

## NEXT MONTH:

- NOV 1 INTERIMS
- NOV 7 PARENT-TEACHER CONFERENCES
- NOV 10 SENIOR GE TRIP
- NOV 11 SHELLY CHALLENGE
- NOV 14 ALL-DAY ELECTIVES
- NOV 20 GOVIE GALA
- NOV 22-24 NO SCHOOL

## Counselor's Corner

First semester is flying by and the 2<sup>nd</sup> interims have already gone out. Our students are making a great deal of progress and are working hard to keep their grades up while also participating in a variety of activities outside the school day. The early action/decision deadline for seniors has passed, and the students are one step closer to completing the college application process. This is both an exciting time for seniors and their parents and also a very stressful time. I promise, you **will** get through it and if I can help in any way, please let me know!

Govie Gala is scheduled for Monday, November 20<sup>th</sup> from 7:00pm – 10:00pm. The theme is Luau! As always, this is a canned food fundraiser for Feeding America. Students must bring 5 canned food items to get into the dance. Please feel free to donate even if your student cannot attend that evening.

As always, if you have any questions or concerns, please do not hesitate to contact me.

## Fall Ultimate Frisbee Tournament

The Fall Ultimate Frisbee tournament was our most successful Frisbee event ever! A record-breaking 10 teams competed for bragging rights and a pancake breakfast, and the tournament raised \$500 to benefit United Way of Roanoke Valley.

The tournament was played single-elimination style with 15-minute matches before school, starting at either 7:45 AM or 8:05 AM. It took five mornings to complete the tournament, and Mrs. Sebolt did a terrific job of keeping both the time and the score. A total of 94 students participated – that's 36% of the student body – with the largest team consisting of 14 students and the smallest of six. Every grade was represented in the tournament, as were all seven of our school districts. Some teams wore uniforms, some created costumes, and one sophomore played the entire championship game in a Japanese kimono. It was like Halloween every morning.

Tournament weather conditions were cold and foggy, and one morning play literally began in the dark. Falls were plentiful, but no injuries were reported, even from the student who forgot his shoes and played barefoot. There were astounding blocks and spectacular catches, and the level of teamwork required to score meant that every player was instrumental to the team. The championship game was a thriller, with all-senior



team (Redacted) topping Saucy Sophomores 8-2 for the win, the team's fifth win in a row. **(Redacted) hasn't lost a game since freshman year!** Everyone will be gunning for them this spring.

Thank you to Mrs. Sebolt for organizing the event and to all of our student athletes who paid \$5 each to play. It was a great week of friendly competition for a good cause. Congratulations to all of our teams: **Hard Boiled Eggs, He Who Must Not Be Named, LB Yee Yee Roosters, PHreshmen, (Redacted), RVGS Determined to Win, Saucy Sophomores, Taylor's Defined ABs, Ultimate Frisbee,** and our faculty team, **The Guv'nors.** See you at the spring tournament!

-Regina Carson

## Message from the Director

You can certainly tell it's getting into late fall at RVGS—seniors are handling college applications, research projects are coming into focus, and the school is bustling with activity. As you can see from our upcoming dates, we have a variety of activities on the horizon for our students. Our seniors will be visiting the GE production facility in Salem later this month for a tour and to benefit from a panel discussion of professional engineers. The following day, GE will serve as the industry partner for our next Shelly STEM Challenge competition on November 11. It's also important that students have some relaxation and enjoyment to go with the hard work they put into their studies, and the Govie Gala—our annual school dance—will be a great way to socialize and have fun with their classmates.

As always, if you have any questions or concerns, please don't hesitate to contact me. We look forward to seeing you at Parent-Teacher Conferences on Nov 7.

Our fall Ultimate Frisbee champions — "[Redacted]"



## AP Physics Pumpkin Launch

Guess what happened to last year's record during Dr. Holt's 5<sup>th</sup> Annual AP Physics Pumpkin Launch – it was SMASHED! This year's AP Physics dream team of **Ana Barrios, Maria Parnell, and Murphy Smith, and their ombre trebuchet, Clarence, set a new school record of 249 feet!** Congratulations, team!

Congratulations, team! Here's their monumental achievement, by the numbers:

**5 x 3 x 6** – dimensions in feet of Clarence, the team's award-winning trebuchet

**5 x 5 x 6** – maximum allowed dimensions in feet of a trebuchet, as specified in the project guidelines

**3** – the launch attempt that broke the school record

**3** – hours the team worked on the trebuchet's design

**3** – hours the team spent at Home Depot purchasing supplies

**6** – hours the team spent building the trebuchet

**9** – extra-credit points the teammates will receive on their mid-term exams for winning the competition

**16** – after-school hours the team spent on the project

**16** – launches in total before the trebuchet's swing arm snapped

**22** – feet this year's farthest launch out-paced last year's farthest launch

**60** – dollars the team spent on construction materials

**210** – feet the pumpkin traveled during the team's first test launch the week before the competition

**227** – feet of last year's distance record

**249** – feet of this year's distance record

**260** – pounds of the weights used as counterweights on the trebuchet's swing arm for the winning launch

**Q** – How did you decide on a design?

**A** – We spent A LOT of time researching ratios online. We knew we wanted to max out the swing arm, so from there we used some trig calculations to determine our optimal ratio.

**Q** – Where did you build it?

**A** – At Murphy's. He lives near Gov. School, so it was a great place to meet.

**Q** – Did anything go wrong?

**A** – The sling! The fabric we used was too stretchy, and we kept having to retie the knots every time we launched. If we had it to do over, we would use leather.

**Q** – What was your biggest obstacle?

**A** – Coordinating our schedules so we could find time to meet.

**Q** – Why Clarence?

**A** – From "It's a Wonderful Life." Clarence was the guardian angel sent to help George Bailey, and he saved him.



## Teacher Spotlight on Mr. Matthew Browning

There are so many fun facts about Mr. Browning, I hardly know where to begin. He played Ultimate Frisbee for Roanoke College as an undergrad. He announced volleyball and soccer games when he taught at Lord Botetourt. He designed the mathematics curriculum for Virtual Virginia. He is personally remodeling every inch of his 1949 Cape Cod.

I guess lots of people are smart and athletic, and some have smooth voices, too, but seriously, construction? "It's just something I picked up," he laughed.

As it turns out, Mr. Browning's grandfather was a roofer, and his father was an engineer with a contractor's license, so he comes by his aptitude naturally. "All my life I've helped out with whatever my dad was working on," he said, "and I picked up skills along the way. My mom felt strongly about the value of learning through experience, and she was right when it came to construction. I can do it all now, plumbing, flooring, electrical work, tearing out walls, putting in windows, relocating a cooktop... I knew what I was getting into when we bought the house."

Mr. Browning married his college sweetheart the month after graduation, and they bought the Cape Cod in Botetourt in 2012. He has spent five years remodeling it, the same amount of time it took him to earn his Master's in Mathematics Education from Radford at night and on the weekends. He needed the master's degree to enable him to teach dual

enrollment and Advanced Placement classes at the high school level, which was his goal from the moment he began teaching middle school math. "I love kids, and I love teaching," he said, smiling. "But 7<sup>th</sup>-graders? I've never prayed so hard in my life."

In the six years Mr. Browning was with Botetourt County Public Schools, he rose from a first-year math teacher at Read Mountain Middle School to the instructional leader of the entire math department at Lord Botetourt High School. He redesigned the mathematics curriculum for the entire school system, and he did the same for Virtual Virginia, the Virginia Department of Education's online learning program. He began teaching a Statistics through the Sports Industry class at Roanoke College, something he continues to do two nights each week, and at the Governor's School, he teaches AP Statistics, Algebra II, and FOR.

When I asked Mr. Browning if he has trouble waking up so early for the drive in from Botetourt when he obviously goes to bed so late, he laughed. "Believe me, we're up," he said. "Our baby is three-and-a-half-months old, and she doesn't have a snooze button. But I love getting up early to be with Elliana. She's not even four months old yet, and she already has me wrapped around her finger."

Mr. Browning said that since coming to the Governor's School, the extra time it takes him to get to work every day is well worth the ef-



fort. "It's just an exceptional place," he said. "Everyone is here for the right reasons. I get asked a question every day that makes me think, and that's meaningful. I used to think of myself as a gatekeeper of knowledge, but here, I'm a facilitator, and for a teacher... that's just really meaningful."

When he's not teaching, announcing, playing disc golf, or fixing a neighbor's leaky faucet, Mr. Browning enjoys spending time with family and friends, including his BFF Mr. Taylor, who recruited him to teach at Gov. School before he even had the job himself. Mr. Browning, his wife, and their new baby can often be spotted hiking around Botetourt or strolling through downtown Roanoke, but be sure to look twice before you leap! One last fun fact – Mr. Browning has an identical twin!

Welcome, welcome to RVGS, Mr. Matthew Browning! We're so glad you're here!

-Regina Carson



## RVGS at the Society for Science Conference

Ms. Villers won the lottery! Society for Science & the Public – the organization that puts on ISEF and publishes Science News magazine – holds an all-expense paid Research Teachers Conference each year, and of this year’s more than 1,000 applicants, Ms. Villers was one of 200 chosen by lottery to attend. She spent October 13-15 in Washington, D.C. collaborating with teachers from all over the country, sharing ideas about how best to support students in conducting original scientific research.

Ms. Villers attended peer workshops in citizen science, statistics, and the use of technology in research. She heard Society speakers talk about the exciting field of big data and the great opportunities available for students through the Regeneron Science Talent Search. She learned best practices on how to teach students to write scientific research reports and how to find and place students in summer programs. She developed friendships with the Virginia delegation, contacts she can call on in the future to benefit our students.

Like the Governor’s School, Society for Science & the Public fosters research and aims to educate and inspire. “The goal of the program,” said Ms. Villers, “is to get kids doing research. The Society provides the support teachers need to help each other to that end.” Thank you, Ms. Villers, for spending your weekend becoming a better teacher! Our Lab Rats – and their parents! – appreciate your commitment.

*Below: Ms. Villers with the rest of the VA delegation*



## RVGS Quiz Bowl Success

The new RVGS Quiz Bowl team attended their first competition recently. One group placed 3rd and the other placed 6th. Billy Luqiu and Jamison Smiley received awards for being the 2nd and 4th top individual scorers, respectively. Congrats to all the students for a great competition!



## AP Environmental Science Canoe Trip

Earlier this month, our AP Environmental Science classes split up into canoes and paddled the Buchanan to Arcadia run of the James River. We participated in the Chesapeake Bay Foundation’s Virginia Watershed Education Program, which examines the relationship between human activities and water quality to encourage participants to explore the complexity of the watershed and see themselves as part of the solution.

Students learned how sedimentation, eutrophication, and human impact affect the health of the river and its aquatic life. They discussed the dynamics of a watershed and collected and analyzed data to gain a new perspective on our own local tributary. The instructors shared their passion for conservation and sustainability and provided an ideal complement to Ms. Villers and Mr. Levy’s classroom curriculum.

Even with two swamped canoes, we all finished a beautiful day relatively unscathed with a new appreciation for nature, our place in it, and what we can do to keep it natural. For an environmental science class, that’s one perfect field trip.

Be sure to check out our pictures on Facebook!

-Regina Carson



## Another RVGS Baby!

The RVGS family keeps growing! Congratulations to Mr. Taylor and his wife on the birth of their new daughter, Ella Jean Taylor. Enjoy this darling photo of Ella smiling an adorable hello to the world (and her new friends at RVGS).

