



Painting by  
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Teacher

# Southwest Middle School



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HOME OF THE PATRIOTS | CHARLOTTE-MECKLENBURG SCHOOLS

IN THIS ISSUE: CURRICULUM HIGHLIGHTS

## Mathematics: 8<sup>TH</sup> Grade

Scholars in NC Math 1 are studying Transformations, as a way to review 8th grade math and also as preparation for NC Math 2 next year. Their focus is on Reflections, Rotations and Translations as congruent shapes while Dilations represent similar shapes which have congruent angles, but proportional sides.

NC Math 2 scholars have been focused on Probability, as it relates to statistics in sports, predictions of patterns, and observations of possible outcomes. They have learned several new formulas which assist them to solve some of the more complex problems they have encountered.

	A	not A	
B	20	10	$P(A B) = \frac{20}{30}$ $P(A) = \frac{60}{90}$ $\frac{20}{30} = \frac{2}{3}$ $\frac{60}{90} = \frac{2}{3}$
not B	40	20	$P(B A) = \frac{20}{60}$ $P(B) = \frac{30}{90}$ $\frac{20}{60} = \frac{1}{3}$ $\frac{30}{90} = \frac{1}{3}$

@A box has 20 balls, each marked with a different integer from 1 to 20. What is the probability that a randomly selected ball is marked with an even #, given that the same ball is marked with a two-digit #? (Show Work)

$$P(A) = \frac{10}{20}$$

$$P(B) = \frac{11}{20}$$

$$P(A \cap B) = \frac{6}{20}$$

$$P(A|B) = \frac{\frac{6}{20}}{\frac{11}{20}} = \frac{6}{11} \approx 55\%$$

### 8<sup>TH</sup> Grade

Nicole Scotti

Fran Mayer

Olivia Robinson

Beth Kohlhoff

Marilyn Bollinger

Grant Huether

Deborah Baysinger

Grant Joreid

Anna Marcello

### Teachers

of

Gifted

Scholars

### 6<sup>th</sup> Grade

Jordan McMullen

Melissa Busteed

Jordan Wilson

Geoffrey Reckerd

Kelly Mayreis

Luke Eller

Jeyna Minnick

Gunnar Kil

### 7<sup>th</sup> Grade

Charlotte Pohlig

Katrina Maurer

Lisa Johnson-Ritchey

Ray Adams

Alecia Bryant

Barnetta Boston

# Mathematics

## 7<sup>th</sup> Grade

Scholars enrolled in NC Math 1 were given the opportunity to participate in The Stock Market Game to help them make strong and direct connections with the real-world economy, business, and government. The Stock Market Game is hosted by members of the United States Congressional Leadership and sponsored by one of the leading brokerage firms, Charles Schwab, and is approved by the US Department of Education. There are approximately 2,800 teams from middle and high schools nationwide. The top 10 performing teams will be awarded an all-expense paid trip to the United States Capitol to meet our Congressional leaders and the NC Representative, Alma Adams.

The game begins during the end of the 3rd quarter and will conclude in the first week of May. Scholars who are participating in The Stock Market Game perform better in mathematics and financial literacy. The Stock Market Game also builds students' communication skills as they work with each other, along with selected 8th grade students from NC Math 2 classes. Teachers are committed to working with the two teams of students and their advisors, which comprise of other students, elective teachers, and our principal, to improve their daily ranking towards coming in first place.

Scholars who are not participating in The Stock Market Game are given the opportunity to engage in higher-level mathematical concepts taught in 11th grade mathematics. This exposure to advanced concepts helps students see the big picture and they are better able to apply the skills they've learned in previous years.

In addition, scholars in honors classes are applying their study of algebraic equations to geometry concepts. Hands-on activities and discovery labs are being utilized to help students conceptualize the mathematical relationships that are prevalent in geometry. Students have explored angle relationships, constructed unique triangles, and used informal measuring techniques to derive the formulas used for circumference and area of circles, surface area, and volume.

Learn more about The Stock Market Game:

<https://www.stockmarketgame.org/capitol-hill-challenge.html>

## 6<sup>th</sup> Grade



During third quarter, sixth grade honors math scholars have focused on Ratio/Proportions and Geometry. As part of their Geometry Unit, they have piloted a new program for Charlotte-Mecklenburg Schools called, *Open Up Resources*.

*Open Up* helps to facilitate and assess students' ability to communicate mathematical thinking verbally, visually, and in writing. The curriculum, which is produced by Illustrative Math, has received the highest rankings from EdReports.org.

Students are also participating in a 12-week Math Stories project which provides interesting, true-to-life situations that will motivate students to apply mathematical skills towards solving everyday problems.



I will focus on my academics.



I will increase my efforts to become successful.



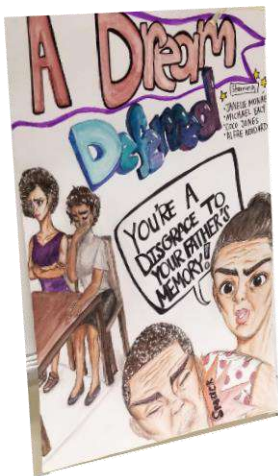
I will have a positive attitude.



# English language arts

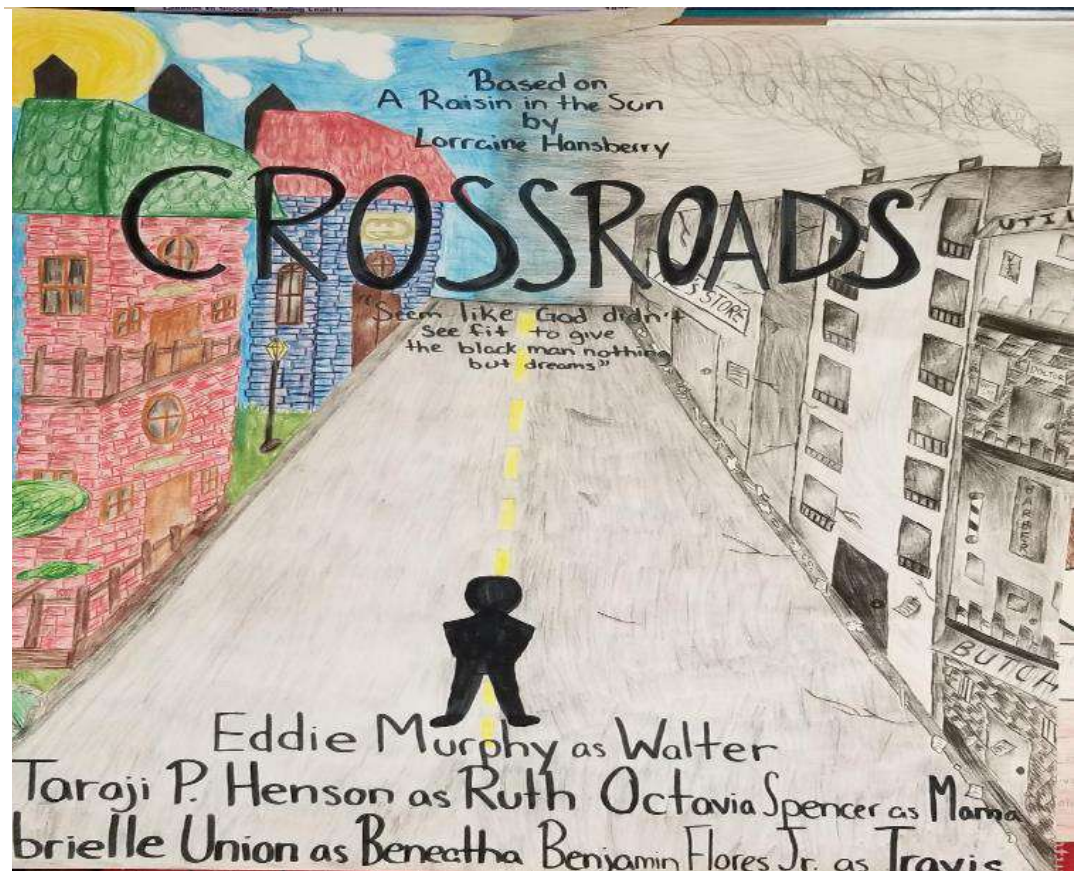
## 8<sup>th</sup> Grade

AIG scholars in language arts are completing their PBL unit for "A Raisin in the Sun." They had to produce a movie poster, a soundtrack, and a trailer script. These students had the opportunity to work individually or with groups. Each student produced a part of the project and presented to the entire class.



For the movie poster, they had to use a scene or a symbol representative of the play. They had to state why the scene or symbol is central to the play and were challenged with renaming the play.

The soundtrack had to incorporate at least eight songs from any time period. For the trailer script, they had to incorporate a scene from the play and complete it using stage directions, and actors they chose to play the roles.



## 7<sup>th</sup> Grade

Scholars in seventh grade honors are currently reading novels. They will be analyzing and studying these novels. After our reading discussions, students will be comparing the novels to the movies they inspired. Students will explore the decisions of the script writers and directors and determine why they chose to make the movie the way they did and the impact on the original work.

Some scholars will have a choice of culminating projects to highlight their particular strengths. Both groups will continue to build their critical thinking skills to better comprehend and analyze text.

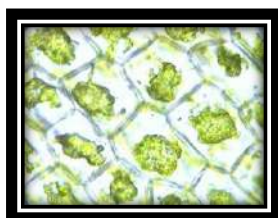
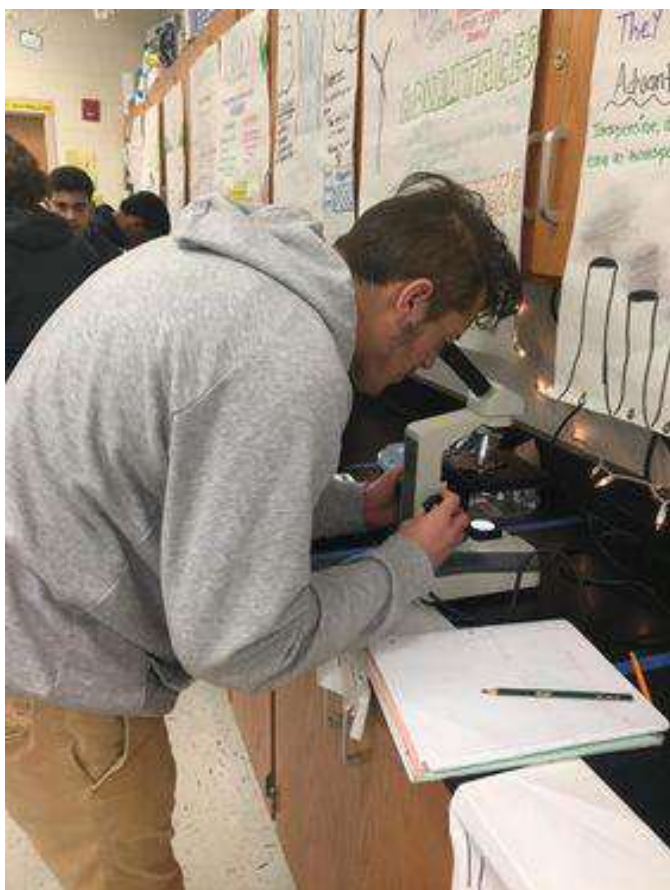
## 6<sup>th</sup> Grade

Sixth grade honors scholars have focused on biography/autobiography this quarter. They completed a biography project that compares a figurative superhero to a real life superhero. They were able to choose an African American or a woman figure from figurative and real life in honor of Black History Month and Women's History Month. Using higher level thinking and research skills, they compared how the two figures are alike and different and what they have done that would make them a superhero. Also, scholars are actively writing high school level papers using MLA format. The rubric and requirements for the project were student-created.



## 8<sup>th</sup> Grade Science

Scholars in eighth grade science are covering photosynthesis, cellular respiration, osmosis and diffusion. In class, we looked at Elodea plant leaves. The leaves of Elodea are so thin we can actually see the chloroplasts under the microscopes. We made our own microscope slides. One slide had fresh water added to it, and the other slide had salt water added to it. Scholars looked at the slides and looked for differences between the two slides. They explained why the chloroplasts were acting differently in each slide using the concept of osmosis and diffusion.



## 6<sup>th</sup> Grade Science: Ms. Mayreis

This quarter's new scientists have explored our surroundings from the properties of our Earth, all the way down to microscopic atoms. Scholars began their curiosity with our matter unit by creating and building molecules and compounds. They used marshmallows and toothpicks that represented the elements and the bonds between them. Scholars investigated how thermal energy manipulates these molecules of matter and how this energy is transferred through substances.

Equally important, they continued to work with energy by designing and creating their own solar ovens that could convert solar energy, or radiation, to heat energy to cook a S'more. Some ovens worked so well they reached temperatures of almost 200 degrees Fahrenheit. Students investigated how energy is transferred in waves by demonstrating transverse and longitudinal waves during our slinky lab.



# Social Studies

## 8<sup>th</sup> Grade

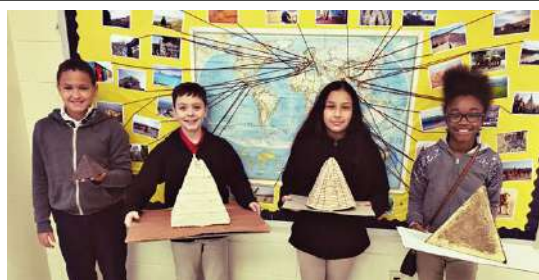
In social studies, we have been focusing on the Civil War. AIG scholars participated in a Socratic Seminar to discuss the causes of the war. The students did a great job looking at the causes of the Civil War through the lens of a person from the 1860s. We discussed how we need to understand the reasoning of people of that time period to recognize falling into similarly destructive patterns in the future.

Finally, students are memorizing the Gettysburg Address. It represents a pivotal time in our development as a nation and the process of memorization activates parts of the brain that our students do not use as often as past generations.

## 7<sup>th</sup> Grade



For third quarter, scholars completed their Industrial Revolution unit, in which they had to create a 3D replica of the movement from an Agrarian to an Urban society. Before creating their replica, the students had to read three comprehension worksheets that explained what life was like before, during and after the Industrial Revolution.



## 6<sup>th</sup> Grade

In social studies with Mr. Eller, this new group of scholars have been working hard at writing, reading, becoming independent thinkers and artists. The subjects of geography and history intertwine to take the students on a fascinating ride through the Ancient World. The students have completed several projects in the third quarter that have pushed their senses and encouraged creativity. The smiling faces and passionate dialogue amongst students have demonstrated how impressive these young minds are.

Our projects have included Cave Paintings (Early Human Art), Building a Tool from the Paleolithic Era (being creative with what nature gives), creating yourself as an Egyptian god/goddess, and the enticing Ancient Egypt Project, full of creative opportunities such as building a 3D pyramid from found objects, or journaling as a member of ancient Egypt's social hierarchy.



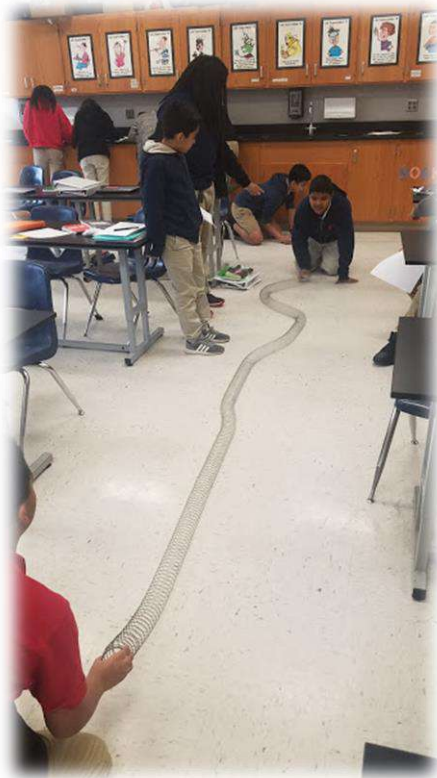
Our scholars were fortunate enough to get a Donors Choose project funded for our class reading of *The Only Thing to Fear* by Caroline Richmond. This book study, accompanied by historical content on World War II, will allow the students to analyze the ever present question of: "What if Hitler had won WWII?" Go to [aleciabryant.weebly.com](http://aleciabryant.weebly.com) for more classroom updates!



## Southwest Middle School

**6<sup>th</sup> Grade Scholars**

**ENCORE:** Ms. Mayreis's science class (from P. 4) and Mr. Eller's social studies classes (from P. 5)



Visit [www.swmsaf.weebly.com](http://www.swmsaf.weebly.com) for school testing information and AIG news and updates

**Southwest Middle Needs Volunteers for End-of-Year Testing**

Sign up today: <http://bit.ly/SWMSProctors>