

# STEM Middle @ Baldwin Road Junior High

## Quarter 1 STEM Spotlight



### Principal's Perspective:

Resilience! When reflecting on the first quarter, our Baldwin teachers and students are the epitome of RESILIENCE! I am so proud of our teachers, who have shown limitless dedication to the instruction of our STEM Scholars! This journey hasn't been easy, but daily they straighten their capes and crowns and continue to TEACH!

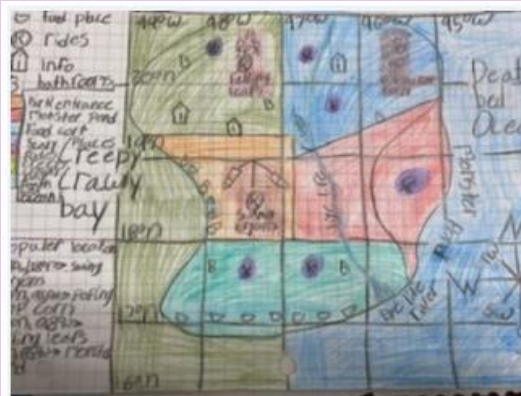
Our STEM Scholars have demonstrated bravery, discipline in social distancing and have proven that hybrid and virtual students can collaborate seamlessly when learning!

What's new on the horizon? Whether hybrid or remote, as we continue this new journey together, SMBR is committed to delivering quality instruction, being mindful of your student's social emotional needs, and strengthening our communication with families. This newsletter spotlights many of the successes of our STEM students from first quarter and how STEM is being integrated into daily instruction. We invite you to continue to navigate to our web page, which will always be our primary method of communication. Here you will find our new PBIS Matrix and can read about our new reward system! We also encourage you to check your emails and PowerSchool and follow us on social media (Twitter/Facebook pages). It is our goal to stay connected!

Yours in Education,  
Principal Wilson

<https://www.reyn.org/stemmiddleastbrjh.aspx>

### STEM Scholars hard at work!



# FIFTH GRADE

Our Fifth Grade Team has already been hard at work Quarter 1 being STEMersed and we are doing a STEMtastic job! Our grade-wide book read, *The Stars Beneath Our Feet*, has set the tone for the semester. We have been learning about many different scientists and people who have contributed to making our world a better place. As we all navigated virtual learning together, we worked to answer our essential question, "Who are we as STEM students?"

In Science, students found out who they are as engineers! We learned about different types of engineering careers, and applied our knowledge of the engineering process to design a rocket car. Students were given the constraint that cars had to be powered only by a balloon. We then used our scientific knowledge of Newton's Laws of Motion to explain how and why the car worked.

In Math, students also put those engineering skills to the test. We looked at the attributes of 2D figures, what makes them different, what they have in common and how to classify them. Students had an anchor project designing a robot, mostly compiled out of quadrilaterals. Students needed to include 6 different quadrilaterals and explain the attributes.

Mrs. Heath's Math class created a roller coaster where the students had to research measurements of drop heights and speeds of popular roller coasters. They compared and contrasted those amounts and made conclusions based on their research. For their final products, students were able to advertise the most "thrilling" coasters they researched in various forms.

In Humanities, we focused on Geography and Historical Thinking Standards with students producing multi-tiered timelines that showed important events in their life on one tier and media that has impacted them on the other. Many students presented their timelines in a Flipgrid video, and showed not only that they mastered the content of reading and designing a multi-tiered timeline but that they are also Flipgrid presenter superstars! In Quarter 2, as an anchor that summarizes all their geographer skills, students have designed a map of a theme park based on things that represent who they are. Students have also been applying close-reading techniques to short films from Pixar and other animators, and have been honing their analytical abilities as they did so!

In Mr. Holloway's Writing Lab, a spirited debate took place on whether or not Disney's Goofy is a dog or a cow. Sources were cited, topic sentences were written, and it eventually became a topic that the entire fifth grade discussed with great enthusiasm. In Ms. O'Connell's Writing Lab, we explored how good writers use processes, just like scientists and mathematicians. We've discussed the "variables" of good writing and what we're "solving for" when we write about reading, as well as how the Writing RAIDERS process for writing is like the Scientific Method and Design Cycle. ❖

How is Writing RAIDERS like the Design Cycle or the Scientific Method?

**Writing RAIDERS**

- R Read
- A Analyze
- I Investigate
- D Describe
- E Elaborate
- R Revise
- S Share

**DESIGN CYCLE**

1. Understand the problem
2. Plan
3. Create a solution
4. Test the solution
5. Improve the solution

**SCIENTIFIC METHOD**

1. QUESTION
2. HYPOTHESIZE
3. EXPERIMENT
4. OBSERVE & RECORD
5. ANALYZE
6. DRAW CONCLUSIONS

Comparisons and Notes:

- They are similar because they are all processes.
- They are similar because they cause you to think and take your time.
- It gives you a visual of what you need to cover in your project.
- They all end in SHARE.
- They both are to help u and help u plan
- There the same because they both have steps that help you do something
- They are all the same because they make you think to find what you are looking for
- They are all the same because you do similar things like reading and asking questions.
- They are the same because you need to plan out what you are going to make of use
- They are the same because you need to write down your answers, and think a little bit.
- They are both the same because you can both share them with people.
- They are all the same because you all have steps that organize each individual step
- The are similar because the both have step by step things.
- There the same because they have steps to do stuff.
- there are the same becous they all us the disine sikol
- They are similar because you have to take your time and think.
- Theyre alike because theyre alike
- they are similar because they are steps to writing a good prompt
- accurately read the book imagine the pictures
- because raiders are all about learning, teaching, writing and thinking.

# Sixth Grade



Micah Barnes

## MOLECULE PROJECT in SCIENCE



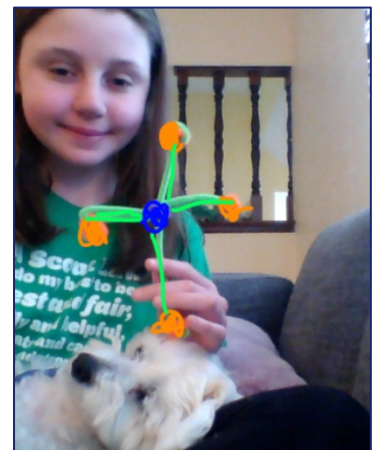
Teah Brathwaite



Jaelyn Boykin



Landon Keeler



Claire Allison

## Honoring Chadwick Boseman through the lenses of Jackie Robinson

We completed a study on the book *42 Is Not Just A Number* to bring about purposeful conversations regarding the injustices Jackie Robinson and those close to him faced. We then compared the book to the movie *42*, which stars the late Chadwick Boseman. As we followed the journey Jackie took to become one of the most well-known, respected players in the MLB, we also analyzed how Jackie Robinson showed the characteristic of respect. ❖

### Upcoming in Quarter 2

We're excited to have started our grade level book read, *The House That Lou Built*. Throughout the reading of the book, we will be studying related topics such as the tiny house movement and the effect it has had on homelessness, budgeting to build a house, careers in architecture and engineering, and energy efficient homes. Students will end the unit by designing and building their own model tiny house. ❖

# Seventh Grade

The seventh-grade team is proud to share that our students are on their way to becoming STEM Scholars. Our first quarter was filled with many exciting new opportunities, and we would like to thank all of our families for being partners with us in this academic year. We truly appreciate all the communication, and we were so grateful to meet with so many of you during parent/teacher conferences.

The first quarter in science provided students with many learning pieces. Students enjoyed the opportunity to go on a virtual field trip to a soybean farm, attend a COSI interactive event, and they also worked on many fun energy consumption learning projects.

Math brought out the competitive edge of our students, as students engaged in interactive gamified lessons that helped to improve their basic math and number sense.

Students engaged in studying the innovations and scientific influence of the ideas of Ancient Greece and Rome in humanities class. Students were able to celebrate and share their knowledge through design challenges including a soundproofing experiment and a Roman innovation build project.

As a team, we also worked to build communities, knowledge, and skills within our advisory groups by using the schoolwide advisory calendar. This included looking at diversity and equity in the modern world, celebrating Hispanic Heritage Month by researching Hispanic leaders in STEM fields, and working on setting S.M.A.R.T. goals.

Students have also created their own digital portfolios. The majority of this work is completed in advisory; however, classes are working to add on showcase level work as well as achievement data for students as they track their own progress on assessments.

Looking forward, students are currently working with their grade level novel, "The Science of Breakable Things." We will be using this for the remainder of the second quarter. In the late third/early fourth quarter, students will begin working with their second-grade level novel, "Wink."

Please remember to visit our team webpage for continued updates and teacher landing page information (<https://sites.google.com/reyn.org/seventhgradesmbr/smbr-seventh-grade>). ❖



Left: Danna Valencia-Orozco's Rome Arch for the Roman Innovation Project in humanities.

Right: Caden Feeney Working with fractions through baking on his STEMmed Recipe Challenge.



"Education is the most powerful weapon which you can use to change the world."

- Nelson Mandela

# Eighth Grade:

## Students Learn about Human Impact on the Oceans

The human impact project started off with students in Mrs. Karpuz' marine biology class exploring plankton. The class viewed freshwater plankton specimen under the microscope, and discovered that there are different types of plankton, phytoplankton and zooplankton. They then investigated why plankton are so important to the animals that live in the oceans and to us. The class learned that they are the base of the ocean food web and that most marine and freshwater animals depend on them as a food source, either directly or indirectly. Students also learned that 50% of the oxygen we breathe comes from the oceans!

After learning why plankton are so important we investigated why the plankton population has decreased by 40% since 1950, and continues to decrease at a rate of 1% per year. Through the students' investigations they found that there are many things here in Reynoldsburg that we are doing on a daily basis to affect the plankton and other ocean life. For example, the class learned that if you follow Blacklick Creek, it connects with other creeks and rivers and eventually leads to the Gulf of Mexico, therefore pollution that ends up in creeks and streams here can eventually end up in the ocean. This pollution kills plankton and other marine life. Additionally, students examined how our dependency on fossil fuels is causing the climate to warm which also affects plankton and kills corals.

How can we reverse the damage that has been done? Stay tuned for more projects where students will learn about how the small changes we make can have a big impact! ❖



# ELECTIVES

In Physical Education students worked through a biography presentation. This presentation was used to help show students how someone can have an impact on their community, and how hard work will pay off in the long run.

Students researched about a person of their choice and conveyed information through a presentation that included the following information:

- their life before becoming famous
- their education
- how they became famous
- highlights of their career
- how they give back to their community
- why they give back to their community
- where they are now

Advanced Environmental Sustainability/SOIL Lab conducted a pH lab this week to test to see the pH levels of the water and soil they used to plant their seeds. They researched how farmers can alter the pH levels in soil to better grow crops. Virtual students were sent to breakout rooms with hybrid students so they could conduct the lab together. ❖

SOIL LABS



Above: Hybrid students help make SOIL Lab kits for virtual students so they would also be able to grow plants from home.

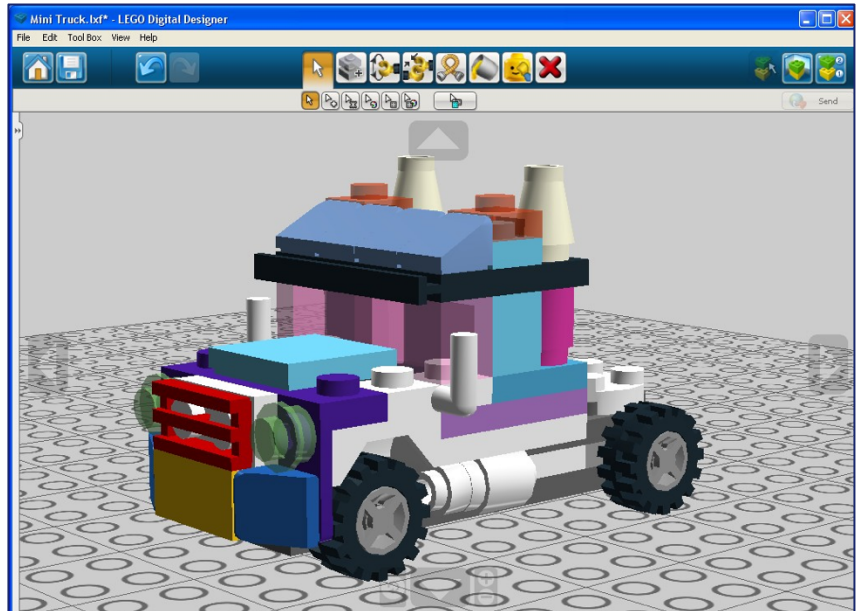
Below: Students harvested tomatoes and cucumbers and donated them to a local Reynoldsburg Food Bank.



# ELECTIVES

## DESIGN WITH MR. BOYD

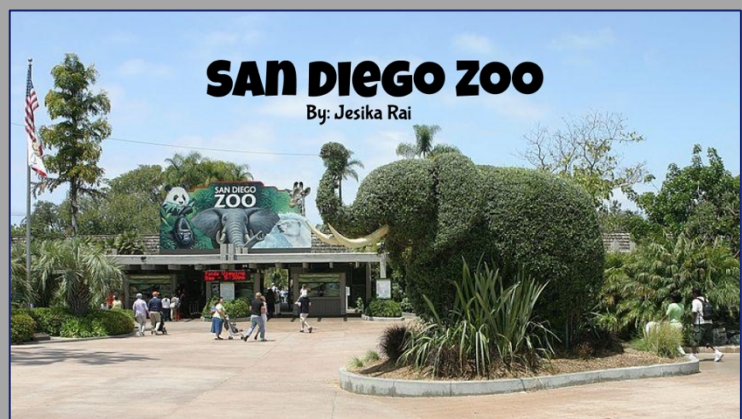
Students have been learning about 3D modeling and its importance in design engineering, reverse engineering and product manufacture. Here is a student's virtual rendering of an actual LEGO truck. It was constructed using a pdf of the instruction booklet that comes packaged with the actual set. ❖



## MULTIMEDIA DESIGN WITH MRS. FOWLER

Take a Virtual Field Trip with 8th Grade Student Jesika Rai to the San Diego Zoo!

In Multimedia Design students learned how we can use technology to provide new and interesting learning experiences through the creation of virtual field trips. ❖



To take tour, click the link below:

<https://docs.google.com/presentation/d/1ZboiROg8trXAVDa0668TuljYwyfhQptqK-YlwkIIEVk/present?slide=id.p>

"We are STEM. Innovators of Excellence, Builders of the Brighter Future,"

- Ara Keith Pabilin

# **SHOW SOME SCHOOL SPIRIT**

The sale ends 11/22 and items should be available for pick up before the holidays. Every order supports the PTO.

<https://baldwin-road-ms.itemorder.com/sale>

**BALDWIN ROAD MIDDLE SCHOOL SPIRIT WEAR SALE**

SALE ENDS 11/22 - ORDERS DELIVER AROUND 12/15  
[HTTPS://BALDWIN-ROAD-MS.ITEMORDER.COM/](https://baldwin-road-ms.itemorder.com/)

The advertisement features a collection of school spirit apparel against a yellow background. At the top right, a white hoodie with a purple and gold pirate logo is displayed, accompanied by a purple beanie with a gold logo and a grey and white striped beanie with a gold logo. Below these, a purple and white hoodie with a gold logo is shown. In the center, a purple t-shirt with a gold atom logo and the text 'YOU MATTER RABERS' is displayed. To its left, a grey t-shirt with a purple atom logo and 'YOU MATTER RABERS' is shown. Below the purple t-shirt, a purple hoodie with a gold logo is displayed. To the right of the purple t-shirt, a grey hoodie with a purple and gold pirate logo is shown. Below the grey hoodie, a purple hoodie with a gold logo is displayed. To the right of the purple hoodie, a black hoodie with a gold logo is shown. At the bottom center, a QR code is visible. To the right of the QR code, a pair of plaid pants with a gold logo is displayed. The text 'BALDWIN ROAD MIDDLE SCHOOL SPIRIT WEAR SALE' is written in large, stylized letters on the left side. At the bottom, the text 'SALE ENDS 11/22 - ORDERS DELIVER AROUND 12/15' and the URL 'HTTPS://BALDWIN-ROAD-MS.ITEMORDER.COM/' are displayed.