



SHELLY STEM CHALLENGE



Moving from Academics to Action

Saturday October 20, 2018

Premise: Student teams compete to solve a real-world STEM challenge that approximates professional objectives.

The Challenge:

The specific problem to be solved will be presented the morning of the Challenge. Engineers from Burns and McDonnell - our industry partner for this year's Shelly Challenge - collaborated with RVGS staff to develop an objective that incorporates engineering, chemistry, environmental science, and mathematical modeling. Specialized skills in these areas aren't necessary to complete - ingenuity, teamwork, and planning will be just as valuable as content knowledge. Students will be assembled into teams to develop and construct a product to solve the Challenge using the equipment, information, and materials provided on site. Groups will present their solutions to Burns and McDonnell employees and will be evaluated based on quantitative effectiveness, feasibility, and design. Top performing teams will be recognized at the awards assembly with a prize and certificates.

Invited Participants:

The Roanoke Valley Governor's School is pleased to invite students from other Governor's Schools to participate in this year's Shelly Challenge. Student teams will be randomly assorted to allow students from different schools to work together. Information for traveling students will be posted under "Announcements" on the RVGS website (www.rvgs.k12.va.us). Further questions can be directed to Mr. Levy (mlevy@rvgs.k12.va.us).

Registration and Teams:

- Students will register individually through their schools; teams will be randomly assorted on Oct 20.
- Schools will submit their participants as a batch list by October 2.

Schedule:

9:30 – 10:00	Arrival and team assembly (students must arrive no later than 10:00 AM)
10:00	Welcome and introduction to the challenge
10:30	Teams begin work
12:00	Working lunch
3:00 – 3:30	Final testing * subject to change
4:00 – 5:00	Closing Program and Award Presentation

Dr. Richard Shelly:

Dr. Shelly was the founding Director of the Roanoke Valley Governor's School. His vision for the school has carried through three decades to continue to provide a unique learning environment for gifted students in the areas of Science, Mathematics, and Technology. This program is dedicated in his memory and a recognition of his years of service will precede the presentation of awards.

A special thank you to Burns and McDonnell for serving as our industry partner for this event.