

# Learn about math and science...

## WHILE PLAYING BASEBALL!

This summer, MIT will host a FREE four-week summer program for boys who will be in the 8<sup>th</sup> grade in the fall of 2009: the MIT Science of Baseball Program (MSBP). We are looking for boys who love baseball and who want to learn about how geometry, physics, probability and statistics play a part in the game they love. We will learn how these concepts impact pitching, hitting, and running as we play baseball and gain a deeper understanding of the game.

### who?

We accept applications from boys who attend public schools in Boston or Cambridge, MA and will enter 8<sup>th</sup> grade in the fall of 2009; applicants must be U.S. citizens or permanent residents. MSBP is designed for students who work hard and also love to play baseball. 35-40 students will be selected to participate this summer.

### when?

The four-week summer program runs from July 6 to July 31, 2009, with an Orientation on June 26 and a Final Presentation on August 1. All dates are mandatory. Sessions are held Monday to Friday from 8:30am to 4pm. Breakfast and lunch are provided free of charge.

### where?

MSBP is held on MIT's campus in Cambridge. The campus is accessible by MBTA (Kendall Square stop on the Red Line or the #1 bus).

#### Questions?

Contact Erin Salius, at  
617-253-8051 or  
msbp@mit.edu.

### how?

Fill out the enclosed application **carefully**. (We suggest that you do a rough draft first.) Return the following items to us:

- complete application
- a copy of your most recent report card
- a copy of your complete report card from last year (2007-2008)
- sealed letter of recommendation from your science or math teacher
- sealed letter of recommendation from your P.E. teacher or baseball coach
- a wallet-sized picture of yourself.

Unfortunately, we cannot review incomplete applications, so double-check that you have everything, and mail it to

#### MIT Science of Baseball Program

77 Massachusetts Avenue, Rm. 1-123  
Cambridge, MA 02139

Fax: 617-324-1120

Due March 27, 2009

GENERAL INFORMATION			
<b>FULL NAME</b>			
<b>STREET ADDRESS</b>			
<b>CITY, STATE, ZIP CODE</b>			
<b>HOME TELEPHONE</b>			
<b>EMAIL ADDRESS</b>			
<b>CURRENT SCHOOL NAME/CITY</b>	CITY		
<b>GRADE LEVEL IN SCHOOL</b>			
<b>BIRTH DATE (mm/dd/yy)</b>			
<b>BIRTHPLACE (city/state/country)</b>			
<b>CITIZENSHIP (circle one)</b>	American Citizen	Permanent Resident	
<b>ETHNICITY: With which ethnic group do you <u>most</u> closely identify?</b>	African American	Native American	Asian
	Caucasian	Hispanic/ Latino	Other _____
<b>LANGUAGE(S) SPOKEN AT HOME</b>			
<b>I LIVE WITH (circle one)</b>	Mother	Father	Both Parents      Guardian
<b>I PREVIOUSLY ATTENDED (circle, if applicable)</b>	STEM Program (When? _____)		
<b>I HEARD ABOUT MSBP FROM (circle one)</b>	Guidance Counselor/School Administrator	Teacher	Parent
	Friend/Relative	Website	Flyer/Poster      Other _____
PARENTAL INFORMATION			
<b>MOTHER'S NAME</b>		<b>FATHER'S NAME</b>	
<b>ADDRESS (if different from above)</b>		<b>ADDRESS (if different from above)</b>	
<b>HOME PHONE</b>		<b>HOME PHONE</b>	
<b>WORK PHONE</b>		<b>WORK PHONE</b>	
<b>EMAIL ADDRESS</b>		<b>EMAIL ADDRESS</b>	
<b>BIRTHPLACE (city/state/country)</b>		<b>BIRTHPLACE (city/state/country)</b>	
<b>CITIZENSHIP</b>		<b>CITIZENSHIP</b>	

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**PARENTAL INFORMATION Continued**

<b>MOTHER'S HIGHEST LEVEL OF EDUCATION COMPLETED (circle one)</b>	High School Diploma Associates Degree Bachelors Degree Graduate Degree	<b>FATHER'S HIGHEST LEVEL OF EDUCATION COMPLETED (circle one)</b>	High School Diploma Associates Degree Bachelors Degree Graduate Degree
<b>HOW MANY PEOPLE LIVE IN YOUR HOUSE?</b>		<b>HOW MANY OF THOSE PEOPLE ARE UNDER 18 YEARS OLD?</b>	
<b>DO YOU QUALIFY FOR FREE OR REDUCED SCHOOL LUNCH? (circle one)</b>	YES / NO	<b>IS YOUR FAMILY INCOME UNDER \$50,000 PER YEAR? (circle one)</b>	YES / NO

**ATHLETIC INFORMATION**

<b>IN THE BOXES TO THE RIGHT, PLEASE LIST ALL OF THE SPORT TEAMS AND ACTIVITIES THAT YOU HAVE PARTICIPATED IN DURING 6<sup>TH</sup> AND 7<sup>TH</sup> GRADES.</b>	<b>ACTIVITY/TEAM</b>	<b>YEARS PLAYED</b>
<b>HOW MANY YEARS HAVE YOU PLAYED BASEBALL?</b>		<b>WHAT WAS THE NAME OF THE LAST LEAGUE YOU PLAYED IN?</b>
<b>WHAT POSITION(S) DO YOU PLAY?</b>		
<b>DESCRIBE YOUR CURRENT BASEBALL AND/OR ATHLETIC SKILLS.</b>		
<b>DESCRIBE THE BASEBALL SKILLS THAT YOU WOULD LIKE TO GAIN OR IMPROVE UPON DURING MSBP.</b>		

**ACADEMIC HISTORY**

Circle all of the following subjects that you have completed or are currently enrolled in.

<b>Middle School Math</b>	<b>Middle School Science</b>	<b>Other Courses</b>
6 <sup>th</sup> Grade Math	6 <sup>th</sup> Grade Science	Robotics
7 <sup>th</sup> Grade Math	7 <sup>th</sup> Grade Science	Computer Programming
Algebra, 1 <sup>st</sup> year	Physics	_____
Algebra, 2 <sup>nd</sup> year	Chemistry	
Geometry	Biology	
Trigonometry		

**STUDENT STATEMENT OF INTENT (To be completed by the applicant.)**

**1.) Why are you interested in participating in the MIT Science of Baseball Program?**

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**2.) What do you like about science and math?**

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**3.) How will your participation in MSBP change your life?**

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**4.) What subjects do you plan to study in college? (Please circle your answers.)**

Health Sciences (Medicine)

Computer Science

Forensic Science

Physics

Mathematics

Biological Sciences

Chemistry

Engineering

Other: \_\_\_\_\_

# MIT Science of Baseball Program Student Application 2009

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Due March 27, 2009

## MATH or SCIENCE TEACHER RECOMMENDATION FORM (2 Pages)

Thank you for agreeing to write a recommendation for your student. He has applied to participate in the MIT Science of Baseball Program (MSBP), a four-week summer program aimed at improving the mathematics and science skills of entering eighth grade boys from Boston and Cambridge, MA by building on their interest in baseball to learn physics and math. This summer, MSBP will provide opportunities for 40 entering eighth grade boys from underserved communities — at no cost to them.

The program will feature an integrated, experiential curriculum, including both academic and athletic components, that exploits connections between student experiences and academic topics. Participating students will learn to master a number of statistical operations that will be used throughout. They will collect numerical data at every opportunity and use it to describe their experiences.

The objectives of MSBP are to:

- 1) Help students become actively involved in their own learning, particularly in mathematics and physics.
- 2) Focus on the learning process by comparing the acquisition of baseball skills with academic skills development.
- 3) Improve baseball and academic skills.
- 4) Have fun!!!

**Instructions:** Please complete this form in blue or black ink and return it to your student in a **sealed envelope** or mail it to 77 Massachusetts Ave., Cambridge, MA 02139 for inclusion in his application. The deadline for submission is **5:00 p.m. March 27, 2009**. Thank you very much for your time!

<b>STUDENT NAME</b>	
<b>YOUR NAME</b>	
<b>SCHOOL NAME</b>	
<b>COURSE TITLE</b>	
<b>WORK TELEPHONE</b>	
<b>EMAIL ADDRESS</b>	

## PERSONAL OBSERVATION

**Please share your candid thoughts about this candidate's ability to succeed in the MIT Science of Baseball Program? (Please attach an additional sheet of paper if necessary.)**

**MIT Science of Baseball Program Student Application 2009**

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<b>MATH or SCIENCE PERFORMANCE ABILITIES</b>					
<p><b>Please rank this applicant's abilities. (Place a check in only one of the columns.)</b>  <b>1= Exceptional/top 5%, 2= Excellent/top 10%, 3=Average, 4= Satisfactory, 5= Poor</b></p>					
1. Possesses a comfortable knowledge of basic skills and factual information for this course.	1	2	3	4	5
2. Has ability and desire to follow through on work, and is able to see a problem through to its end.	1	2	3	4	5
3. Pursues interests to understand or satisfy curiosity—wants to know how and why.	1	2	3	4	5
4. Generates questions on his/her own — questions the common, ordinary or unusual.	1	2	3	4	5
5. Enjoys the challenge of difficult problems, assignments, issues and materials.	1	2	3	4	5
6. Requires a minimum of adult direction and attention — able to do independent work.	1	2	3	4	5
7. Completes homework and other assignments on time.	1	2	3	4	5
8. Is able to function effectively in a group.	1	2	3	4	5
9. Seems self-confident, happy and comfortable in most situations.	1	2	3	4	5
10. Is able to cope with normal frustrations — adapts to change with minimum difficulty.	1	2	3	4	5
11. Has a positive attitude in class, with peers and adults.	1	2	3	4	5
12. Receptive to new tasks or experiences — willing to take reasonable risks.	1	2	3	4	5
13. Attends class regularly.	1	2	3	4	5
14. Completes high quality homework and other assignments as directed and on time.	1	2	3	4	5
<p><b>Math or Science Teacher Signature _____ Date _____</b></p>					

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## BASEBALL COACH or P.E. TEACHER RECOMMENDATION FORM (2 Pages)

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- 3) Improve baseball and academic skills.
- 4) Have fun!!!

**Instructions:** Please complete **both pages** of this form in blue or black ink and return it to your student in a **sealed envelope** or mail it to 77 Massachusetts Ave., Cambridge, MA 02139 for inclusion in his application. The deadline for submission is **5:00 p.m. March 27, 2009**. Thank you very much for your time!

<b>STUDENT NAME</b>	
<b>YOUR NAME</b>	
<b>YOUR TITLE (circle one)</b>	Baseball Coach                      P.E. Teacher
<b>SCHOOL OR LEAGUE NAME</b>	
<b>WORK TELEPHONE</b>	
<b>EMAIL ADDRESS</b>	

## PERSONAL OBSERVATION

**Please share your candid thoughts about this candidate's ability to succeed on the baseball field this summer? (Please attach an additional sheet of paper if necessary.)**

# MIT Science of Baseball Program Student Application 2009

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## ATHLETIC PERFORMANCE ABILITIES

Please rank this applicant's abilities. (Place a check in only one of the columns.)  
1= Exceptional/top 5%, 2= Excellent/top 10%, 3=Average, 4= Satisfactory, 5= Poor

1. Demonstrates basic knowledge of baseball.	1	2	3	4	5
2. Demonstrates passion for baseball.	1	2	3	4	5
3. Works positively with teammates/classmates; shows team mentality.	1	2	3	4	5
4. Is receptive to coaching and instruction.	1	2	3	4	5
5. Effectively leads teams/peers.	1	2	3	4	5
6. Demonstrates leadership potential.	1	2	3	4	5
7. Demonstrates desire for self-improvement.	1	2	3	4	5
8. Is able to function effectively in a group.	1	2	3	4	5
9. Demonstrates a positive attitude about group challenges.	1	2	3	4	5
10. Does not present discipline problems.	1	2	3	4	5
11. Possesses general athletic skills and abilities.	1	2	3	4	5
12. Maintains general physical conditioning.	1	2	3	4	5
13. Attends class/practice regularly.	1	2	3	4	5

Math Teacher Signature \_\_\_\_\_ Date \_\_\_\_\_