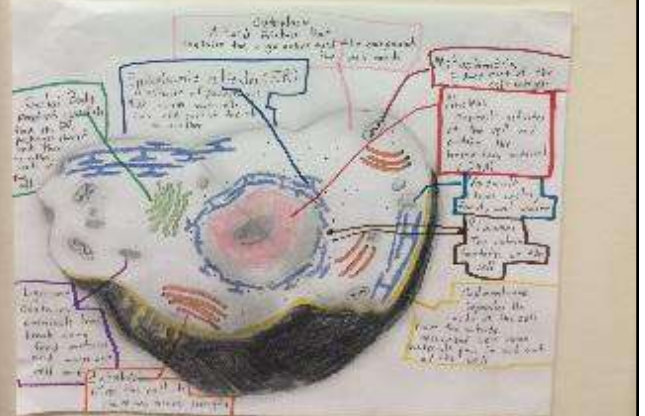
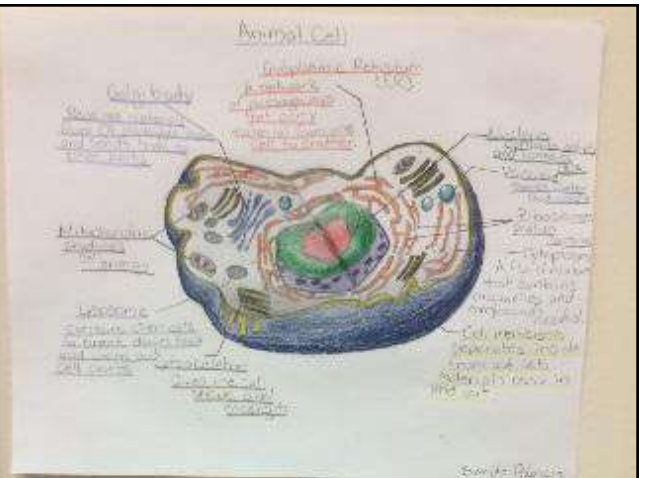


Science—Mr. Baer



We have some talented artists as well.

chemiluminescence, physical science investigations of angular momentum and rotational inertia, rocketry, the physics of super powers, lightning, and projects that combine art and science to create pictorial studies of crystal systems and their molecular structure and the anatomical differences between a lynx and a bobcat. Wow! That is a lot of learning going on in Science Core! I hope everyone is as excited as I am to see more of our students work throughout the year and especially at our GT Expo at the end of the year. Keep up the great work Science Core!





STEM—Mr. Green

Since many school districts have talked about getting their students to Think Outside of The Box, I found that getting and having students Think Outside of The Box are two entirely different things. The question in point is, how do you get your students to become engaged? and how do you keep them engaged while they are thinking outside of the box? To prepare my students for such an engagement, I presented my 3rd and 4th grade scholars with a major challenge. I introduced them to the Global Cardboard Challenge. The Global Cardboard Challenge is an annual event presented by the Imagination Foundation to celebrate child creativity and the role communities can play in fostering it. The Global Cardboard Challenge gives children an opportunity to collaborate, learn, and build the things they imagine through a simple process called Creative Play. The Challenge lets children explore their interests and passions; teaches critical thinking, resource-



fulness, perseverance, teamwork and other 21st century skills; and brings communities together to foster and celebrate child creativity!

My students were automatically engaged at the thought that they could and can plan, build, and then share what they've created. The Global Cardboard challenge usually allows students to work on their projects three to four times a week, at a minimum of 4 to 5 weeks. My scholars only had three class days within two weeks to accomplish their goals. The challenge was upon them way before they began and despite their minor and major interruptions all succeeded to the end except one. With a Launch Log my students could design their product which included sketches and detailed descriptions along with notes to help create solutions. The Log was their step by step plan to assist them in making their creation come true.

Having never done this type of project before, my scholars could think outside of the box by working together to provide solutions to each other, and solve problems as they rose along the way. Once students approached me, they contin-





STEM—Mr. Green

ued and grew above their original plans. Their success had shown to me that their thinking process was literally outside of the box. The art of a tilted bowling game where the ball rolls down at an angle was genius at best. The simplicity of a Tic-Tac-Toe game put the power of the game into the hands of players and tingled the minds of those who watched. Many who played the Robot game will not forget how easy they thought it would be to get a ball into the Robots mouth. The critical thinking of one Scholar included a decorated box that you had to

shake, touch and feel, listen, and then guess what the item was inside. If that doesn't require both the creator and player to think outside of the box, nothing will.

(NAGC standards and Content area standards that are being addressed: **3.4. Instructional Strategies.** Students with gifts and talents become independent investigators.)

3.4.1. Educators use critical-thinking strategies to meet the needs of students with gifts and talents.

3.4.2. Educators use creative-thinking strategies to meet the needs of students with gifts and talents.

3.4.3. Educators use problem-solving model strategies to meet the needs of students with gifts and talents.

3.4.4. Educators use inquiry models to meet the needs of students with gifts and talents.





ELA—Mr. Brooks

Middle School— 7th-8th Grades

As they continue to follow the transition of our country's government, there have been budding poets and activist for Justice and Equality, believing that we should continue to be an inclusive America. The 7th and 8th graders are reading novels like, *To Kill A Mocking Bird*, *Feathers*, *Warriors Don't Cry*, and *Mice of Men*. At the same time reading scholarly journals to do comparison and contrast characters of Civil Rights fighters of the 60's vs the Civil Rights fighters of the 21st Century.

Middle School— 5th-6th Grades

I am so pleased with this group of students as they are in the 9th week of working in their literature circles, and deciding on their project to go with their novel they have chosen to read. This group of students have created an atmosphere that is truly student-centered. I am able to conference with each group or take annotated notes on the group's progress.

Intermediate School— 3rd/4th Grades

Literacy in grades 3rd & 4th. The students have begun selecting roles in their Literature Circles and they're learning how to work in cooperative groups. They have

stepped up to the challenge as they try to collaborate and work on completing their novels before the holiday break. They are getting used to working in a timely fashion, like at their home schools.

Primary Grades— K-2nd Grades

My 1st and 2nd graders are working hard to design their own chapter books.

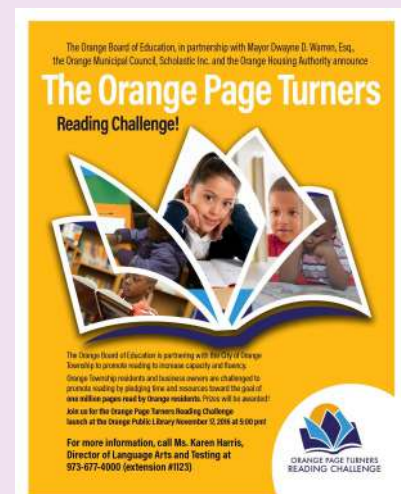
I started with showing them story telling videos. Then we watched how to write a story book in the beginning stages of book writing. They are excited each Thursday to come into ELA, to add more to their books. They started with designing their covers after they came up with their titles. We did a character sketch on major characters. The students came up with their own titles, settings, characters (major & minor), and plot. They had to decide how where they going to hook their readers. Many of them wanted to include family members in their chapter books to make them personal narratives on the first grade level and the second graders came up with offbeat and usual stories such as, "The Day My Closet Turned into an Adventure." The 1st and 2nd graders are



This is what I envision my second graders to do in three years when they become 5th graders.

eager to share their chapters as their books are starting to blossom.

"My mom, walked into my room and heard an usual sound coming from the closet". Written by O. V. 1st grader from Forest Street School.

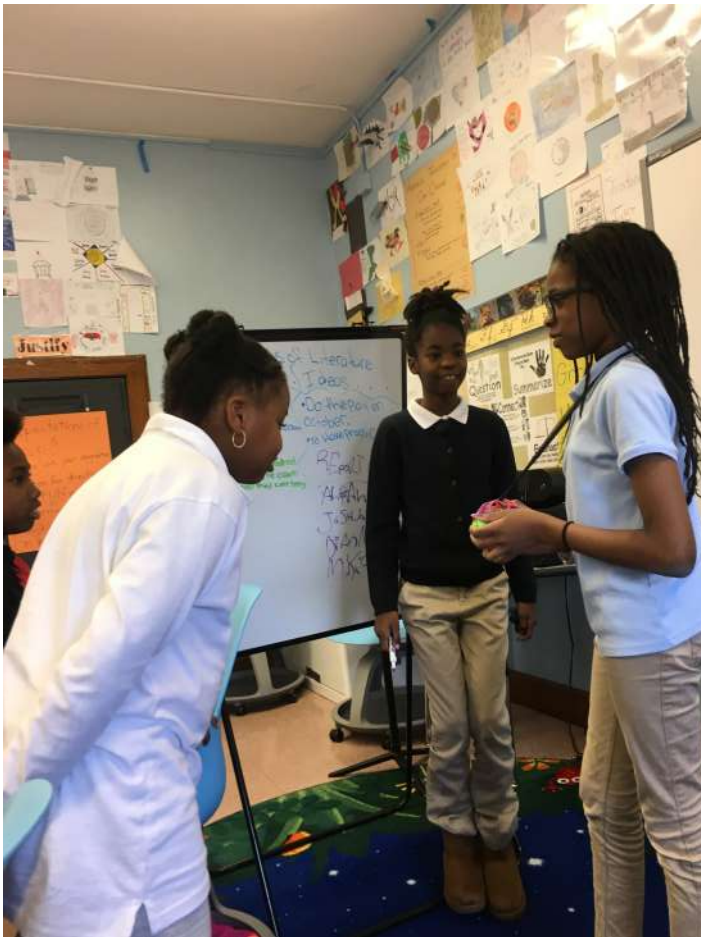
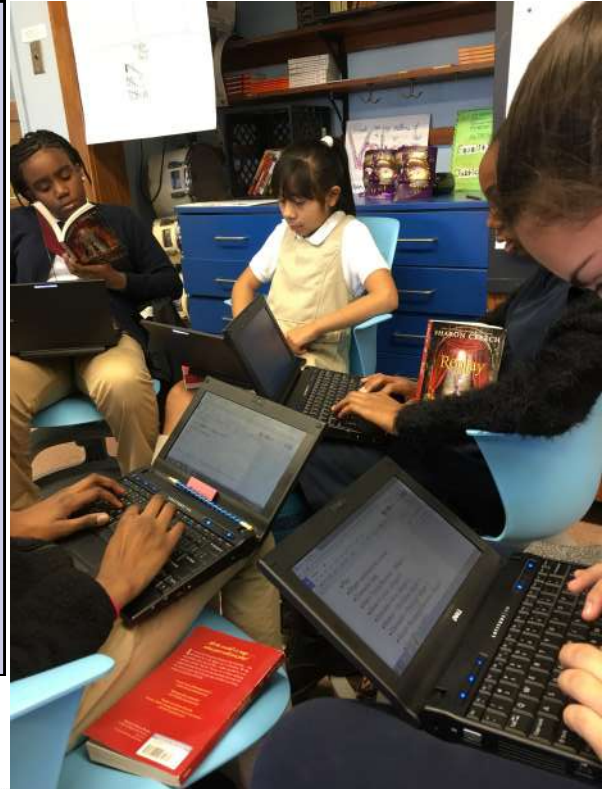




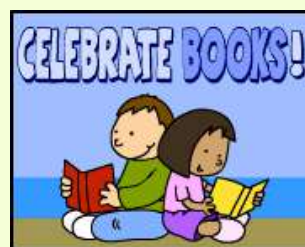
These are the NGAC Standards: 3.4.1. Educators use critical-thinking strategies to meet the needs of students with gifts and talents. 3.4.2. Educators use creative-thinking strategies to meet the needs of students with gifts and talents.

We have an open door policy feel free to make an appointment to come and see what's going on in Literacy at Scholar's Academy.

(973) 677-4000 ext 1801



- NJAGC competition entries are due 12/19/ 16
- Forensic Competition , January 6, 2017 , hosted at Scholars Academy in Orange, NJ.
- 1st & 2nd Graders Chapter Books (Work in progress).





Math—Mrs. Keogh

The Math Students at Scholars Academy are very busy and hard at work on many exciting activities. Middle School Students in 7th and 8th grades are working on a Financial Literacy Unit called Mathematics in the Marketplace. It is an interactive, discovery-based Math Unit for High Ability learners. The unit guides students to role-play as bankers, stockbrokers and investors. It teaches them real-world investment concepts; and offers students practical knowledge in a meaningful context.

Standards

CCSS.MATH.CONTENT.8.NS.A.1

Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.

CCSS.MATH.CONTENT.8.NS.A.2

Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2).

CCSS 6.N.S. B Compute fluently with multi-digit numbers and find common factors and multiples

NAGC 2.4.2, NAGC 3.4.1, 3.4.2, 3.4.3, 3.4.4

Middle School Students in 5th and 6th grade are working in the Mentoring Mathematical Minds (M³) curriculum. Specifically, they are working on a Unit that focuses on using Algebra to analyze change. In this unit, students learn about algebra as a set of concepts tied to the representation of relationships through words, tables and graphs. They also learn about algebra as a style of mathematical thinking for formalizing patterns of change. They extend their notion of variable from a letter in an equation that represents a number to a broader definition, that of a quantity that varies or changes. The experiences in this unit provide opportunities for advancing mathematical understanding and are an important prelude to a more formal study of algebra that the students will encounter in middle school.

Standards

• CCSS 6.EE.B Reason about and solve one-variable equations and inequalities.,

7.EE.B Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

NAGC 2.4.2, NAGC 3.4.1, 3.4.2, 3.4.3, 3.4.4

Elementary Students have started a new unit called Treasures From the Attic. It is part of the Mentoring Mathematical Minds Curriculum (M³) for gifted and talented math students. In this unit, students explore fractions. The focus of the entire unit is on making sense of fractions rather than on learning algorithms to perform computations. This is a significant departure from more traditional approaches. It is important for students to think about and picture the relative sizes of fractions and make estimates based on their mathematical thinking when





Math—Mrs. Keogh

Primary Students are working on the Mentoring Young Mathematicians Curriculum (M²) called Using Everyday Measures: Measuring with Meerkats. They are introduced to Measurement as a process that they use in their lives every day; as they explore the world around them at home, at school and in their community. Through many exciting adventures and activities, they come to understand the concepts of measurement and the skills involved in the measurement process.

Standards

[CCSS.MATH.CONTENT.2.MD.A.1](#)

[CCSS.MATH.CONTENT.2.MD.A.2](#)

[CCSS.MATH.CONTENT.2.MD.A.3](#)

[CCSS.MATH.CONTENT.2.MD.A.4](#)

[CCSS.MATH.CONTENT.2.MD.B.5](#)

[CCSS.MATH.CONTENT.2.MD.B.6](#)

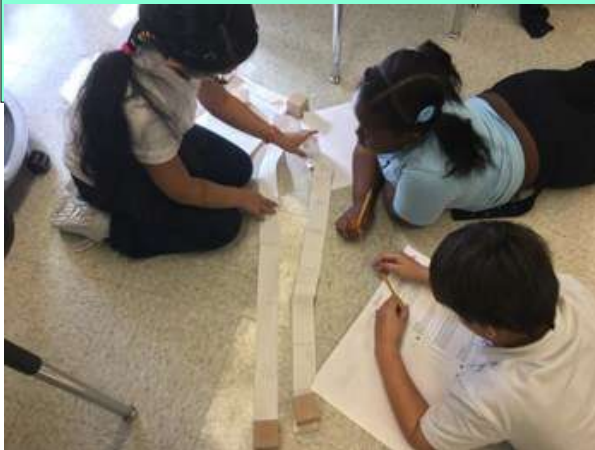
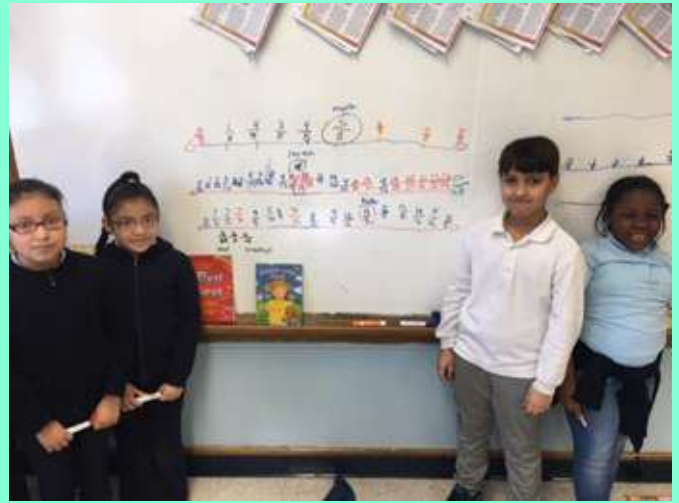
[CCSS.MATH.CONTENT.2.MD.C.7](#)

[CCSS.MATH.CONTENT.2.MD.C.8](#)

[CCSS.MATH.CONTENT.2.MD.D.9](#)

[CCSS.MATH.CONTENT.2.MD.D.10](#)

NAGC 3.4 – Using critical-thinking, creative-thinking, and problem-solving strategies.



Students from Scholars Academy are practicing and preparing for their third Challenge 24 Math Competition through the Essex County Gifted and Talented Steering Committee. The competition will be held at Millburn Middle School in the Spring. 5th and 6th grade students will compete at the Junior Varsity level using single, double and variable cards. 7th and 8th grade students will compete at the Varsity Level using single, double, variable, integer, fractions and decimal cards. We are looking forward to an exciting day.



Essex County Gifted and Talented Committee Competitions



Tech Day Tower Challenge in Livingston!

The objective of a Student Technology Day is to give Essex County GT students in a variety of districts the opportunity to work together cooperatively on a realistic worldly problem. Students are provided with a specific situation, a specific amount of time, and a specific amount of materials. They must utilize a variety of skills in order to successfully solve the problem. Therefore, a multi-modality, multi-sensory approach is applied to an active learning project. The 4th graders from the Orange School District were very active leaders in their participation in the Tech Day activities. "My favorite part was making new friends from other school districts." Desiree R. Park Avenue School. "Activities in the Essex County Competitions provides students an opportunity to network with other children in other districts who have the same type of interests and educational drive," states Principal Machuca and continues with, "Our next competition is in January for Middle School with reading forensics!"



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