

M.S. 447

The Math & Science Exploratory School



Arin M. Rusch, Principal

The Basics...

- > High-performing and nurturing academic environment
- > Approximately 550 students
- > 6 classes per grade
- > Integrated Co-teaching Classes on all grades
- > 3-year advisory program
- > 6-day (A-F) schedule
- > Busing for 6th Graders



Our Vision...

As inquisitive learners, we grow through perseverance, resilience, and innovation. We believe that, to act with integrity and empathy, we have a responsibility to advocate for ourselves and others, honoring our community and the world.

The Math & Science Exploratory School

CORE VALUES

- > Learning through **Inquiry-Based Experiences**: Opportunities that empower students to question, explore and make sense of the world around them.
- > **Collaboration and Partnership**: Between students, teachers, families, and our city
- > Education of the **Whole Child**: Students as citizens who are self aware, socially aware, and environmentally aware, and act as responsible members of our community.

Exploration Program

- > Interdisciplinary units focused around a central theme
- > Taught onsite & offsite by a core seven-teacher team
- > Collaborations with NYC cultural institutions
- > Each unit ends with an Exposition for friends & family

Exploration Units of Study:

6th Grade: Food for Thought, City Planning and Community Development, Water Stewardship

7th Grade: Engineering and Responsible Urban Development, Forensics and Justice, Art for Social Change

8th Grade: Inventions for a Better World, Perception/Critical Media Literacy, Service Learning

Some of Our Destinations and Collaborations...

- > Brooklyn Botanic Garden
- > Sloop Clearwater
- > The Innocence Project
- > Center for Architecture Foundation
- > Dolan DNA Learning Center
- > Gowanus Canal Conservancy
- > NYC Mayor's Office of Sustainability
- > Queens Museum of Art
- > NY Hall of Science
- > Taste Buds Kitchen

...And Some More

- > Paley Center for Media
- > Brooklyn Grange Rooftop Farm
- > Museum of Natural History – Sackler Lab
- > Frick Collection
- > Jamaica Bay Wildlife Refuge
- > Liberty Science Center
- > Metropolitan Museum of Art
- > NYC Greenmarkets
- > Museum of Tolerance
- > Oyster Farming in Red Hook
- > Prospect Park
- > One World Trade Center



English Language Arts

- > We follow a comprehensive literacy (reading, writing, word study) curriculum in English Language Arts
- > All disciplines integrate literacy into their curriculum
- > Daily instruction reflects a cooperative spirit in which students engage with one another to ask big questions, make meaning, synthesize, apply, and share their learning
- > Emphasis on student voice

Social Studies

- > 6th Grade: Ancient civilization and non-Western countries
- > 7th & 8th Grades: US History
- > Collaborations: Facing History and Ourselves, Constitution Works



Mathematics

- > Development of deep understanding of mathematical processes through problem-solving, conversation, and routine skills practice.
- > Algebra 1 Regents exam at the end of 8th grade.

Science

- > Earth Science, Physical Science, Life Science
- > Inquiry-based lessons and projects
- > Long-term investigations
- > Emphasis on four modes of investigation
 - Controlled experiments
 - Secondary research
 - Field study
 - Exploring working model/systems
- > Living Environment Regents for all students in 8th grade
- > Urban Advantage School

Foreign Language

- > Spanish, Grades 7/8
- > 7th grade focus on conversation
- > 8th grade focus on grammar, reading, writing, and speaking



The Arts

All students Grades 6-8 Participate in:

- > Studio or Performance Art
- > Technology

Talent choices:

- > Dance
- > Instrumental Music
- > Theater
- > Studio Art

7th Grade Arts Elective

Physical Education & Health

- > Two P.E. periods per cycle
- > Sports and Games/Team building
- > Fitness/Healthy Living
- > Additional Health class in 7th Grade
- > Recess Sports
- > Morning gym program



Advisory

- > Safe, consistent, and nurturing setting
- > Small Group (8-10 students)
- > Focus on five competencies:
 - Self-Awareness
 - Self-Management
 - Social Awareness
 - Relationship Skills
 - Responsible Decision Making

Social Emotional Learning

- > Peer Mediation/conflict resolution
- > Student Council
- > Upstander Project
- > Peace and Diversity Conference
- > Student Led Conferences
- > Restorative approaches to discipline
- > Kids Can Project
- > Lunch Clubs and Recreation
- > Strong Support Staff



Special Education, ESL, Academic Intervention Services, & Student Support

- > Integrated Co-Teaching (ICT) inclusion program
- > ASD Nest Program
- > SETSS
- > Speech, OT, and PT
- > ESL services
- > Lit Lab and Math Lab for small group targeted instruction and academic intervention
- > Counselors on all three grades

Sample 6th Grade Schedule



The Math & Science
Exploratory School

Class 601

MS 447 - MATH & SCIENCE EXPLORATORY SCHOOL, 345 DEAN STREET, BROOKLYN

	A	B	C	D	E	F
AM Lockers 8:20 - 8:26 AM	Lockers 454	Lockers 454	Lockers 454	Lockers 454	Lockers 454	Lockers 454
1 8:26 - 9:11 AM	Geneen PE Gym	Acker / J. Farrell / McKanna Mullins Arts Talent B22,303,306,453	Khan / Shedwell ELA 454	Moore / Wilson Math	Khan / Shedwell ELA - Ind. Read. 454	Khan / Shedwell ELA
2 9:14 - 9:56 AM	Moore / Wilson Math 455	Khan / Shedwell ELA - Ind. Read. 454	Khan / Shedwell ELA - Ind. Read. 454	455	Exploration	454
3 9:59 - 10:41 AM	McCollum Computer Apps 304	Khan / Shedwell ELA 454	Acker / J. Farrell / McKanna Mullins Arts Talent B22,303,306,453	Khan / Shedwell ELA 454		Geneen / Schrup PE Gym
4 10:44 - 11:26 AM	Davis / Shedwell Social Studies 452	Davis / Shedwell Social Studies 452	Davis / Shedwell Social Studies 452	McCollum Computer Apps 304		Davis / Shedwell Social Studies 452
5 11:29 AM - 12:11 PM	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
6 12:14 - 12:57 PM	Khan / Shedwell ELA 454	Moore / Wilson Math	Frantzis / Hyman Science 325	Frantzis / Hyman Science	Exploration	Shedwell / Moore / Antoniello Advisory 302,455,452
7 1:00 - 1:43 PM	Shedwell / Moore / Antoniello Advisory 455,454,302	455	Moore / Wilson Math	325		Moore / Wilson Math 455
8 1:46 - 2:30 PM	Acker / J. Farrell / McKanna Mullins Arts Talent B22,303,306,453	Frantzis / Hyman Science 325	455	Davis / Shedwell Social Studies 452		Frantzis / Hyman Science 325
PM Lockers 2:30 - 2:35 PM	Lockers 454	Lockers 454	Lockers 454	Lockers 454	Lockers 454	Lockers 454

Mondays: Staff PD, 2:35-3:55. Tuesdays: Parent Engagement, 2:35-3:15. Wednesdays & Thursdays: Office Hours, 2:35-3:35.

aSc Timetables



Overnight Trips

- > 6th grade: Camp Bernie (Outdoor Ed, team building, candle making, night hikes, & more)
- > 7th Grade: PEEC
- > 8th Grade: Washington, DC



After School Program

- > Free, full-time after school program (SONYC)
- > In partnership with LeAP
- > Robotics, Fine Arts, Dance, Basketball, Flag Football, Soccer, Spoken Word/Creative Writing, Photography, Film Production, Cartooning, Theater, Songwriting, Games Factory, Vocals, Life Skills and Leadership, Homework Help, and more...



Family Involvement

- > Parents as partners
- > Trip Chaperones – Exploration off-site, overnight trips
- > Fundraising
- > Family Activities
- > Strong and Involved PTA & SLT

High School Admissions

- > Art and Design
- > Bard Manhattan
- > Bard Queens
- > Beacon
- > Brooklyn Latin
- > Brooklyn Tech
- > Edward R. Murrow
- > Essex Street Academy
- > Frank Sinatra School of Arts
- > HS of Telecommunications
- > La Guardia
- > Leon Goldstein
- > Midwood
- > Millennium Brooklyn
- > Nest + M
- > NYC iSchool
- > New York Harbor School
- > Stuyvesant
- > Talent Unlimited
- > Sunset Park HS



Admissions

- > All district middle schools in District 15—including ours—use an open lottery admissions method, and some applicants will have priority for 52% of seats at each school. This means:
 - Our school no longer screens or uses applicants' academic records to evaluate or admit students. If we have more applicants than available seats, applicants are matched by random lottery selection.
 - We will give the following applicants an admissions priority for 52% of seats at our school: students from low-income households (who qualify for the federal free and reduced price lunch program), students in temporary housing, and English Language Learners.
- > This will not affect your ability to select and rank schools or the way in which you can apply to middle schools.
- > To learn more about the D15 Diversity Plan, visit d15diversityplan.com.



Learn More...

- > Visit our website: ms447.org
- > Contact our Parent Coordinator, Amy Sirot
asirot@ms447.org