

Mathematics Workshops

Algebra Boosters Workshop

Whether you have just wrapped up Pre-Algebra or are well into Algebra 2 and Trigonometry, the ability to develop strong, algebraic foundations and a firm grasp of logical reasoning are absolutely vital to successfully pass each new and higher level of math. As you progress through algebra and make your way to calculus you will see that almost every problem involves a fair amount of algebra. Boost your algebra skills with one of our Algebra Boosters this summer! Placement is determined by the teacher.

Teachers will assess foundations, fill in gaps, and help students to:

- Develop a deeper understanding of basic algebra concepts
- Use logical and process-oriented thinking
- Use precise mathematical language through discussion of problem-solving
- Feel more confident and prepared for their next level of math

Bridge to Calculus Workshop

As you progress through algebra and make your way to calculus you will see that almost every problem involves a fair amount of algebra. The prerequisite for calculus is to have solid foundations in algebra, geometry, and trigonometry. As each level of math builds on itself, mastery of previous topics is vital to success in calculus. Students might find themselves wondering if they should move into calculus or make the leap to AP Calculus AB/BC. In our Bridge to Calculus summer workshop, teachers will not only assess mastery of prerequisite skills for calculus, but they will also help the student determine if they are ready to move into calculus or make the leap into AP Calculus AB/BC.

Teachers will assess foundations, fill in gaps, and help students to:

- Develop a deeper understanding of prerequisite skills
- Use logical and process-oriented thinking
- Use precise mathematical language through discussion of problem-solving
- Feel more confident and prepared for calculus or quicken their pace in order to be prepared for the rigors of AP Calculus AB/BC.



Writing Workshops

Creative Writing Workshop: Introduction to Storytelling

Creativity is fundamental to language learning. This writing workshop provides students with an introduction to storytelling that will not only help students tap into their creativity, but will provide them with a solid foundation from which to become better analytical thinkers and writers. Students will develop a positive relationship to writing and learn more about themselves in the process. Workshop participants will explore interesting and engaging themes to help spark their imagination. They will be encouraged to use self-expression, develop critical thinking skills, and gain confidence. Students will read short stories, write in response to a variety of intriguing prompts, and create their own short stories. At Lydian, we believe that every student has a story to tell. We aim to help nurture students' creativity and facilitate an understanding that writing can be a fun endeavor! This workshop is open to both middle and high school students.

Teachers will assess foundations, fill in gaps, and help students to:

- Develop a positive relationship to writing, learn how to use self-expression, and gain confidence as authors
- Engage in dynamic, creative writing tasks, and practice meaningful, structured writing
- Use their imaginations while also learning how to evaluate, summarize, create, and extrapolate
- Develop critical thinking, listening, and reading comprehension skills

Writing Workshop: Tackling the Formal Essay

Many times, students find themselves struggling to write the perfect essay. Some might even experience confusion when it comes to the essay writing process and how to approach writing in general. This workshop will help students develop their formal essay writing skills by systematically breaking down the steps involved in the process. Students will write on topics of interest and will produce four types of formal essays (narrative, descriptive, expository, and argumentative). Students will learn how to effectively brainstorm, outline, draft, and revise a paper. The goal of the workshop is to get students to the point where they feel more confident in their formal essay writing and can use the skills they learn to become self-directed writers in their academic courses, and better writers in general. This workshop is open to both middle and high school students.

Teachers will assess foundations, fill in gaps, and help students to:

- Differentiate between formal and informal writing, and learn how to write narrative, descriptive, expository, and argumentative essays
- Understand and break down the writing process in order to make writing more manageable
- Produce essays that have a strong and clear voice, craft effective thesis statements, and gain the confidence required to become self-directed writers
- Understand how to both summarize and analyze, construct productive topic sentences, and learn how to use in-text citations and create bibliographies