



# MARK TWAIN

## INTERMEDIATE SCHOOL FOR THE GIFTED & TALENTED



Years  
of Multiple  
Gold with  
Distinction  
Awards



Winners  
2 out of the  
Past 4 Years

**Karen Ditolla, Principal**  
**Rosanna Conenna, Assistant Principal**  
**Christopher Rodriguez, Assistant Principal**  
**Christine Sciascia, Assistant Principal**



Winners' Work  
Featured at  
Metropolitan  
Museum of Art

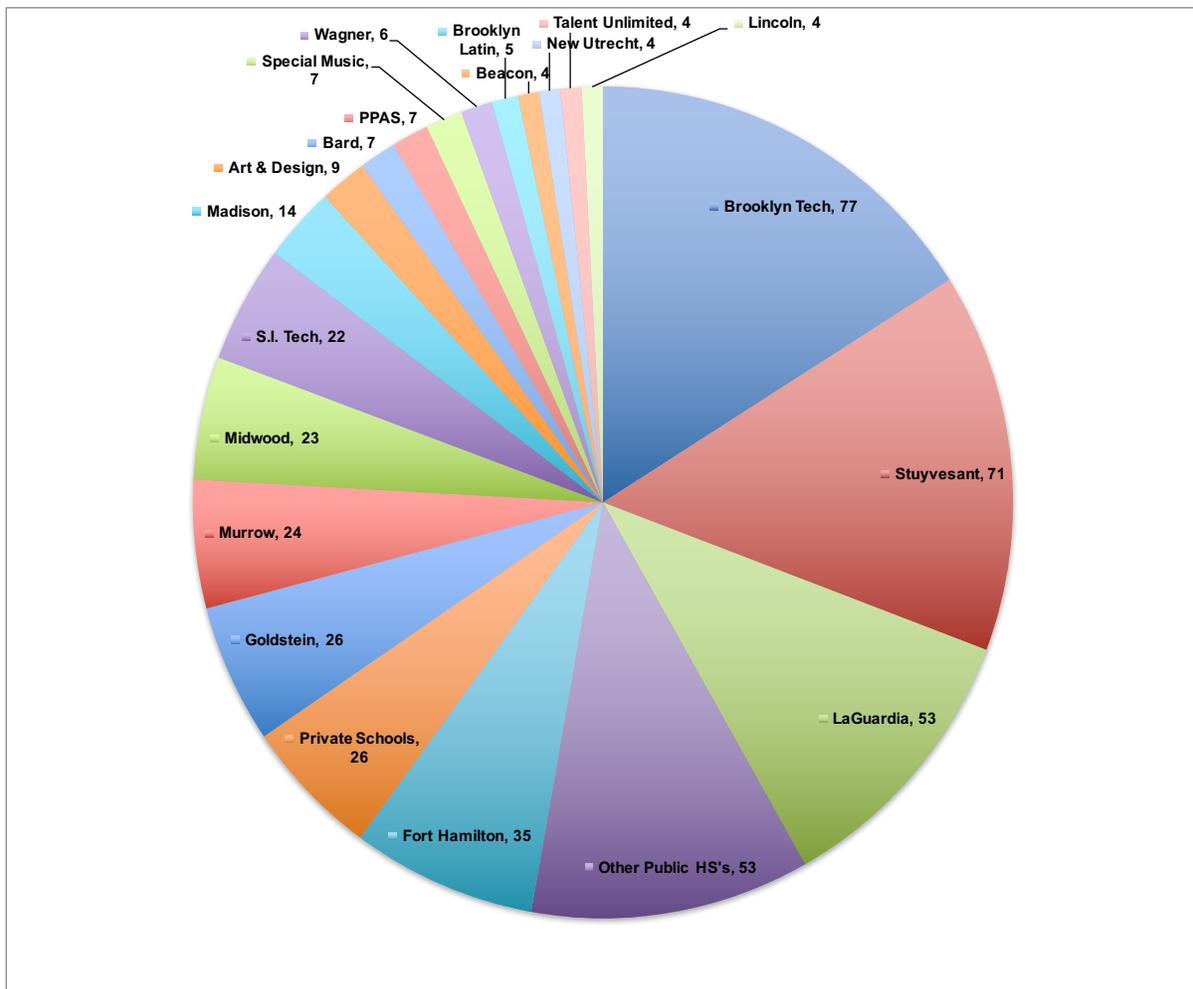
2401 Neptune Avenue  
Brooklyn, NY 11224

One of a select  
few NYC schools  
partnering with  
Apple on a large  
scale 1:1 iPad  
initiative



School Phone – 718.266.0814  
 Admissions Phone – 718.449.6697  
 Admissions Fax – 718.265.9225  
 Web Site – [is239.schoolwires.com](http://is239.schoolwires.com)

## CLASS OF 2016 HIGH SCHOOL ACCEPTANCES





## General Description

Mark Twain Intermediate School for the Gifted & Talented sets itself apart from others because of its dual mission. Students are immersed in an environment of academic rigor blended with a full visual art and performing arts experience, all in an extremely supportive environment. Twain is organized into clusters, or mini-schools, of four classes with a team of teachers assigned to each. Clusters are scheduled for conference periods to facilitate interdisciplinary planning, data analysis and communication with parents to discuss student progress. This helps teachers and families strategize and focus their instruction to suit individual student needs. Cluster teachers ensure that tutoring is made available to students during regularly scheduled lunch periods.

Every child is involved in the in-depth study of a Talent area. Talent teachers often have the students for all three years which establishes strong relationships and excellent skill development.

Our organizational structure gives us the framework for success but our numerous awards and accolades demonstrate success. *New York Family Magazine* and their parent company *Manhattan Media* honored us as one of three NYC middle schools that “foster academic, emotional and social growth in students,” the coveted *Blackboard Award*.

Mark Twain has consistently been among the highest performing schools in NY. Many times in recent years, including last year, the *NYS Department of Education* conferred the “Reward School” selection based on high student performance on state tests and overall academic progress.

Among our noteworthy achievements is our extraordinary success regarding acceptances to specialized high schools, both in the sciences and the arts. You can see the actual numbers on the cover of this document. We attribute this success to our student body’s determination, our challenging curriculum, a dedicated staff and administration, and an internal Specialized HS Test Prep system we offer during student lunch periods.

*GreatSchools.net* rates us as “10 out of a possible 10 points” and *SchoolDigger.com* rates us “5 out of 5 stars.” *InsideSchools.org* refers to us as featuring “high academic achievement and a strong talent program.”

Though this may not be a high school, we still have a large percentage of our graduates taking the *Common Core Algebra, Earth Science (in grade 7)* and *Living Environment* Regents Exams. Last year’s results are completely typical with a remarkable passing rate and average in the 90’s.

Our modernization plan continues thanks to the leadership of Principal Karen Ditolla. She’s managing the resources that come from a proactive Parents’ Association, a strong relationship with our City Councilman Mark Treyger and Brooklyn Borough President Eric Adams, a caring physical

plant staff, an eager student body, and a faculty with many unique skillsets. Thanks to these relationships with former and current local politicians, our school library has undergone a major half million dollar physical renovation that also includes digitizing the entire collection, availability of a substantial set of eBooks for the entire student body to download, and participation in a system where NYC Library books can be borrowed from our facility and delivered. Our largest talent, Computer Mathematics is housed in three separate well equipped labs and they’re getting a \$200,000 infusion of money before next fall from the Brooklyn Borough President Adams. Our Science Talent lab was recently completely renovated and updated. Other classroom science labs have been updated recently as well. Our auditorium received a major renovation featuring new cushioned seating, a new sound system, electrical upgrades, large screen TVs, etc. Many of our bathrooms were renovated recently with more to come. Our new state of the art Dance Studio is fully operational. Drama Talent now takes advantage of Black Box Theater thanks to City Councilman Treyger. And the building of our Mock Court Room is about to get under way. Many locations in the building including our auditorium, lunch room, computer labs, library and multiple classrooms are now air conditioned and there are plans to air condition a number of other locations. We have interactive Smart Boards or large flat screen TVs under wireless control, in nearly every instructional classroom in the building. All of our teachers have an iPad and computer and before this month is over, **all of our students will piloting a 1:1 Apple iPad program** where they carry these devices with them all the time modeled after a similar program at *Staten Island Tech*. The goal is to take better advantage of digital content like online textbooks and other Common Core content. We’re also piloting a new mobile device deployment and management system for the DOE and *Apple*.

**Have Questions About Admissions?  
Call 718-449-6697.**

**Have General Questions about  
Mark Twain visit  
[is239.schoolwires.com](http://is239.schoolwires.com)**

The bottom line is that we continue to have an administration dedicated to upgrading our school’s instructional technology and overall infrastructure in terms of funding, staffing, scheduling and professional development.

Our [is239.schoolwires.com](http://is239.schoolwires.com)

site is our portal to every portion of the Twain community. It is an excellent resource for parents and students alike. You will find information pertaining to admissions, school events, our Parents’ Association, school calendar, notable accomplishments, and the like. We are comparatively unique in NYC in that many faculty members generate content for this centralized site to use in conjunction with their classes. Our web site also enables us to share examples of the outstanding work and activities our students are engaged in. This web site is our forum that serves to showcase the hard work of every member of our team.

At the same time, we are now deploying Skedula/Pupil-



Path (used in many NYC high schools) as a way for parents to monitor their child's progress/grades. Students now get most of their assignments through this system. Standardized test results and other information are readily available.

And teachers can even accept online homework through the system, via computer or mobile device.

We also provide students with opportunities to learn from home with accounts for *PearsonSuccessNet.com* (online access to English, Math, Science, Social Studies and Foreign Language textbooks and other Common Core materials). Other tech initiatives including *Streaming.DiscoveryEducation.com* (100,000 educationally appropriate videos from PBS and the Discovery Network) and *BrainPop.com* (animated curricular content).

Mark Twain is an exemplary school for the Arts. Not only have our Music Talent students performed at prestigious venues such as *Carnegie Hall*, *Brooklyn Borough Hall*, *Hofstra University*, and *Lincoln Center*, but they have also received some of the highest possible ratings in the annual *New York State School Music Association Major Organization Festival*. Our Visual Arts students have had their work featured on television, art exhibitions, *Carnegie Hall*, the *Manhattan office of the Center for Arts Education*, and the *Metropolitan Museum of Art*. Moreover, they have received numerous accolades in a wide variety of contests. All three of our Music talents typically attain the coveted Gold with Distinction awards at the *NYSSMA Festival*. Our Fine Arts and Media students routinely bring home honors in the *Scholastic Art* competition, the *Arts Connection* competition, the *Snug Harbor Museum* art show as well as the *PS Art* competition.

Our students collaborate on projects that involve the efforts of multiple talents. For instance, many different talents join forces to produce our award-winning senior yearbook *Reflections*, our dance, drama, and musical performances, as well as our web site at [is239.schoolwires.com](http://is239.schoolwires.com). Such collaborative endeavors are worthwhile experiences for all involved.

We encourage our students to test their academic and creative prowess and evidence of that success includes victories in a wide range of competitions. In addition to frequent first place borough finishes in the Math Team competition, our Math Team almost always goes all the way to the state finals in Albany against the best private and public NY middle schools. In the *SIFMA Stock Market Game* competition, we've seen two teams of 6th graders win in the last four years, two national *InvestWrite* essay winners in the past 8 years, and three sought after invitations to participate in the *Capital Hill Challenge* variant of the game where one school is paired up with one Congressional representative for a very demanding national competition. Multiple awards mark our participation in the annual *FutureCity* competition based around *SimCity* simulation software. Our senior yearbook has earned several consecutive 1st place finishes in the *American Scholastic Press Association's* national competition. Creative Writing students have won multiple essay competitions including multiple Gold Keys in the *Scholastic Writing Awards*, the *Water Conservation Poetry Contest*, and the

*Holocaust Essay & Poetry Contest*. Recently, the work of over a dozen Creative Writing students appeared in *Teen Ink* literary magazine.

Our supportive Parents Association and local politicians are busy raising funds for future upgrades. And most importantly, we achieve these results around the time and programming and financial commitments to our eleven talent programs that other schools look at with envy. Our "Team" of students, teachers, administrators and parents just continues to make us proud year after year and decade after decade.

Clearly, Mark Twain is a distinctive middle school with an honorable tradition of excellence we strive to uphold.

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**CHILDREN ARE ADMITTED  
TO THE SCHOOL  
ON THE BASIS OF  
APPLICATION  
AND MUST EXCEL ON  
ONE OF TWO  
ADMISSIONS QUALIFYING EXAMS  
CHOSEN FROM A LIST OF THE  
FOLLOWING TALENT AREAS:**

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## Art Talent

Mark Twain's fine arts program follows a comprehensive, sequential curriculum that is based on the NYS standards for the arts as delineated in the "Blueprint for the Arts." Throughout the three years, students participate in drawing, painting, sculpture, printmaking, collage making, 2D design and media technology. Emphasis is placed on literacy in the arts, and connections are made to the appropriate social studies topics through art historical discussions. Students are introduced to the many, fine art collections found in the city's vast array of museums.

Throughout the year, art students are called upon to design tee shirts, posters, programs, and sets for drama and dance performances. They supply the yearbook with its cover as well as drawings used throughout the book. They participate in contests and host an annual art ceremony and art show in the spring of each year. Beginning in the 6th grade, portfolios are maintained in preparation for the LaGuardia, Murrow, Frank Sinatra, and Art and Design high school art entrance exams that take place in the 8th grade. Mark Twain has, for years, been the primary feeder school to these art programs. It is understood that entering students have varied backgrounds in art instruction. All students get personal attention to facilitate skill acquisition and art theory comprehension.

The last page of this booklet has a short description of the admissions test for this talent.



## Athletics Talent

Mark Twain's Athletic Talent program is designed to promote a strong foundation in the areas of physical fitness, cooperative learning and sport. Students will be exposed to a variety of fitness related activities and exercises, various sport skills practices, and of course, group games and tournaments. As part of the three year curriculum, students will engage in a diverse selection of team sports which are conducive for participation in a gymnasium setting.

In every grade, emphasis is placed on body conditioning as a means of developing and improving muscular strength and endurance, cardiovascular endurance, and flexibility. Through exercise, students will enhance their athletic performance while broadening their knowledge and desire of fitness. This will translate into lifelong health benefits to students who are motivated to incorporate these practices into their daily lives.

In addition, students will participate in a 10-week bowling tournament each year. During one of their Athletic Talent class double periods on a given school day, students will be transported to a nearby bowling facility where they will bowl with their classmates in a team setting.

Applicants will be tested on their ability to perform two physical education activities (including soccer dribbling and baseball catching and throwing) designed to determine coordination and balance, physical fitness, hand-eye coordination, depth perception and motor skills. They are to report with sneakers and comfortable loose fitting pants (sweat-pants or gym shorts) and a T-shirt.

Applicants will also answer questions relating to sports history, rules, scoring and strategy.

## Computer / Math Talent

### (Computer Science, Applications, STEM)

Mark Twain once said, "I have never let schooling interfere with my education."

The use of instructional technology provides opportunities for our students to experience learning both inside and outside the school walls. In today's fast-paced, competitive, high-tech society where our graduates are looking at a future of constant job changes across multiple fields, few students are better prepared for 21st century careers than those students in our most populous talent, encompassing over 20% of the student body.

Please note that the emphasis on this course is computer programming and the use of various computer and mobile device applications. Additional mathematics concepts are dealt with as they arrive incidental to the other subject matter. Mathematics is NOT the primary driver here.

In 2013, our existing program was recognized by the NYCDOE by being selected as one of ten middle schools to pilot a new *Software Engineering Pilot* or SEP curriculum for ongoing rollout to the rest of the city. Three years and over 1000 hours of professional development involving our three computer teachers have only solidified our decades

long reputation as Twain's most consistently applied for talent. We strive to keep it that way by making continuous adjustments that fulfill the requirements of the curriculum as it impacts our unique group of children.

Grade 6 starts with basic Programming skills using an age appropriate graphical programming language called *Scratch* developed by MIT. The fall and early winter is also when we develop our skill sets and strategy for later participation in the Stock Market Game against other NYC middle schools and more often than not the Capitol Hill Challenge variation of that game against the top teams in the country. Other highlights include an introduction to 3D graphics using Google SketchUp and an introduction to text based programming. The current plan is to use Swift Playgrounds on the student iPads to cover Apple's new language of choice Swift (a more modern version of Objective C using for Windows, Mac and iOS). All year long, the vast majority of all this work resides on students' online portfolios and Google Apps for Education is heavily employed all three years.

Grade 7 is introduced to Physical Computing using the Arduino, a single board Microcontroller. They'll build on the graphical nature of Scratch and program their Arduino electrical circuits using another text based programming language, Processing, which looks a lot like Java or Python. Another major topic in the physical computer portion of our curriculum is the building and programming of Lego Mindstorms EV3 robots. Additional topics include graphics and sound editing as well as some explorations of Game Design using Gamestar Mechanic.

Grade 8 is primarily built around text based programming in Python and a web development sequence that starts with HTML, then introduces Cascading Style Sheets, CSS, to make more complex web pages. And then we go interactive by adding Javascript to the mix.

Computer-Math Talent involves writing, peer tutoring, collaborative projects, and computer/network troubleshooting. There's no question that students are capable of excelling with either strong math or computer backgrounds. Students work cooperatively to support and extend their very different levels of individual expertise.

When making the decision to apply to this talent, it is critical to note that this is a computer intensive program and has no separate Math component. Instead the applied mathematics concepts are sprinkled throughout. So when we do 3D graphics, we're heavily invested in 2D/3D geometry. When students play the stock market game, we're analyzing charts and graphs, making mental calculations. Programming is chock full of algebraic concepts like equations, variables, Cartesian Coordinates and of course basic problem solving. Arduino is largely about the design of electric circuits and physics formulae. Robotics uses sensors and motors to turn math into specific distances with rotating wheels and gears and mathematical feedback from the real world.

There is no best method of preparation for the Math portion of the test. Some questions are recognizable as Math Team competition questions or IQ test questions. We're not



just looking for good math students. We're looking for students who can apply the math concepts to unusual situations.

The best preparation for the Computer portion is lots of web browsing, an effort to use the computer for things other than chatting and videogames and some familiarity with computer and internet terminology. Good review sites include: *whatis.techtarget.com*, *computer.howstuffworks.com*, *cnet.com* and *theverge.com*.

Entrance into this talent is highly competitive. The typical student in this talent scored from 3.8 to a perfect 4.5 on the NYS Math test, and almost as well on the NYS ELA test. Strong tech skills can compensate a bit for weaker Math skills. Think about these ranges when making the application decision for your individual child.

Feel free to email [prubin3@twain239.org](mailto:prubin3@twain239.org) with questions.

## Creative Writing Talent

Students in Creative Writing enjoy expressing, in words, their ideas and emotions. They use their superior facility with language to create vivid characters and unique plots. The writers' workshop method is used to critique one another's work and make necessary revisions, whether students are working on poems, short stories, memoirs or even novels.

Sixth graders are introduced to a variety of genres. They study each genre by reading and analyzing successful examples and then writing their own works and sharing with their peers. They typically study poetry, mythology, mystery, play writing and fantasy. They also work on expanding their knowledge of the world through the power of observation. Self-examination reminds them of their uniqueness as individuals and their commonality as members of society.

Seventh grade Creative Writing students study the elements of journalism prior to publishing our award-winning school newspaper, the Pilot. They also continue an intensive investigation of poetry, short stories and the novel, culminating in the creation of their own individual novellas.

Eighth graders use their expertise to write the entire award-winning school yearbook, *Reflections*. One editor and two assistant editors are chosen from each eighth grade Creative Writing class. All creative writing students interview staff and students, observe classes and school events, and write articles and photo captions. The editorial staff then works on proofreading, revising and offering suggestions on layout. Most of our yearbooks have won 1st place in a nationwide contest sponsored by *American Scholastic Press Association*. In addition to producing the yearbook, the seniors of the creative writing program also study and write young adult fiction, children's literature, memoirs and historical fiction.

The writers in all grades use journals as a method of collecting ideas and exploring new avenues of creativity. In addition, they use *The Ultimate Writing Guide for Students* by Mignon Fogarty as a reference tool in enhancing their understanding of proper writing mechanics. They also subscribe to *Read/Scope* and *Teen Ink* magazines, where they

have had success in getting work published.

They enter various poetry & essay contests throughout the school year, on local and national levels. Author visits and class trips to view performances of pieces that are read in class are enriching experiences that students remember fondly for years to come.

A description of the admissions test for this talent appears on the last page of this booklet.

There is no specific preparatory book available, but reading and writing on a daily basis is helpful. Challenging test prep materials in reading and writing may also be beneficial. It is recommended that children with above grade level skills in reading and writing take the exam.

## Dance Talent

Elements of our dance curriculum include the study of:

- Various movement techniques such as ballet, jazz, modern, tap, ethnic, and social dance.
- The parts of movement including rhythm, tempo, level, direction, space, expression, etc.
- Dance history
- Dance vocabulary
- Careers in the dance field
- Current events
- Creative movement
- Choreography

Dance classes are held in a mirrored, barred, wooden-floored studio. Emphasis is on the development and refinement of movement ability and the exposure to diversified dance forms. Some goals include the improvement of technique, the experience of choreography and performance, the study of the use of the moving body, the fostering of creative expression, and the enjoyment of dance.

The Dance test consists of several small sections, only one of which the student can prepare for ahead of time. A description of this test appears on the last page of this booklet. We look forward to seeing you at the audition. Good luck!

## Drama Talent

The Drama Talent entrance exam consists of two parts. First, applicants will prepare and perform a monologue. The monologue will be posted on our [is239.schoolwires.com](http://is239.schoolwires.com) website before testing begins. Students must memorize the monologue and perform it in front of two judges. Props, costumes, etc. may be used in order to make your child's performance more believable, but it is not required. Please help your child to prepare for this part of the exam.

Second, your child will be asked to do a cold reading. A cold reading is a scene given to performers at an audition so that judges can gauge their acting instincts. Your child will be grouped with other applicants to participate in this activity.

For the exam, students will be judged on the following criteria: diction, expression, poise, characterization, interpretation, creativity, voice quality, ability to follow stage directions, concentration, and timing.



The curriculum for the Drama Talent students consists of developing principles, techniques, and processes of drama. The program demonstrates both literacy and professionalism in the theater.

**Goals:**

- To foster students' initiative and cooperation via frequently participating in individual and group activities (i.e. charades, pantomimes, improvisations, scene work, script writing, discussions, and performances).
- To express ideas and venture creatively, orally, and in writing.
- To help develop character, setting, and dramatic action.
- To establish professionalism in the theatre.
- To work independently and collaboratively, and to assume theatrical responsibility.
- To perform theatre-related tasks (i.e. handling props, set design and construction, application of makeup and costume design).
- To compare and contrast human experience to theatre, both orally and in writing.
- To improvise observational skills and self-confidence via journal entries, reports and presentations.
- To improve body coordination and flexibility via relaxation exercises and choreographed dancing.
- To stimulate responses, constructive criticism, and self/peer critiquing.

## Media Talent

Media Talent is an important component of the NYS Visual Arts curriculum, which offers students another creative form of expression. The arts give life to a child's creativity, and human creativity is the essence of art. Enriching a child's life with art enables them to develop and thrive as a student and as a person of the world.

Media Talent is an intensive photography program involving both film and digital camera equipment and their varying processes. Our photography laboratory contains eleven professional Beseler enlargers and a darkroom processing sink for students to process their own black and white film and enlarged photographic images. Our outer room is utilized for general classroom and digital lab work. Apple computers containing digital editing and word-processing programs are used. Students will also attend moving image classes.

Media students will learn how to use small-format photographic equipment and concentration will be on learning traditional methods of darkroom chemical processing. Students will learn how to compose and create thought provoking images by "painting with light". They will work extensively in our professional photographic darkroom, learning basic to advanced processing techniques. They will also learn how to successfully edit digital images (still and moving) on our classroom computers using digital equipment and computer technologies utilized in the industry. Students will study the historical influences and works of master artists throughout this three-year program while developing their own personal

artistic voices.

Media Talent students are responsible for recording school events and functions throughout the school year to be published and showcased in our school's Reflections yearbook; our school newspaper, The Pilot; our [is239.schoolwires.com](http://is239.schoolwires.com) web site; our video yearbook; and our yearly in-house Visual Arts Show. Students are also responsible for completing a portfolio of their finest work achieved while attending Mark Twain, for high school entrance examinations and syllabus completion. Photographic images created by Media Talent students are entered in various contests and competitions throughout their attendance, with the ultimate goal of exhibiting in New York galleries and museums throughout the city.

Knowledge of the subject area is recommended but not required for the Media Talent examination. We are testing a student's ability to identify what they are seeing when observing a photograph or moving image, in both content and genre. Applicants should be able to recognize and interpret the various effects that camera angle, lighting, subject-placement, sound, and special effects can have on the mood, content, and overall quality of an image or scene.

Further details about the test for this talent is available on the last page of this booklet.

## Music Talents (Strings, Winds, Vocal)

The Mark Twain Music Talents are a sequential three year program. The students in sixth and seventh grade receive five periods of instructional time per week, while eighth grade receives seven periods per week.

**No experience on an instrument or singing is required to test for the Mark Twain music programs.** Sixth graders are considered beginners if learning a new instrument or vocal technique. If your child comes into Mark Twain as an experienced strings, band, or vocal performer, they are considered "advanced." Each teacher provides advanced students with different opportunities to show their skills.

Further details about this test is available on the last page of this booklet.

**Although applicants are allowed to audition on piano and guitar for both string and wind talent areas, note that there is no long-term instruction on either guitar or piano at Mark Twain. Children who are accepted will have to learn one of the other many instruments currently in use in our programs.**

Some of what we look for during the test include:

- Pitch Discrimination (distinguishing between high/low sounds)
- Melodic sing-back (short melodic example is played, student sings/hums it back)
- Rhythm tap-back (short rhythm is played, student taps it back)
- Solo Performance (student performs a short selection on their instrument)



Expectations for all Music Talents are high. Students are expected to perform at a high level. Students are challenged to be the best musician and performer they can be as individuals and as an ensemble player. Students are expected to maintain at least an 85 average. The ensembles require discipline to practice a half hour per night on their instrument/vocal production, as well as work on written assignments, quizzes, and playing exams to understand music theory and vocabulary. Students learn to be solid sight-readers as well as learn how to read music.

Students are required to perform in two culminating concerts per year (December & May). All groups perform in the concerts. The Music Department is asked to perform in many out of school performances such as *Brooklyn Borough Hall*, local senior homes, *Lincoln Center*, and *Hofstra*.

Each year, directors of each talent choose an ensemble to participate in the *New York State School Music Association* Major Organization Festival in June. Students perform on specific levels to achieve a rating based on their performances. Recent years have been very successful for our students who have achieved 6 Gold with Distinctions (the highest honor given) and 2 Gold!

**Strings Talent (String Orchestra):** Students, regardless of what instrument they audition on, will be playing either Violin, Viola, Cello, or Double bass. Students experience differing genres throughout their 3 years in Twain. Concert pieces range from Baroque (Handel, Bach) to Classical (Mozart) to Modern (Richard Meyer) to Broadway and Movie Themes.

**Vocal Talent (Choir):** The Mark Twain Choirs perform in many languages throughout the three years including Latin, Italian, Spanish, German, French, English, Russian and Japanese. The students will study youth group choral literature with a rich harmonic texture and is appropriate for an accomplished youth choral ensemble.

**Winds Talent (Band):** Students will choose to play either a woodwind, brass, or percussion instrument regardless of what instrument they audition on. Students have the opportunity to not only perform in the regular wind ensembles, but also the Jazz Band in the eighth grade.

Our Music Department has a successful history, and if your child wants to be a part of an exciting and challenging music world, have them audition for the Mark Twain Music Department's three Talents.

## Science Talent

The Science Talent program is a three-year spiral curriculum course of study that focuses on the biological and chemical sciences.

Components of this program include:

- Higher Level mathematics, extensive writing, reading and public speaking skills integrated.
- Advanced laboratory skills and techniques
- Meet 4 days/week for 5 periods (1 day is a double pd.)
- Metric system used exclusively
- Oral presentations and formal lab reports required
- Group and independent study projects

**6th Grade (Year One)** — Students are introduced to the analytical and observational skills of a working laboratory. Extensive training using specialized equipment is accomplished through both individual and group experimentation. Topics covered include metrics, scientific method, phases of matter, Periodic Table, atomic structure, formula writing, graph construction/analysis, and a well-grounded introduction to biology, chemistry and biochemistry. Expertise in the use of the microscope will be developed through the study of cellular biology, bacteriology, and living specimens. Cell structures and cellular reproduction are covered. By the end of the year, students are well grounded in biology and chemistry and are ready for complex and advanced study.

**7th Grade (Year Two)** — Students will be furthering their studies of chemistry and biology and their respective relationship to human biology and genetics. The Laws of Mendelian Genetics will be studied along with DNA structure and genomics. An introduction to DNA Analysis through electrophoresis will be begun. An expansion of the nature of chemistry includes stoichiometry, chemical equations, types of reactions and radioactivity. Forensic science techniques will be initiated. All topics include sophisticated laboratory experimentation using

state of the art equipment.

**8th Grade (Year Three)** — Science Talent students will be expected to advance their knowledge and laboratory skills as we build upon our foundations in biology and chemistry. Detailed DNA structure, replication, transcription and translation to proteins will be covered. DNA analysis will become more intricate, involving intensified electrophoresis activities such as cancer gene and genetic disease detection. Topics of human genetic disorders-history, symptoms, current treatments and future possibilities will be addressed. Evolutionary trends, both molecular and anatomical are discussed. Forensic science techniques will be continued and will focus on crime scene analysis. Topics in organic chemistry and labs involving product production will be introduced. Studies of comparative anatomy will be performed using dissection skills. Dissections may be done using actual specimens, models or computer labs. Identification, preparation and staining of microbiological specimens will be performed.

**Again, if you have questions  
about Admissions?**

**Call 718-449-6697.**

**Questions about our school  
should start with a visit  
to our web site at**

**[is239.schoolwires.com](http://is239.schoolwires.com)**

# DISTRICT 21 MAGNET TESTING

Students who currently attend NYC Public Schools can obtain a Request for Testing (RFT) from their elementary school. RFT's must be completed and returned by October 14th to the child's elementary school. Non-public school students can obtain an RFT from their local Family Welcome Center (see <http://schools.nyc.gov/ChoicesEnrollment/NewStudents/WelcomeCenters>). All testing is done at Mark Twain IS 239. Test dates are listed on the RFT. Applications will be generated after RFT's are completed and will also be distributed via the child's public school or from the Family Welcome Center for non-public school students.

## ART

### • DO NOT BRING PORTFOLIOS! •

The art test consists of 3 parts. Part One requires the applicant to draw a still life using pencil. Part Two requires the applicant to draw an imaginary scene on a given theme using colored pencils. Part Three requires the applicant to write a paragraph comparing two works of art. All necessary supplies are provided.

## ATHLETICS

Applicants will be tested on their ability to perform two physical education activities (including soccer dribbling and baseball catching and throwing) designed to determine coordination and balance, physical fitness, hand-eye coordination, depth perception and motor skills. They are to report with **sneakers** and comfortable loose fitting pants (sweatpants or gym shorts) and a T-shirt.

Applicants will also answer questions relating to sports history, rules, scoring and strategy.

## COMPUTER / MATHEMATICS

### • BRING MULTIPLE #2 PENCILS & ERASERS •

Fifty question multiple choice exam that features a math and a computer/internet component.

Approximately half the questions consist of complex multi-step mathematical problem solving, puzzle and logic questions, and pattern recognition. **A thorough knowledge of K-5 math is assumed** but questions go well beyond Common Core standards.

The other half of the questions ask applicants to demonstrate knowledge of basic computer skills and vocabulary, Internet fluency, and familiarity with current technology issues. Applicant must demonstrate reading comprehension of a technical document. And finally there are some questions that analyze "**potential**" **programming ability** featuring logical, sequential and iterative thinking.

## CREATIVE WRITING/ JOURNALISM

### • BRING MULTIPLE #2 PENCILS & ERASERS •

The exam consists of two parts. In Part One (40%), applicants answer 40

multiple choice questions on a variety of topics including reading comprehension, spelling, grammar, punctuation, and vocabulary. In Part Two (60%), applicants write an original composition (choice of two topics) that will be evaluated on idea development, organization, voice, word choice, sentence fluency, originality, creativity, writing mechanics and use of conventions.

## DANCE

Applicants will perform a dance sequence, with or without music that has been prepared at home. It is to be 1-2 minutes in length (bring music on CD only). Students may choreograph their sequence incorporating any dance style(s), preferably one(s) that they feel most comfortable with. They will also be asked to improvise to a short piece of music selected by the examiner and be taught a very brief dance sequence which they will have to repeat. Evaluation will be based upon technical execution of movements, form, coordination, grace, rhythm, style, creativity, originality, spontaneity, and freedom of expression.

Applicants are to come prepared to dance in a leotard and tights, or other comfortable clothing. Proper footwear is recommended.

## DRAMA

Applicants will prepare and perform a monologue and be asked to do a cold reading. They will be judged on diction, expression, poise, characterization, mood, sincerity, interpretation, creativity, voice quality, directions, concentration, audience appeal and timing.

The monologue can be obtained from your public elementary school or downloaded from before testing begins at [is239.schoolwires.com](http://is239.schoolwires.com).

## INSTRUMENTAL MUSIC (Winds or Strings)

Applicants are not required to have previous musical training and instead will take a specially designed written test of musical potential. We recommend that students who can play an instrument be tested on that instrument, and should bring it to the testing site with a prepared

piece of one to two minutes in length.

Understandably, if the instrument is inappropriate for transport (percussion, piano), students will be supplied with that instrument at the testing site. There will be no testing using the recorder! Students are allowed to audition on piano and guitar for both string and wind talent areas.

Note that there is no long-term instruction on either guitar or piano at these schools. Children who are accepted will have to learn one of the other many instruments currently in use at the Winds or Strings Talent program at each D21 school.

## MEDIA

### • BRING MULTIPLE #2 PENCILS & ERASERS •

Applicants will view photographs and short films, and will then be given a multiple choice test on content, genre, aesthetic awareness, visual perception, and ability to solve visual problems. Students will also be tested on general photographic, video, and media recognition.

## SCIENCE

### • BRING MULTIPLE #2 PENCILS & ERASERS •

Applicants will be given a multiple choice test dealing with science concepts and facts covered in grades 4 and 5 in biology, earth science, physics and chemistry.

Topics in the questions include: scientific method, experimentation, analysis and graph interpretation, problem solving, developing scientific hypotheses and logical thinking.

## VOCAL MUSIC

Applicants will be asked to demonstrate their vocal ability with a prepared song. Applicants are not required to have previous musical training. Do not bring CD's for accompaniment. Students will sing acappella.

Applicants will be tested for sense of pitch and rhythm with a listening test. They will be asked to determine differences between rhythmic and melodic patterns played on the piano.