

Seminar Descriptions for Forest Ridge Elementary

Grade 4

1. Green Team

This instructional seminar is for students who enjoy research and problem solving. This seminar will focus on The Chesapeake Bay and how the actions/decisions of everyone living within the Chesapeake Bay watershed affect the health of the bay. This seminar will explore environmental issues and strive to increase environmental awareness within our school community.

2. Science/STEM Fair

In this instructional seminar, students learn how to conduct fair test experiments on a topic of their choice. Class sessions walk students through the process of conducting an experiment and model an experiment for them. Class time is for instruction only and all assignments are completed at home with adult assistance and supervision as necessary. Students learn how to conduct an experiment fairly, record their observations, report their findings and present what they've learned. Students will share their projects upon completion in February. Homework is an extensive part of this seminar.

3. Math Olympiads

Students who enjoy the challenge of multi-step math problem solving might consider this instructional seminar. These problems are designed to be extremely challenging and require students to employ many advanced problem solving strategies. There are 5 monthly contests to test the students' application of these strategies.

Class size is limited.

4. Rube Goldberg Engineering Challenge

Wednesday After school (3:45 – 4:45)

This is the seminar for you if you love to design and build! Students will participate in an engineering challenge that will be composed of the following four parts:

- Design and Construction of a Project
- Written Report
- Oral Presentation
- Performance Demonstration

Due to space constraints, this seminar will be limited to 15 students. In addition to writing about why you want to participate in this seminar, you will need to research the 6 simple machines and write a report about each machine, what its purpose is, and give examples of each. If interested, please make sure your application is complete and turned in by the due date.

5. Unheard Perspectives

Fridays before school

This challenging performance-based program will have students researching and delving through primary sources like letters, songs, interviews, pictures and maps as well as reading newspaper articles, biographies, and much more as they learn about our history. Part of each project focuses on contextualizing and putting events in reference to others through the student creation of a timeline of relevant events. Each week, students will hone their research skills as they learn more about black innovators in American history. This class will be limited to 20 students.