# Takoma Park Middle School

# Mathematics, Science, Computer Science Magnet Program

# for Grades 6 through 8



Takoma Park Middle School 7611 Piney Branch Road Silver Spring, MD 20910 Applications available at www.montgomeryschoolsmd.org/curriculum/specialprograms





Rockville, Maryland

# Program

The Takoma Park Middle School magnet program offers rigorous academic study in mathematics, science, and computer science to highly gifted students.

The magnet program features an interdisciplinary, problem-solving approach in three subject areas:

#### Mathematics

Students will study accelerated and enriched units in mathematics. The mathematics curriculum courses will include pre-algebra, algebra, and geometry/Algebra II topics. The primary focus will be on problem solving and using mathematics as a tool for communication.

#### • Science

The science curriculum focuses on various aspects of life science, earth science, and physical science over the course of three years. Specific topics are selected to reinforce mathematics concepts. Interdisciplinary mini-units and culminating activities accentuate the interlocking nature of the mathematics and science disciplines. Students learn various techniques for gathering, processing, analyzing, and graphing data. Students are offered the use of library materials and equipment.

#### Computer Science

The computer science curriculum focuses on the use of the computer as a tool for problem solving in other subjects. Students learn to collect, manipulate, graph, and analyze data using the computer. They develop algorithms, write programs in various structured programming languages, and use commercial software to solve problems. Only in the Takoma Park Middle School magnet program can sixth, seventh, and eighth grade students get three full years of daily computer science instruction.

# **Academic Opportunities**

- Partnerships with the government agencies, environmental, and research institutions enable students to consult and interact with scientists from many different fields of science.
- Academic competitions, including Mathcounts, Continental Math League—Math and Computer Divisions, Sigma Math League, Maryland Math League, County Math League, Montgomery County Area Science Fair, Toshiba, and American Computer Science League.
- Field work at area creeks using the Chesapeake Bay Foundation curriculum.
- Dramatic/Communication Arts Festival competitions.
- Desktop publishing experience in creating a mathematics/science/computer science journal.
- Field work at regional science facilities.

#### **Transportation**

School bus transportation to and from Takoma Park Middle School is provided from central locations. Students currently are transported from selected schools. Activity buses depart approximately an hour later than the earlier afternoon buses on Tuesday, Wednesday, and Thursday.

# **Students**

The Takoma Park Middle School magnet program is designed for creative students who want to be challenged academically and who are ready to be actively involved in their own learning with a group of their intellectual peers. It is recommended that applicants successfully complete Math 6 by the end of Grade 5. The selection committee will look for students who have—

- high interest and involvement in mathematics and science,
- high mathematics, reading, and reasoning scores on entrance exams, and
- intellectual curiosity, analytical thinking, and imagination.

#### **Transfers**

Students who are accepted into the program and who do not live in the Takoma Park Middle School attendance area should obtain the transfer brochure from the principal of their assigned home school and complete MCPS Form 335-45 *Request for Student Transfer from an Assigned Home School*.

# Staff

Mathematics, science, and computer science courses are taught by outstanding teachers recruited for the magnet program.

# **Directions to Takoma Park Middle School**

Route 495 to University Boulevard (Langley Park), straight on University Boulevard to right onto Piney Branch Road, to the school on the left.

# **Application Packets**

#### Applications are due in the late fall of Grade 5.

Application packets will be available in the local elementary schools and on the MCPS Web site in the fall.

Grade 5 students interested in applying to the Takoma Park Middle School magnet program may obtain the application packet in the following ways:

- Visit www.montgomeryschoolsmd.org/curriculum/specialprograms
- Contact your local school principal
- Call or write to:

Scott DeGasperis, Magnet Coordinator or Debra Butler, Admissions Secretary Takoma Park Middle School Magnet Program 7611 Piney Branch Road Silver Spring, MD 20910 Phone: 301-562-5220

# Timeline Information Meeting

October

Parent Meeting Takoma Park Middle School Gymnasium 7611 Piney Branch Road Silver Spring, MD 20910

# **Application Deadlines**

November Applications due December Teacher recommendations due

# Testing

December

Takoma Park and Eastern middle school magnets

# Notification

February

Students are notified of selection decisions by mail.



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