

## Grade 3

### **1. 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 will 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.

### **2. Discovering Math Through Art**

In this instructional seminar students will make connections between math and art. Students will produce a final product based on the ideas presented in the seminar.

### **3. Cryptology**

This instructional seminar will show students how to break and invent secret codes. We will also look at the history of cryptology. If you love to solve puzzles, this would be a great seminar for you!

### **4. Unheard Perspectives**

Friday 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.

### **5. Kitchen Chemistry**

Chemistry is alive in your own home! We will use simple household items to become research scientists. We will learn to observe, question, and think like a scientist. We will use the scientific method to experiment, observe, and form hypotheses in this hands-on class.

### **6. Engineering Challenge**

Friday before school

Using the Engineering Design Process, students will work toward designing a product that will solve a problem. For each challenge, student will research, design, test, and present their ideas. If you like science and math, are creative, and work well in groups – this might be the seminar for you!