

THIS MONTH:

DEC 6 INTERIM REPORT
DEC 14 AM1/PM1 EXAMS
DEC 15 AM2/PM2 EXAM
DEC 16 ALL DAY ELECTIVE
DEC 19 NORMAL SCHOOL
DEC 20 DAYS
JAN 4 STUDENTS RETURN

RVGS Newsletter

Issue 4
Dec 8, 2016

Finding Lost Water at the Inaugural Shelly STEM Challenge

Message from the Director

What an exciting and action-packed time of the year we are in! The Govie Gala, the Shelly Challenge, preparing for exams, early decision responses coming back from colleges, students receiving awards, holidays, and, of course, the frantic ordering of supplies to be ready for intersession research projects...RVGS is bustling with action!

As we approach the end of the semester, many students can have difficulties with stress. Conversely, some students can feel the pull of being close to winter break and be tempted to coast. My advice for students would be to take a middle road. Exams are impactful and should be taken seriously, but panic and stress about exam preparations are likely to be counter-productive. A rested, calm, and confident mind can be as important to success as the time spent studying. I urge students to pace themselves in exam prep, studying a reasonable amount of time each night, rather than cramming at the end.

I appreciate the opportunity to work with our wonderful students each day, and I'm proud of the work that they do. I hope that everyone enjoys a restful and relaxing winter break.

Counselor's Corner

First semester is coming to an end with exams happening next week! I will be processing report cards when we return in January and they will be mailed home on January 6th. As you know, students will be in Intersession for the month of January. This is both a very exciting time and also often a stressful time. It's not unusual for students to think they have plenty of time to get everything done, and then wait until the last minute to actually do the work. This poor time management is often what leads to feeling stressed and overwhelmed. Please encourage your students to stay on top of their project and to pace themselves accordingly. They will feel great relief and pride once they have accomplished their project goals. If you have any questions or concerns, please feel free to contact me. I hope you and your families have a wonderful holiday break.

The winning team from the Shelly Challenge: Ryan, Luke, Sujith, and Erik!

Water, water, everywhere at the inaugural Shelly STEM Challenge!

On Saturday, December 3, RVGS held its first Shelly STEM Challenge, and it was a barn burner from start to finish! Our Lab Rats ran the spectrum from freezing up to reaching their boiling points, from feeling buoyant to feeling sunk, from overflowing with exuberance to watching a full day's work go down the drain. It was an entire month of Intersession, including Project Forum, crammed into 5 hours, and our students thrived under the pressure.

In total, 8 teams of 4 competed in the event. All 4 grade levels were represented, as were 4 of our 7 school districts, and 9 of our 13 home schools. The gender split was close to 50/50, with two teams being coed. Sisters competed against each other on separate teams – apparently blood is not *always* thicker than water – and many teams were formed with students from different school districts.

One team worked best to Les Mis, one to Britney Spears, and at least one in complete silence. An all-male team rolled out of bed just in time for the 10 AM start, a coed team got up early enough to dress in matching T-shirts, and an all-female team planned far enough ahead to arrive decked out in Ninja costumes. In other words, our participants were a mix of typical



RVGS teenagers.

Western Virginia Water Authority served as the school's industry partner for the event, and they presented students with a current, real-world problem that they are desperately trying to solve – the loss of 24.5% of their water through leakage in their underground pipe system. They challenged students to come up with solutions using only math, science and technology, and students were required to engineer their solutions using only equipment and materials provided at the challenge. Construction materials were purchased with funds donated to the school in memory of Dr. Richard Shelly, the Governor School's founding director.

To complete the challenge successfully, students had to determine the location of holes in pipes without being able to see the pipes, which proved to be incredibly difficult, messy, and full of trial and error. It was an excellent first challenge that gave our students an opportunity to better understand the issues facing not just our community, but every community.

Continued on page 2





Punkin' Chunkin' in AP Physics

On October 26th and 27th, AP Physics held their annual Pumpkin Launching contest. Students worked in teams for approximately two weeks outside of school developing trebuchets that could launch small pumpkins the maximum distances. This year, the designs of the trebuchets varied considerably, from our first ever metal trebuchet to our standard wooden trebuchet. Besides just launching the pumpkins, students had to videotape their launch and then analyze their video using special software that would help them determine initial velocities and launch angles. From this data, students were given the task of trying to determine the average drag force that the pumpkin encountered. Overall, both days were quite successful. The weather was gorgeous and several groups had some very successful launches. AM1's top team was Ryan James, Trevor Buzzard, and Ben Phillips with a launch of 205 feet. AM2's top team was Olivia Menezes, Drew Freeland and Edward Rodriguez (pictured here) with a launch of 227 feet. The launch of 227 feet is RVGS's new official record and will be tough to beat for upcoming AP Physics classes.

- Brent Holt



Shelly Challenge

(continued from page 1)

Congratulations to freshmen Ryan Rigatti (Lord Botetourt High School), Luke Arner (Hidden Valley High School), Sujith Panchumarthy (Cave Spring High School), and Erik Scarlatescu (Hidden Valley High School) for presenting the best solution and winning the competition! The team earned bragging rights, a cash prize and recognition on a perpetual plaque.

At the close of the day, Dr. Shelly's daughter, Sara Wohlford, spoke about how much RVGS meant to her father and how the STEM Challenge would have meshed beautifully with his vision of providing unique learning opportunities for gifted students in the Roanoke Valley. I know he would have been impressed with our students on Saturday, and I hope our students understand that the foundation Dr. Shelly laid 30 years ago is what made Saturday possible.

Thank you to the Water Authority for providing the problem and the judges for the competition, and to Mr. Levy for spending many hours creating and developing the Shelly STEM Challenge series. To read an outstanding article on the inaugural challenge by Roanoke Times journalist Neil Harvey, please visit our RVGS Facebook page, and while you're there, check out the 50 or more pictures of our hard-working Lab Rats posted from the event.

And be on the lookout for the next Shelly STEM Challenge!

- Regina Carson

Staff Spotlight on Mrs. Paula Buch

Mrs. Buch is such the ideal example of someone with a picture perfect life that it feels as if there should be a little white picket fence surrounding her desk. Everything she ever wanted she has found right here in Roanoke, and she has never even considered living anywhere else.

The baby of her family, Mrs. Buch grew up with four older brothers in Roanoke County. She graduated from Northside and Virginia Western, married, had two daughters, and became a stay-at-home mom. She subbed as a secretary for Roanoke County Public Schools when the girls were in elementary school, and by the time they hit middle school, Mrs. Buch was working full-time for the County school system. Fast forward a dozen years or so to 2007, and Mrs. Buch joined RVGS.

Secretary is her official title at Gov. School, but Mrs. Buch also serves as the school's nurse, bookkeeper, and receptionist. She tracks attendance, organizes meetings, takes minutes, administers medication, prepares purchase orders, and completes payroll. She keeps the school calendar, schedules fire drills and field trips, makes conference appointments, and submits maintenance work orders. She keeps the copier running, handles the cash that comes in and out of Gov. School, and

does the administrative work for Student Project Forum. She answers the phone and door dozens of times each day and communicates daily with all 13 of our students' home schools. Basically, she runs the place.

When I asked Mrs. Buch about what she likes doing outside of school, she didn't have any likes, but she had a long list of loves. She loves to sing, and she and husband, Marc, often sing together at church services, weddings and funerals. She loves Southern Gospel and country music, and she loves to go to concerts. She loves cruises, and has had some amazing adventures like swimming with the dolphins in Nassau and zip-lining in Honduras.

Mrs. Buch loves the beach, she loves to decorate for Christmas, and she loves to enter contests. She once won an all-expense paid trip for two to New York City to hear N'Sync play Madison Square Garden, and she was able to take her younger daughter, Sara, on the trip of a lifetime. Mrs. Buch loves her family, and she absolutely adores her grandchildren, Madie and Ryan.

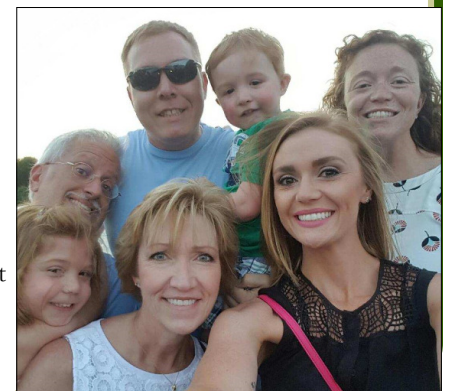
Mrs. Buch loves her job, she loves the people she works with, and she loves her kids at school. "They feel like my own children," she said.

"They come in as freshmen or sophomores, and I get to watch them grow up. I get to be part of that for so many students, and I always cry on the last day of school when they leave me. The students are the life of this building, and I'm lonely without them here in the summer.

"The faculty is like an extended family," she continued, "and I hope to be with the Governor's School until I retire. A lot of people don't like their jobs, and I feel so lucky to love mine."

It's ironic that Mrs. Buch feels that she is the lucky one in this arrangement, when everyone I have ever talked with gushes about how lucky *we* are to have *her*. "She's sunshine," said my son, Ford, who graduated in 2014. "Mrs. Buch just radiates warmth, and everyone loves her." Yes, she is, and yes, we do.

-Regina Carson





Govie Gala Was Out of This World!

Though the Conga Line has been around for over a century it never fails to get everyone on the dance floor, and when the DJ yelled, "Everybody, let's Conga!" at the Govie Gala last month, I was almost trampled mid-photo. Luckily the Mannequin Challenge is trending this year, so I was able to get some still shots of the crowd without objection, and I snapped a few dozen other pictures during water breaks and rest periods. Be sure to check them out on Facebook!



This year's theme was Govie Gala-xy, and Mrs. Sebolt and the Dance Committee put on a spectacular event. They transformed the lecture hall into an out of this world wonderland of lights, streamers, and balloons, and they lit up the lobby with a star-studded photo booth for anyone willing to pose for a picture. They worked with veteran DJ Kenny Malloch – now in his 16th year with the Govie Gala – to create a mix of music that kept well over 100 kids tearing up the dance floor for three solid hours.

Admission to the dance cost five cans of food for Feeding America Southwest Virginia, and the students filled three huge containers with their donations. Ten staff members chaperoned the dance in shifts, and several brought their pets and/or children, which made the event even

more fun for the students. The kids voted for a queen and king of the dance and crowned Kunitika Tiwari (sophomore, Patrick Henry High School) and Jack Sherman (junior, Patrick Henry High School) this year's royalty.

Every year the Govie Gala is a joyful, inclusive evening that celebrates friendships both old and new. It gives students an opportunity for fellowship outside the classroom and is a chance for our hard-working Lab Rats to become carefree kids for just a few hours. It usually allows Mrs. Buch to bust a move, too, but because she's still recovering from a broken foot, Ms. Bohland stepped up this year. She quickly pulled in Mr. Wages, Dr. Frazier, Mrs. Russell, and Mr. Levy, which left daughter Isabella (age 10) calling for another Mannequin Challenge, pronto.

The Govie Gala was a well-deserved night out for everyone! Special thanks to Mrs. Sebolt and the following students for making it happen: McKinley Anders, Wells Carson, Madison Duval, Kathryn Fink, Christine Flora, Callie Garst, Jessica Goad, Jaelyn Guerrant, Tiana Horace, Gretchen Kepley, Kayla Li, Kendall Livesay, and Meagan Webb.

-Regina Carson



Special thanks to those who have already contributed to the Annual Appeal:

Roni Arnold
David and Regina Carson
Jeffrey Largen
Archie and Carrie Pugh
John and Patricia Smith
Danielle Stang
Jim and Caroline Wallace

Special thanks to those who have already contributed gift certificates for the Silent Auction:

Jim and Caroline Wallace
John Smith IV
Mike and Nancy Duval

Silent Auction and Annual Appeal Update

Silent Auction and Annual Appeal season has begun! Mr. Levy emailed sponsorship information in Parent Packets on November 21, and he also emailed parents Friends Packets that can be used to introduce the Governor's School to the community while asking for support. To have your child bring home Friends Packets on official RVGS letterhead, please contact Mrs. Buch at 853-2116, and if you are interested in reaching out to larger companies, please contact Mr. Levy for special packets for corporate-level fundraising.

As you know, proceeds from this year's Silent Auction and Annual Appeal will be used to purchase a single, signature item for the school: a \$40,000 Atomic Force Microscope that would enable nanotechnology research to be performed in-house. It is a cutting-edge piece of equipment that with care could be in use for decades, and every student at the school would have access to its technology.

Recognizing that the Atomic Force Microscope is a major investment, it is likely to take two years of fundraising to collect enough money to purchase it. This year's fundraising goal is \$25,000.

This year's Silent Auction will be a gift card/gift certificate auction only that focuses on experiences rather than things. **RVGS is asking that parents secure two gift cards of any amount suitable for this year's auction, or make a tax-deductible cash donation to the RVGS Foundation as part of the Annual Appeal.**

In addition to the Gift Card Silent Auction at Student Project Forum, we are planning a 50/50 raffle, an RVGS Student Art Show, a looped slideshow of hundreds of student pictures from the RVGS Facebook page, and paparazzi pictures on The Roanoke Times' Red Carpet. We will celebrate our students on January 28th, and we very much hope to be able to celebrate reaching our fundraising goal, as well. Please give generously!

If you have any questions about the Silent Auction, please contact one of the co-chairs, Lacey Levy at gpack52@gmail.com, or Paul Parnell at ptparnell@yahoo.com. For questions about the Annual Appeal, contact Regina Carson at thecarson5@cox.net or Mark Levy at mlevy@rvgs.k12.va.us.

Thank you for your support of RVGS and for helping the school continue to uphold its commitment to academic excellence!