Long Island Math Fair Deadlines

*All documents must be either dropped off or emailed to Ms. LaGattuta in the Math Office (Room 207) and Ms. O'Donnell (Room 222) by the end of the day for the dates listed below.

December 5, 2016

- *Rough draft* of paper which includes the Cover Page and Statement of the Specific Topic.

    Background/Introduction: 3-4 pages.
    a. Provide enough information to familiarize the reader with the examples and applications that will follow. Use internal citations!!
    b. Provide the source of your idea and why you find it interesting or provide the Rationale.
    c. The goal of the study - once introduced, discuss the particular aspect on which your project will focus.

    Work Cited Page - Use easy bib/citation master/endnotes – include journal articles, books, web pages and email correspondence with experts. By the conclusion of the project a minimum of 10 sources must be provided.

December 12, 2016

- Forms A-1 (Application form for Independent Entries), D (Report Cover Sheet) and Field Trip Consent Form (all attached).
- *Revised Draft* of previous submission + **Application**: Provide a sample problem or application of the concept *that you found in your review of literature.*

December 19, 2016

- *Revised Draft* of previous submission + "**What if**" component statement followed by sample problem or application.

January 4, 5 and 6, 2016

- Ms. LaGattuta will be available for feedback on the draft of your paper in the Math Office, (Room 207). Please set up an appointment via email in advance for feedback.

January 9

- *Add* **Further Research/Conclusion + Abstract + Turnitin Report**
- Submit papers into turnitin.com. Class ID: 14049415, Password: mathfair. Attach a copy of the "report" to each copy of your paper.

January 13, 2017 – *Please deliver color copies to Ms. Levine in the main office*

- **3 color copies**: [1]Cover sheet (form D) [2]abstract+ paper + work cited [3] Turnitin report

January 23, 2017 *** Only for Independent Research Students***

TOSHIBA: Online Registration + Sample Toshiba Web Pages; Team members must draw five sample web pages that communicate and promote their future technology vision. Web pages may be hand-drawn or computer-generated (e.g., PowerPoint) and may include text, pictures, photographs and diagrams. They should relate to material presented in the written description and **illustrate** the attributes of the chosen technology. NO webpage should ever contain ONLY WORDS!! One web page should be devoted to a model or visual representation of the technology that could be used to create a prototype for display. The model should help others visualize the design and communicate design features. Include a description of limitations of the model. No need to create an actual website or a prototype until a team becomes a Regional winner.

Toshiba Submission Day is February 2, 2017.

February 6, 2017
- Initial PowerPoint submission to be e-mailed to glagattuta@pobschools.org AND MOdonnell@pobschools.org

February 27-Mar 3
- Final PowerPoint presentation practice during your Research period or a scheduled appointment.

March 10, 2017
- Long Island Math Fair Presentation at Hofstra University (3:00 pm-6:00 pm).
- Bus leaves at the beginning of 9th period.

April 28, 2017
- Final Long Island Math Fair Presentation at Hofstra University (3:00 pm-7:00 pm) by invitation only.
- Bus leaves at the beginning of 9th period.

IF YOU DO NOT MEET THESE DEADLINES,
YOUR APPLICATION **WILL NOT** BE SUBMITTED TO THE LONG ISLAND MATH FAIR.

Paper Format

Cover page (Form D)

Abstract: (separate page) -150-word summary
> A short summary of what the reader can expect to find.
> It is a summary, NOT an introduction.

Background/Introduction
> Once the topic is introduced, what particular aspect of the topic does your project focus on? Expand on this in detail.

Application from Literature
> Provide a sample problem or application of the concept that you found during your review of literature

The "What If" component – Original material
> How will you expand on this topic? What variable will you manipulate?
> How does this change the results? *This is the hardest part.*

Conclusion or "For Further Research"
> What possible new directions can this research take?
> It should follow directly from the body of the paper and be somewhat concrete.

Works Cited Page
> Use easy bib or endnotes-must include a minimum of 10 sources,
> including journal articles, books and web pages.

MATH FAIR COMMITTEE STATEMENT

To students planning to enter the LI Math Fair and the Parents/Teachers of those students:

The Math Fair is significantly different from your other math experiences, such as Mathletes, in at least two respects. First, you will investigate a project for months, develop your own ideas about the topic and present them orally. In math class or Mathletes, the time span for a problem is minutes, not months. The LI Math Fair gives you the opportunity to develop your "math power" -the ability to investigate one topic and then to stand before a group of judges, peers and parents and defend your work. However, the second and major difference is the element of subjectivity and luck involved in the LI Math Fair. This occurs when you are placed in a room in the Preliminary and Final Rounds.

In the Preliminary Round, some rooms will have one or two winners and others will have three or four winners. You may be placed by the luck of the draw in a room of excellent papers. Had you been in another room, you might have won. The evaluation of your presentation and paper is subjective. To reduce this subjectivity, the LI Math Fair will be sending your paper to the judges before the Preliminary Round. **Please be aware that you must meet the following deadlines to enter the Fair this year: Your final paper must be submitted to Ms. LaGattuta (Room 207) postmarked by January 18, 2017.**

Some Tips and a Warning:
In the Preliminary Round, the judges will have had your paper for about two weeks. Your presentation on your paper is still the key to winning. Practice it as often as you can. Have note cards to help with the presentation, but don't read your paper to the judges. Talk to them about the significant parts of the paper. Good homemade visuals always help.

Warning: We will disqualify you for plagiarism, and no medal will be awarded even if you won at the Preliminary Round. Judges have been given web sites where they can verify whether or not the paper has been plagiarized. Moreover, your paper should have a bibliography and your footnotes should conform to your school's standards. Finally, you are required to sign on the application form that the paper has not been plagiarized.

The subjectivity of the Fair is difficult for students, parents, and teachers to accept. To balance this subjectivity, we have an outstanding group of judges, all volunteers. Most of the judges have many years of Math Fair experience. All have outstanding knowledge in mathematics. Most are teachers while others are engineers or other professionals in math related fields. The goal of all judges is to give you the best possible experience in the Math Fair. We hope you decide to enter the Fair - we believe it is a very unique, worthwhile activity and one which will help you improve mathematically.

What is Plagiarism?

Many people think of plagiarism as copying another's work, or borrowing someone else's original ideas. But terms like "copying" and "borrowing" can disguise the seriousness of the offense:

According to the Merriam-Webster Online Dictionary, to "plagiarize" means

- to steal and pass off (the ideas or words of another) as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source.

In other words, plagiarism is an act of fraud. It involves both stealing someone else's work and lying about it afterward.

But can words and ideas really be stolen?

According to U.S. law, the answer is yes. The expression of original ideas is considered intellectual property, and is protected by copyright laws, just like original inventions. Almost all forms of expression fall under copyright protection as long as they are recorded in some way (such as a book or a computer file).

All of the following are considered plagiarism:

- turning in someone else's work as your own
- copying words or ideas from someone else without giving credit
- failing to put a quotation in quotation marks
- giving incorrect information about the source of a quotation
- changing words but copying the sentence structure of a source without giving credit
- copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not (see our section on "fair use" rules)

Most cases of plagiarism can be avoided, however, by citing sources. Simply acknowledging that certain material has been borrowed, and providing your audience with the information necessary to find that source, is usually enough to prevent plagiarism. See our section on citation for more information on how to cite sources properly.

What is a citation?

A "citation" is the way you tell your readers that certain material in your work came from another source. It also gives your readers the information necessary to find that source again, including:

1. information about the author
2. the title of the work
3. the name and location of the company that published your copy of the source
4. the date your copy was published
5. the page numbers of the material you are borrowing

Why should I cite sources?

Giving credit to the original author by citing sources is the only way to use other people's work without plagiarizing. But there are a number of other reasons to cite sources:

1. citations are extremely helpful to anyone who wants to find out more about your ideas and where they came from.
2. not all sources are good or right -- your own ideas may often be more accurate or interesting than those of your sources. Proper citation will keep you from taking the rap for someone else's bad ideas.
3. citing sources shows the amount of research you've done.
4. citing sources strengthens your work by lending outside support to your ideas.

Doesn't citing sources make my work seem less original?

Not at all. On the contrary, citing sources actually helps your reader distinguish your ideas from those of your sources. This will actually emphasize the originality of your own work.

When do I need to cite?

Whenever you borrow words or ideas, you need to acknowledge their source. The following situations almost always require citation:

1. whenever you use quotes
2. whenever you paraphrase
3. whenever you use an idea that someone else has already expressed
4. whenever you make specific reference to the work of another
5. whenever someone else's work has been critical in developing your own ideas.

Helpful Hints for Presentations

1. Use Math word processor – looks more professional
2. Visuals- neat and well-organized and clearly visible
3. Don't read
4. 15 minutes- know the math as it refers to the topic and show your enthusiasm presenting it.
5. Be prepared for questions on any part of your paper.
6. On upper grade levels a paper that is no more than an outline of a textbook chapter will probably not win.
7. Dress appropriately
8. Practice presentation as often as you can and at least once with your mentor.

Possible Math Fair Topics

4th Dimension	Flow Charts	Pi
Abacus	Four Color Map Problem	Pictures
Adventure Game	Fractal Geometry	Platonic Solids
Area Under a Curve	Fractions	Polygons
Astronomy & Mathematics	Game Theory	Polyhedral
Attendance Program	Golden Rectangle	Polynomials
Battleship	Graph & Graphing	Prime Numbers
Binary System	History of Numbers	Probability in Genetics
Binomial Theorem	Infinity	Probability with Dice
Boolean Algebra Computer	Integers	Pyramids
Simulation	Integral Calculus	Pythagorean Theorem
Business Management	Kepler's Laws	Quaternions
Catalan Numbers	Lenses Golden Ratio	Rational Number Bases
Checkbook	Linear Equations	Relativity
Chinese Remainder	Lissajous Curves	Rotation of Axis
Theorem	Logarithms	Rubik's Cube
Codes & Ciphers	Logic	Sets
Complex & Imaginary	Logic & Truth Tables	Sine, Cosine, Tangent
Numbers	Magic Square	Slide Rule
Computer Abacus	Mastermind	Spirals
Computer Football	Math & Music	Squares & Square Roots
Computer Graphics	Matrices	Statistics
Computer Simulation	Matrix Algebra	Telephone Book
Conic Sections	Mendel's Law	Tessellations
Curved Lines	Metric System	The Simplex Method
Determinants	Mobius Strip	Topology
Differential Calculus	Modular Numbers	Trachtenberg Speed System
Diophantine Equations	Non-Euclidean Geometry	Trigonometry
Famous Mathematicians	Number Madness	Trisecting the Angle
Fibonacci Numbers	Optical Illusions	Venn Diagrams
Fibonacci Sequences	Pascal's Triangle	Zeno's Paradox
Finger Math	Permutations	

2017 AL KALFUS LONG ISLAND MATH FAIR
(FORM D)   REPORT COVER SHEET

To be completed by student. This must be attached to each of the three copies of your paper. All papers must be STAPLED (not bound) to this cover sheet.

STUDENT'S NAME _____ / _____
                        (Last Name)   (First Name)

   (OR)

TEAM MEMBERS' NAMES: (Last Name)   (First Name)

_____ / _____

_____ / _____

_____ / _____

GRADE LEVEL _____

TITLE OF PAPER _____

SCHOOL _____

The Math Fair receives many requests from judges for copies of student's papers. We do not release the papers without your permission. PLEASE **INDICATE HERE IF WE CAN RELEASE YOUR PAPER.** YES _____ NO _____
Remember: Please bring a postcard addressed to your teacher to the Preliminary Round to give to the judges, as most will write you with comments.
SPONSORING TEACHER'S NAME _____

Report will be reviewed.

Presentation will be reviewed.

PLAGIARISM: Paper documentation (bibliography, footnotes) will be reviewed.

GRADE 11: submit your TurnItIn.com report attached to each copy of your paper

2017 AL KALFUS LONG ISLAND MATH FAIR
(FORM A-1)   APPLICATION FORM FOR INDIVIDUAL ENTRIES

To the Student: Please make sure you circle the grade level you wish to participate in, and the Preliminary Round you will attend. **Note:** Students may attend either of the Preliminary Rounds of the Fair -that is Nassau students may go to the Suffolk Round (3/3 –Suffolk Community College) and Suffolk students may go to the Nassau Round (3/10-Hofstra). Please discuss this with parents/ teachers. The Math Fair Committee hopes you find this year's Fair to be enjoyable and a worthwhile experience.

Please **PRINT or TYPE** the following information clearly:

NAME OF SCHOOL _____

NAME OF STUDENT _____/_____

                                      (LAST NAME)   **(FIRST NAME)**

STUDENT CELL PHONE _____ HOME PHONE _____

TOPIC _____

Circle GRADE LEVEL: 7   8   9   10   11   **12 (Final round only)**

Circle Preliminary Round: **Nassau (3/10-Hofstra)**   **Suffolk (3/3-Suffolk Community College)**

Permission to participate in 2017 Long Island Math Fair:
(Please note: While we acknowledge subjectivity in the Fair, by signing below, all parents, students, and teachers accept the decision of the judges as FINAL! Student signature attests to the fact that the paper, or any part of the paper, has NOT been plagiarized.)

Sponsoring Teacher's Name (Please Print) _____

Sponsoring Teacher's Signature _____

Student's Signature _____

Parent or Guardian's Signature _____
                                        Must be signed by parent or guardian

Plainview- Old Bethpage C.S.D.
Field Trip Consent Form

Date this form was completed by parent/guardian:_____ Teacher: **Ms. G. LaGattuta**

(I give) (I do not give) my son/daughter_____
(Line out what does not apply)   Student Name

Permission to participate in a field trip to: **Long Island Math Fair-Hofstra University**

The trip is scheduled to leave the school at approximately **1:45 pm** on **3/10/17 and 4/28/17** and return to the school at approximately **7:00 pm** on both dates.

In accordance with school district policy students attending a field trip must abide by all school rules and regulations and follow the directions of accompanying staff members and chaperones.

MEDICAL EMERGENCY INFORMATION

Parent/Guardian Name:_____ Daytime Phone:_____

Evening Phone:_____   Cell Phone:_____

Name of an Emergency Contact Person:_____

Daytime Phone: _____ Evening Phone:_____Cell Phone:_____

Students Medical Insurance Carrier:_____

Policy Number_____

Does the student have any medical allergies? No_____ Yes_____

If Yes, Please list:_____

Does the student take any medications? No:____ Yes:____ (a doctor's written orders must be submitted to the nurse if the medication of amount differs from authorizations on file with the nurse.)
If Yes, please list:_____

Signature of Parent/Guardian:_____

Print Parent/Guardian's name:_____

***Deadline for submission of this form:*   __December 12, 2016__**