



## WOODLAND HILLS 4<sup>th</sup>-5<sup>th</sup> GRADE PROGRAM FOR GIFTED STUDENTS

*Course Catalog 2021-2022*

*This catalog is provided to outline the proposed gifted course offerings for the 2021-2022 school year. Gifted options are subject to change; additional options may be offered throughout the year as opportunities arise, and options may be eliminated.*

*\* Events with this symbol beside them may progress beyond the local level to a state, regional, or national level. If a qualifying student decides to participate in competitions beyond the local level, some costs may be incurred by the student's parents/guardians and a parent/guardian may need to transport and accompany the student to the event.*

### LANGUAGE AND PERFORMING ARTS

**PPT-SHAKESPEARE COMPETITION**– Students will prepare a chosen monologue or scene for the Pittsburgh Public Theater's Shakespeare Monologue and Scene Competition. Coaching sessions are conducted in January and February in the school and at the O'Reilly Theater. Contestants present their pieces on the Public's main stage in front of a panel of judges and those who advance to the final round of the contest have the opportunity to perform at the Showcase of Finalists.

**NOVEL STUDY**- Students will read a novel of their choice and create a unique product that demonstrates their understanding of the text.

**BATTLE OF THE BOOKS**- Teams of 4<sup>th</sup> and 5<sup>th</sup> grade students will read and interpret several novels in literary groups. The groups will prepare questions and projects to present at the Battle of the Books competition within the Woodland Hills Gifted program.

**PBS KIDS WRITERS CONTEST**-The PBS KIDS Writers contest is a local contest designed to promote the advancement of children's reading skills through hands-on, active learning. Students in kindergarten through 5th grade will write and illustrate an original fiction story, nonfiction story, or poem and submit them to the local PBS station, WQED, for judging based on grade level. Entries are judged based on originality, creative expression, storytelling, integration of storytelling and illustrations, and overall presentation.

**THE GREEN WOLVERINE NEWSLETTER**- A newsletter staff will be assembled to publish the monthly Green Wolverine Elementary Climate Action Newsletter. Students may participate as editors, writers, photographers or graphics and layout specialists. Students will research environmental topics to inspire the articles they write.

## VISUAL ARTS

**ART CHALLENGES**-Students will have the opportunity to participate in local, state, and national art competitions available in the upcoming school year. All products will include a research component and written summary about the piece. Previous competitions have included the River Sweep Poster Contest, the Pennsylvania State Fish Art Contest, Scholastic Art Contests, the Let's Clear the Air Poster Contest, and the National Energy Technology Laboratory Earth Day Poster Contest. Students will be expected to complete a minimum of two challenges during the school year.

**ARTIST STUDY**-Students will choose an artist to study and practice artistic techniques in the style of the artist that was selected. The student must complete a research project about the artist and at least two pieces of art.

## SOCIAL STUDIES

**\*NATIONAL GEOGRAPHIC GEO CHALLENGE**- In the fall of 2021, National Geographic will be reintroducing the Geo Challenge competition on a global scale. It will enable more young people in countries around the world to generate solutions and take action toward solving global problems. Students that choose to participate in the Geo Challenge will research global issues and collaborate to develop solutions.

**STUDENT AMBASSADOR PROGRAM**- Students will explore the continents and cultures of the world through research, independent studies, and project development.

**\*GEOGRAPHY BEE PREP**- Students will have the opportunity to explore atlases, globes, maps, and on-line resources in preparation for the yearly Geography Bee.

## SCIENCE

**ANATOMY ACADEMY**- Through research and experimentation, students will explore different systems of the human body. Topics will vary by year and will include the muscular, skeletal, respiratory, digestive, circulatory, and nervous systems as well as cells and senses.

**\*K'Nex**- This is a hands-on introductory approach to engineering, architecture and design in which students use K'Nex materials to create various structures. Students can potentially create over 100 projects. Students may also have the opportunity to participate in the K'Nex STEM Design Challenge at the AIU.

**RIVER WATCHERS**-Students learn about various types of pollutants that can affect a river ecosystem. They also investigate the sources of the pollutants, both point and nonpoint. Each month, the students will test a water sample from the Allegheny River for six types of pollution to determine an overall water quality index. The results are reported to the Ohio River Valley Water Sanitation Commission in Cincinnati, Ohio. The students will maintain a database of the results to monitor pollution trends throughout the year.

**ENVIROTHON-** Students will prepare for the Allegheny County Envirothon Competition. Students may compete in this natural resource environmental education program that combines classroom learning and outdoor activities. At the Envirothon, teams of five students compete in field testing using their knowledge in five topic areas – Soils and Land Use, Aquatic Ecology, Forestry, Wildlife, and Environmental Issues.

## **MATHEMATICS**

**CALCU-SOLVE-**This program is open to all fifth grade students and involves preparation for the Calcu-Solve competition. The Calcu-Solve competition is sponsored by the AIU and consists of four member teams working to solve higher-order mathematics problems. Students that score the highest on a placement test may participate at the Calcu-solve competition.

**PENNSYLVANIA MATH LEAGUE-** Students learn advanced problem solving skills while preparing for the annual Pennsylvania Math League competition in grades 4-5. Preparations for this competition involve a series of approximately five exams covering various areas of mathematics. Each exam will have a follow up class where we will discuss possible solutions for each exam question.

**MATH 24-**Students will learn strategies necessary to be successful in the Math 24 game. It is a challenging mathematical game designed to show the relationship between numbers through attempting to add, subtract, multiply or divide four numbers to equal 24. The students will work their way through single digits, double digits, integers and variables. The highest scoring students may qualify for a Math 24 competition sponsored by the AIU.

**MATH GAMES-** Students will explore a variety of mathematical concepts including algebraic thinking while playing Math games which may include Equate, Math Dice, and Probability and Statistics challenges.

## **INDEPENDENT RESEARCH PROJECTS**

**INDEPENDENT STUDY-**Students will select a topic of interest in an academic area and conduct an in-depth investigation which may include, but is not limited to, research, hands on explorations, video production, or presentations. The independent study will require dedicated preparation outside of school.

**\*PA INVENTION CONVENTION-** The Pennsylvania Invention Convention is designed to showcase student problem-solving, innovation, creativity, and ingenuity while making learning fun! Students are asked to find a problem to solve, investigate possible solutions, create, test, and refine a prototype, and create a video to highlight the invention. Fifth grade students will submit their video for a virtual competition in December and finalists will advance to a face-to-face state competition in February. They may advance to the national level based on their performance at the February event. Fourth grade students will only compete virtually and that will occur in April. This is a project for individual students and the work will occur at home.

**SERVICE PROJECT-** Students involved with a service project will be responsible for researching a social issue and designing and implementing a project to help with the issue. Past projects have included: organizing food drives, fundraising for charities, supporting local animal shelters, writing letters of support to communities in need and conducting clothing drives for homeless shelters.