



**The Ingenuity Project<sup>®</sup>**  
**at**  
**Baltimore Polytechnic Institute**

**Student Application**  
**2010-2011**



**The Ingenuity Project® at Baltimore Polytechnic Institute  
STUDENT APPLICATION  
2010-2011 SCHOOL YEAR**

Dear Prospective Ingenuity Student and Parents:

Thank you for your interest in the Ingenuity Project® at Baltimore Polytechnic Institute!

*To learn more about Ingenuity and determine if you meet our pre-qualifications, please read the last page of this application packet (“Participant Recruitment and Selection”).*

**Directions for Student Application**

1. Complete this application form and send it to *Ingenuity at Poly* by the deadline (December 11, 2009). **PLEASE PRINT CLEARLY.**
2. Distribute *all* of the three Teacher Recommendation Forms:
  - One to your 8<sup>th</sup> grade science teacher
  - One to your 8<sup>th</sup> grade mathematics teacher
  - One to another teacher or a person in the community.
3. Give your guidance counselor the *Counselor’s/Principal’s Recommendation Form*.
4. **Important: Applicants must also complete the BCPSS Citywide High School Application requesting Baltimore Polytechnic Institute as their first choice. *This deadline is different from the Ingenuity deadline.* Ask your middle school guidance counselor or call the Office of Student Placement at 410-396-8600 to request this application.**

**Application deadline: December 11, 2009**

Qualifying students will be invited to take the admission test, which will be held in January. Acceptance letters will be mailed mid-March.

**Return the completed application to:**

**The Ingenuity Project  
Baltimore Polytechnic Institute – Room 337  
1400 W. Cold Spring Lane, Baltimore, MD 21209**

# APPLICANT INFORMATION

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First Middle Last

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Date of birth Race Student Email Male Female  
 Gender (circle)

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Home Address Home phone number

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City State Zip

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Current school name and number BCPSS Pupil ID# Current grade

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Mother's/Guardian's full name Daytime phone number Email address

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Father's/Guardian's full name Daytime phone number Email address

How did you hear about Ingenuity? \_\_\_\_\_

Please list your extracurricular interests, activities, and hobbies. Attach an extra sheet of paper if necessary.  
 \_\_\_\_\_  
 \_\_\_\_\_

List achievements/awards and give the date the award was received (e.g. Scouts, 4-H, science, mathematics, community). Attach an extra sheet of paper if necessary.  
 \_\_\_\_\_  
 \_\_\_\_\_

Please list special programs in which you have participated, giving dates, location, and courses (e.g. Chesapeake Bay Foundation, Johns Hopkins Center for Talented Youth, MSDE Summer Programs). Attach an extra sheet of paper if necessary.  
 \_\_\_\_\_  
 \_\_\_\_\_

**Parent/Guardian Permission:** I hereby submit application for my child to be considered for the Ingenuity Project High School Program at Baltimore Polytechnic Institute, and give my permission for school officials to report my child's achievement and aptitude test scores when required. I understand that the teacher information and test results will be maintained in confidence by all members of the Screening Committee and that applications will not be returned to students.

\_\_\_\_\_  
 Parent/guardian signature Date

**NOTE: IF STUDENT REQUIRES SPECIAL TESTING ACCOMODATIONS AND HAS AN I.E.P. OR 504 PLAN DOCUMENTING THIS NEED OR IF ENGLISH IS NOT THE STUDENT'S FIRST LANGUAGE, PLEASE INFORM INGENUITY AT THE TIME OF APPLICATION SO THAT APPROPRIATE ADMISSIONS TESTING ARRANGEMENTS CAN BE MADE.**



**Ingenuity at Baltimore Polytechnic Institute**  
**8th GRADE SCIENCE TEACHER RECOMMENDATION FORM**  
(Confidential)

I. **STUDENT:** Please complete Part I before giving this form to the individual making the recommendation.

Student Name \_\_\_\_\_ Sex \_\_\_\_\_ BCPSS # \_\_\_\_\_

Current School \_\_\_\_\_ Date \_\_\_\_\_

II. **TEACHER:** Please complete the recommendation form before the deadline. Return to the applicant in a sealed envelope with your signature across the sealed flap:

**DEADLINE: DECEMBER 11, 2009**

The mission of the Ingenuity Project® is to prepare highly capable and motivated secondary students in Baltimore City to achieve at nationally competitive levels in mathematics, science, technology, and related fields. The expectation is that Ingenuity students will graduate from high school, attend college, and seek careers in science and mathematics.

We are recruiting advanced and highly able students who thrive on intellectual challenge. Your recommendation is an important consideration in the application process.

**Please Print:**

Person completing form: \_\_\_\_\_

How do you know the applicant? \_\_\_\_\_

Telephone number: \_\_\_\_\_

E-mail (if a good way to reach you): \_\_\_\_\_

(OVER)  
Recommendation Form  
page 1 of 2

Please rate the applicant by completing the table.

	Outstanding	Above Average	Average	Below Average
Learns quickly with good retention				
Recognizes and understands conceptual material quickly				
Applies concepts when introduced to new materials				
Demonstrates extensive knowledge about a variety of topics				
Works well in group settings				
Demonstrates strong skills in writing				
Demonstrates initiative				
Demonstrates intellectual curiosity				
Works independently				
Meets clock and calendar deadlines				
Shows persistence and perseverance when faced with difficult tasks				

Please provide additional comments elaborating on the marks you selected above:

OFFICE USE:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Recommendation Form  
page 2 of 2



**Ingenuity at Baltimore Polytechnic Institute**  
**8th GRADE MATH TEACHER RECOMMENDATION FORM**  
(Confidential)

I. **STUDENT:** Please complete Part I before giving this form to the individual making the recommendation.

Student Name \_\_\_\_\_ Sex \_\_\_\_ BCPSS # \_\_\_\_\_

Current School \_\_\_\_\_ Date \_\_\_\_\_

III. **TEACHER:** Please complete the recommendation form before the deadline. Return to the applicant in a sealed envelope with your signature across the sealed flap:

**DEADLINE: DECEMBER 11, 2009**

The mission of the Ingenuity Project® is to prepare highly capable and motivated secondary students in Baltimore City to achieve at nationally competitive levels in mathematics, science, technology, and related fields. The expectation is that Ingenuity students will graduate from high school, attend college, and seek careers in science and mathematics.

We are recruiting advanced and highly able students who thrive on intellectual challenge. Your recommendation is an important consideration in the application process.

**Please Print:**

Person completing form: \_\_\_\_\_

How do you know the applicant? \_\_\_\_\_

Telephone number: \_\_\_\_\_

E-mail (if a good way to reach you): \_\_\_\_\_

(OVER)  
Recommendation Form  
page 1 of 2

Please rate the applicant by completing the table.

	Outstanding	Above Average	Average	Below Average
Learns quickly with good retention				
Recognizes and understands conceptual material quickly				
Applies concepts when introduced to new materials				
Demonstrates extensive knowledge about a variety of topics				
Works well in group settings				
Demonstrates strong skills in writing				
Demonstrates initiative				
Demonstrates intellectual curiosity				
Works independently				
Meets clock and calendar deadlines				
Shows persistence and perseverance when faced with difficult tasks				

Please provide additional comments elaborating on the marks you selected above:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



**Ingenuity at Baltimore Polytechnic Institute**  
**TEACHER/COMMUNITY MEMBER RECOMMENDATION FORM**  
(Confidential)

I. **STUDENT:** Please complete Part I before giving this form to the individual making the recommendation.

Student Name \_\_\_\_\_ Sex \_\_\_\_ BCPSS # \_\_\_\_\_

Current School \_\_\_\_\_ Date \_\_\_\_\_

IV. **TEACHER:** Please complete the recommendation form before the deadline. Return to the applicant in a sealed envelope with your signature across the sealed flap:

**DEADLINE: DECEMBER 11, 2009**

The mission of the Ingenuity Project® is to prepare highly capable and motivated secondary students in Baltimore City to achieve at nationally competitive levels in mathematics, science, technology, and related fields. The expectation is that Ingenuity students will graduate from high school, attend college, and seek careers in science and mathematics.

We are recruiting advanced and highly able students who thrive on intellectual challenge. Your recommendation is an important consideration in the application process.

**Please Print:**

Person completing form: \_\_\_\_\_

How do you know the applicant? \_\_\_\_\_

Telephone number: \_\_\_\_\_

E-mail (if a good way to reach you): \_\_\_\_\_

(OVER)  
Recommendation Form  
page 1 of 2

Please rate the applicant by completing the table. Does the applicant exhibit each trait to an exceptional degree, to a satisfactory/ grade-appropriate degree, or rarely?

	Outstanding	Above Average	Average	Below Average
Learns quickly with good retention				
Recognizes and understands conceptual material quickly				
Applies concepts when introduced to new materials				
Demonstrates extensive knowledge about a variety of topics				
Works well in group settings				
Demonstrates strong skills in writing				
Demonstrates initiative				
Demonstrates intellectual curiosity				
Works independently				
Meets clock and calendar deadlines				
Shows persistence and perseverance when faced with difficult tasks				

Please provide additional comments elaborating on the marks you selected above:

OFFICE USE:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



**Ingenuity at Baltimore Polytechnic Institute**  
**COUNSELOR/PRINCIPAL'S RECOMMENDATION FORM**  
(Confidential)

**DEADLINE: DECEMBER 11, 2009**

\_\_\_\_\_  
Student's Last Name                      First Name                      MI      Sex      BCPSS #

Present School: \_\_\_\_\_

**Please attach COPIES of the following:**

1. Most recent **standardized test scores**
2. **Final report card of seventh grade and first quarter report card of eighth grade** (Please wait until 1<sup>st</sup> quarter report cards of 2009-10 are issued before mailing.)
3. Does this student have any attendance issues? If yes, please explain:

\_\_\_\_\_  
\_\_\_\_\_

4. Does this student require accommodations? If yes, please explain. (Use the back of this form if more space is needed.) ***NOTE: IF STUDENT REQUIRES TESTING ACCOMODATIONS AND HAS AN I.E.P. OR 504 PLAN DOCUMENTING THIS NEED OR IF THE STUDENT IS NOT A NATIVE ENGLISH SPEAKER, PLEASE INFORM INGENUITY AT THE TIME OF APPLICATION SO APPROPRIATE ADMISSIONS TESTING ARRANGEMENTS CAN BE IMPLEMENTED.***

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Guidance Counselor's Signature

\_\_\_\_\_  
Date

**PRINCIPAL'S RECOMMENDATION**

I support the candidacy of this student for the Ingenuity Project High School Program and verify that the information given is accurate and complete.

\_\_\_\_\_  
Principal's Signature

\_\_\_\_\_  
Date

The completed recommendation may be returned to the applicant in a sealed envelope with your signature across the seal or sent/delivered to:

The Ingenuity Project, 1400 W. Cold Spring Lane, Baltimore, MD 21209, Phone 410-662-8665  
www.ingenuityproject.org



## WHY INGENUITY AT POLY MAY BE THE PROGRAM FOR YOU:

- **Scholastic achievement is our highest priority.**

*Ingenuity is proud to be the home of the 2005 nationwide fifth place Intel Science Talent Search winner, as well as the 2006 seventh place winner and the 2007 tenth place winner.*

- **Four-year program of fast-paced and intensive mathematics and science classes**  
*Formal classes through AP Calculus BC, independent or off-campus study also possible*
- **Off-campus research opportunities / local, state, and national science competitions**  
*Three-year mentored program, culminating in entries for the Siemens, Intel Science Talent Search, Maryland Junior Science and Humanities Symposium, and Baltimore Science Fair*



- **Participation in challenging local, state, and national mathematics competitions**  
*Ingenuity @ Poly placed second statewide in the 2006-07 Maryland Mathematics League*
- **Classes with other, high ability students**  
*Many courses, including Calculus, Chemistry, and Physics at the AP level*
- **Outstanding teachers providing challenging and dynamic course work**  
*Teachers have degrees in their subject areas*
- **Exceptionally high standards for the learning environment and student performance**  
*Students must maintain an average of 80 or above*
- **Ingenuity students = great scholars and terrific people**  
*Students are kind, caring, encouraging and they work hard to maintain good grades*
- **Students build strong academic resumes for college applications**  
*Take SAT IIs in Biology (9<sup>th</sup> grade) and Physics (10<sup>th</sup> grade); take SAT II or AP exam in Chemistry (11<sup>th</sup> grade)*
- **Extra support from Ingenuity staff**  
*Arranging for accelerated classes, contacting scientists, providing personal budgets for science projects, offering encouragement and support while cheering for successes*
- **Double periods for Biology/Lab and Chemistry/Lab**
- **No tuition for Baltimore City residents!**
- **Universities actively recruit Ingenuity students:** *Many Ingenuity seniors receive full college scholarships –Since its inception, the Baltimore Scholars program at JHU has offered many Ingenuity students full scholarships each year*

**YOU ONLY HAVE ONE CHANCE TO EXPERIENCE HIGH SCHOOL: MAKE THE MOST OF IT!**

## PROJECT MISSION

The mission of the Ingenuity Project® is to prepare highly capable and motivated Baltimore City secondary students to achieve at nationally competitive levels in mathematics and science. The goal is to give city students classroom advantages, with the expectation that Ingenuity students will, upon graduation, attend four-year colleges and ultimately be prepared to become leaders in their chosen professions. Ingenuity high school students take advanced placement courses, work with scientist mentors to develop independent research projects, and if selected, submit their work to national competitions.



*Ingenuity senior (2009) Hannah Bands (R) was selected as a regional finalist in the **Young Epidemiology Scholars (YES) competition**. Senior Jasmen Rice(L) was a YES semifinalist. Bands went on to become a*

## DISCIPLINARY FOCUS

The Ingenuity Project® uses an accelerated and advanced curriculum, developed by master-teachers, emphasizing applied learning in the areas of secondary mathematics, science, and research skills. The specific objectives have been to:

- Conduct classes in enhanced mathematics and science education in conjunction with basic skill building
- Design classrooms capable of supporting student research and participation in national competitions
- Provide a learning environment capable of responding to the heterogeneous strengths of each class and individual
- Develop relationships with mentors at universities, medical institutions and biotechnology research centers to provide students access to professional internships

## PROJECT DEFINITION



*A Goal Achieved: On Saturday, March 28, 2009, Ingenuity at Poly participated in the Maryland Science Olympiad at Johns Hopkins University. A team of fifteen freshmen, sophomores and juniors participated in 24 events and earned 49 medals. The Ingenuity Team took first place in the high school AA division.*

The Ingenuity Project®, a non-profit organization, is a joint effort of the Baltimore City Public School System, the Abell Foundation and Baltimore's science and mathematics community. Enrollment is citywide, serving a diverse population. To the extent that openings occur in the program, students wishing to enter the Ingenuity Project® after ninth grade must demonstrate competencies in science, mathematics, and reading.

The high school component of the Ingenuity Project® was launched in the fall of 1997 at Baltimore Polytechnic Institute. A key feature is the three-year science Research Practicum. Each research student identifies a topic of great interest and a mentor from the Baltimore scientific community where their interest is nurtured and advanced. Students write independent research papers for entry to national competitions and/or for publication in scientific journals. This independent research option, together with Ingenuity's advanced mathematics, makes for a unique high school opportunity.

## PARTICIPANT RECRUITMENT AND SELECTION

Students residing in Baltimore City and surrounding counties are eligible to apply. Students who reside outside of Baltimore City pay tuition. All eligible City residents are accepted and, if there are openings, County residents will be offered placement. Selection is based on the completed application and the admission test created by the Center for Talented Youth (CTY, Johns Hopkins University, Baltimore, MD).

### **1. Applicants to Ingenuity at Poly must meet the following criteria to be eligible for the admission test:**

#### **STANDARDIZED TEST SCORES**

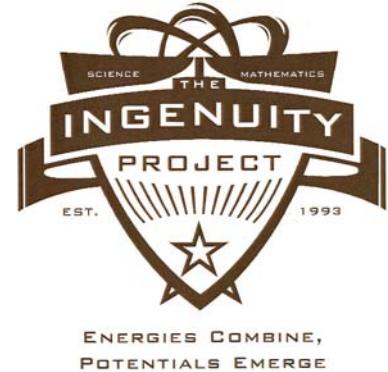
(Spring of 2008-2009 school year or fall of 2009-2010 school year)

Total Reading:	at least in the 80 <sup>th</sup> national percentile
Total Mathematics:	at least in the 80 <sup>th</sup> national percentile

**AND** (standards for both test scores and report card grades must be met)

#### **REPORT CARD AVERAGES** (Final for 7<sup>th</sup> grade and first quarter of 8<sup>th</sup> grade)

Mathematics	At least 80%
Science	At least 80%
English	At least 80%
General Average	At least 80%



### **2. Standards**

The philosophy of the Ingenuity Project® is to nurture, develop and encourage the Ingenuity participant. In keeping with this philosophy, a student who continues to meet the standards of the program is accepted for all four high school years.

Ingenuity students are expected to have excellent attendance with no unexcused absences. This includes summer programs for Ingenuity. They are expected to maintain a demeanor that is respectful of fellow Ingenuity students and teachers and which honors the importance of the work. Students who do not meet attendance and behavior standards will be dismissed from the program.

Ingenuity students are expected to maintain an 80 average or above in all course work. If at any time during the year an Ingenuity student is not showing consistent effort to meet the standards, the student and his/her parents will be asked to meet with the school and Ingenuity staff to assess the student's difficulties and determine the necessary steps for improvement in academic performance. Students who are continually unable to meet the demands of the Project will not reenter the program for the subsequent year. If students withdraw or are asked to leave because they do not meet the standards, they will be assigned to regular classes.

### **3. Project Staff**

Dolores Costello, Director of The Ingenuity Project®, works closely with Dr. Gary Pasternack (Chair of the Board of Directors). The Board includes area professionals and serves to advise and make recommendations to the staff. Mrs. Costello is assisted by:

Sergei Zverev, PhD, Associate Director  
Gale Fletcher, M Ed, Dean of Students  
Mikhail Goldenberg, PhD, Mathematics Department Head  
David Nelson, MS, Research Coordinator  
Shani Lee Ortiz, MA, Admissions Coordinator  
Dolores Morales, Administrative Assistant