2017 Hillsborough Regional STEM Fair

Science, Technology, Engineering, and Mathematics

General Rules and Regulations

Hillsborough Regional

science, technology, engineering & mathematics fair



ELEMENTARY DIVISION K-5



Revised 8/16

GENERAL RULES AND REGULATIONS HILLSBOROUGH REGIONAL STEM FAIR ELEMENTARY DIVISION K-5

ENTRIES

- A. Every project entering the Regional STEM Fair must have previously been judged a winner at a school fair and the project deemed Regional STEM Fair quality. If your school has a tie at a certain grade level, please decide which project will represent your school.
- B. Individual participants must be students enrolled in grades 3-5 in public, charter, or private school in Hillsborough County.
- C. Grade K-2 students enter as a class.
- D. Grade 3-5 students may enter as individuals, OR
- E. Grade 3-5 students may enter as a small group of 2-4 students. Students participating in small group projects must be from the same grade level.
- F. ESE classes may enter a non-judged project as a whole class, <u>or</u> be included with your small group project entries if represented by a group of 2-4 students from the same grade level. If entered with your small group projects the project will be judged.

Class Projects	Individual Projects	Small Group Projects	ESE Group: Class
Non-Judged Entries	Judged Entries	Judged Entries	Non-Judged Entries
Allowed Per School	Allowed Per School	Allowed Per School	Allowed Per School
K-2: 1 per grade	Grades 3-5: 2 per grade	Grades 3-5: 2 per grade	1 per school
		*may include ESE small group of 2-4 students	·

- G. It is the teachers' responsibility to inform and provide copies of these rules and regulations to the entrants. It is the students' responsibility to be knowledgeable of these rules and regulations.
- H. In order for students to enter the fair, each school must submit a school registration form and registration fee of \$75.00 per Hillsborough County Public Schools; \$150.00 per Private schools and Charter schools by **December 9, 2016**.
- I. Checks should be made payable to <u>Hillsborough County Schools/Hillsborough Regional STEM Fair</u>, and sent to:

or

Shana Tirado, Elementary Supervisor Hillsborough County Schools ROSSAC Rt. 7

Shana Tirado, Elementary Supervisor Hillsborough County Schools 901 East Kennedy Blvd. Tampa, FL 33602-3408

J. An online entry form must be completed by **January 5, 2017.**

Find us on the web http://www2.sdhc.k12.fl.us/CountyScienceFair/Schools/index.asp

As you enter data, use proper capitalization for names.

Typed data will be used for the awards program.

Online entries MUST occur between December 9, 2016 and January 5, 2017.

K. Science Project Paperwork Check-In will be held the following dates: Location: USF Patel Partnership School

Jan. 2, 2017	8:30 am – 3:00 pm	Open for All Participating Schools
Jan. 3, 2017	2:30 pm – 5:00 pm	Open for All Participating Schools
Jan. 4, 2017	2:30 pm – 5:00 pm	Open for All Participating Schools
Jan. 5, 2017	2:30 pm – 5:00 pm	Open for All Participating Schools

You must bring the following:

- 1. A copy of the Hillsborough Regional STEM Fair School Entry Form printed from the online entry system after you input the data.
- A copy of the Hillsborough Regional STEM Fair Entry Forms for all projects: Class Projects, Grades 3-5 Individual Projects, Grades 3-5 Small Group Projects and (if applicable) a Class Project form for any ESE Non-Judged Class project. All required signatures must be completed.
- 3. A Human/Animal Research Form (as applicable) with all required signatures.
- 4. Group projects will require parental signatures for ALL students involved. If four students participated in the group project, four parental signatures are needed for the photograph release entry form.
 - * Please Note: Not all parental signatures need to be on the same form. The committee will accept multiple forms with parent signatures for group projects.

Any incomplete or late paperwork will result in student projects being ineligible for judging. Do not mail or fax paperwork. It is important to send a school representative familiar with the student projects to answer questions.

- L. Participants are expected to observe best rules of courtesy and conduct during the fair. Students whose conduct interferes with the judging process will be asked to leave the judging area and their projects will be disqualified.
- M. If there is a working model, it may be displayed only during the judging process and must be transported by the participant without assistance from an adult. The size of the model may not exceed the table space in front of the project. Models left after judging will not be returned.
- N. Participants are **not** to wear nametags, school shirts, or school uniforms on the day of judging.
- O. All projects must remain through the end of the Hillsborough Regional STEM Fair and must be picked up by a school representative or the participant after the awards ceremony. Any remaining projects will become property of the location after the awards ceremony and will not be returned.
- P. All projects entered without the required STEM Fair log will **not** be judged. They will be disqualified and closed for judging.

SPECIFIC GRADE LEVEL REQUIREMENTS

A. Grades K-2:

Students work collectively with the help of a directing teacher to produce a class project for display and be eligible for any special awards.

B. <u>Grades 3 - 5</u>:

Students work as individuals to complete a scientific experiment and construct a display. Grades 3 - 5 students who work as a small group must contribute equally to complete a scientific experiment and construct a display. **A background paper is not required.** Teachers and parents can serve as advisors in paper research and writing, as well as in correction of spelling and grammatical errors.

- C. <u>A STEM Fair log is required for ALL projects</u>, including Kindergarten, First and Second grade class projects. The log should show evidence of student work throughout the experimentation period. This requires dates to be recorded as each part of the project is done. The log must be clearly marked with the project title and label. Projects without logs will be disqualified.
- D. Any projects that require a Human/Animal Research Form must submit a copy of the form during paperwork check in. A copy must also reside in the student's STEM Fair log.
- F. Students entering individual projects in grades 3-5 must be present for judges' interviews during the time specified by the Fair Directors. If a student is not present the project will not be judged.

Students entering a small group project must select <u>ONE</u> member to be present for judges' interviews during the time specified by the Fair Directors, but all may attend the fair.

CATEGORIES

A. Grades 3-5 individual projects are divided into 6 categories:

Life Science

Earth/Space Science

Physical Science – Matter

Physical Science - Energy

Math/Computer/Engineering

Behavioral Science

Grades 3-5 small group projects are divided into 6 categories:

Life Science

Earth/Space Science

Physical Science – Matter

Physical Science – Energy

Math/Computer/Engineering

Behavioral Science

B. The selection of category is the responsibility of the student with guidance from the sponsor and shall not be changed by the officials of the Hillsborough Regional STEM Fair.

RESEARCH INVOLVING HUMANS/ANIMALS

- A. Students who intend to conduct research involving humans/animals must file a research plan **Human/Animal Research Form**, p. 8 with the School's Review Committee* **BEFORE** starting research. This form must accompany the application form submitted for the Hillsborough Regional STEM Fair. Refer to the attached information concerning humane considerations.
- B. No surgery or dissection may be performed.
- C. Non-mammalian vertebrates, excluding birds, may be used in biological experiments, provided that harm does not result from such experiments.

RESEARCH INVOLVING HUMANS

- A. Normal physiological and behavioral studies for the human animal may be conducted, provided that such projects are carefully selected so that neither physiological nor psychological harm to the subject can result from such studies. No student should be allowed to proceed with any such research unless an adult supervisor determines that no physical or psychological risk is involved.
- B. Students who intend to conduct research involving humans must file the **Human/Animal Research Form**, with the School's Review Committee* **BEFORE** starting research. This form must accompany the application form submitted for the Hillsborough Regional STEM Fair and a copy must be kept in the student's data log. Refer to information provided in this section.

PROHIBITED RESEARCH:

RESEARCH INVOLVING MOLD, HUMAN BLOOD AND PATHOGENS

Projects involving **HUMAN BLOOD** and **PATHOGENIC AGENTS** (bacteria, mold-bread mold included, viruses, fungi, parasites, etc.) are prohibited. (Applies to all pathogens-human, non-human, and plants).

*Yeast is the ONLY exception and IS approved to use.

RESEARCH INVOLVING WEAPON

Weapons include any kind of gun, arrows, catapults, knives, darts, paint ball guns or explosives (including rocketry engines). Any projects including these items are prohibited at the elementary level. Any objects that could cause bodily harm are prohibited. Please email Shana Tirado on IDEAS if there are any questions on your student projects.

^{*&}lt;u>School's Review Committee</u> is a group of qualified individuals responsible for evaluation of student research for compliance with the rules. Members of the committee could include the school assistant principal, principal, guidance counselor, psychologist, M.D., or Ph.D. in areas of science or science research, etc. Designate one member as a chairman.

PROJECT RULES - RESEARCH INVOLVING VERTEBRATE ANIMALS (EXCLUDING HUMAN SUBJECTS)

Humane Considerations

The legitimate use of animals in the classroom, in the laboratory or in science research projects presupposes two postulates. First, the use of animals for learning, as it is for testing and research is morally acceptable; and second, that man has a responsibility to grant the animals used in research every humane consideration for their comfort and well being.

The moral responsibility that we all have toward animals means that we cannot give free rein to students in research involving animals. Consequently, those of us who would nurture a healthy curiosity in youngsters are placed in a delicate position. To "turn off" a prospective biologist or physician by excessive limitations would be a serious mistake. We know that through science fair work thousands of today's physician, dentists, veterinarians, scientists, engineers and science teachers were given an important impetus toward their careers.

The proper care and use of animals is a primary consideration in school research projects. If the student can acquire this concern, through becoming familiar with animals and their needs, it will be beneficial to both the scientific and personal development and education of the student.

The use of protista and other invertebrates is to be encouraged for most research involving animals. Their wide variety and the feasibility of using larger numbers than is usually possible with vertebrates make them especially suitable.

This is not to say that the use of vertebrate animals should be prohibited. Certain forms of investigation can only be done with vertebrates. But since the higher forms of animal life are more complex, more experience and training are required to use them properly. Under proper supervision, there is no reason why students should not be permitted to use vertebrates in research.

All animals should be lawfully acquired, and their care and use must be in compliance with local, state and federal laws. Lack of availability of information about the proper care and use of animals is not an acceptable excuse. There are numerous publications, sources of information and professionals available who can supply information on proper care no matter how remote the school district.

Proper care is imperative since quality animal research demands quality animal care. If animals are not used or cared for properly, the accuracy of the data is certainly questionable, and thus the value of the project greatly decreased or even destroyed. Non-behavioral studies involving common laboratory animals (rats, mice, hamsters, gerbils, guinea pigs and rabbits) are permitted only in an <u>institutional environment</u> and <u>cannot be conducted in the home</u>. A student must have an adequate knowledge of the characteristics, care and handling of the species to be used in order to do good research.

The use of animals by students under qualified adult supervision is both necessary and important for learning about the life science and for encouraging an interest in careers in the life sciences. To be done properly, however; it must include a concern for the humane and proper use of animals, particularly vertebrates. To ensure this, qualified adult supervision is essential.

PROJECT RULES - RESEARCH INVOLVING VERTEBRATE ANIMALS (EXCLUDING HUMAN SUBJECTS) (Continued)

All research involving live vertebrate animals must conform to the following rules:

- Research must be conducted with a respect for life and an appreciation of humane considerations
 that must be afforded all animals. Development of new, or refinements of existing, surgical
 techniques, or research which is carried to a lethal conclusion without proper sacrifice, are neither
 humane nor do they develop a respect for life, nor are they educational, and thus are not allowed.
- 2. Surgical procedures on vertebrate animals will only be done within academic, hospital, clinical or institutional research facilities <u>under direct adult supervision</u> to assure proper technique. This rule is intended specifically to prohibit such procedures at home.
- 3. The comfort of the animals used in any research experiment shall be a prime concern. No research using live vertebrate animals shall be attempted unless the animals have been obtained from a reliable source and the following conditions can be assured: appropriate, comfortable quarters; adequate food and water; humane treatment and gentle handling. Proper quarters and care must be provided at all times, including weekends, holidays and vacation periods, to be in compliance with federal and state guidelines. Animals must be observed daily to assess their health and welfare.
- 4. <u>Under no circumstances</u> should the student be allowed to perform sacrifice unless under the immediate supervision and in the presence of the animal care supervisor, qualified scientist and/or the designated adult supervisor (except in an emergency which would require a humane termination of life).
- 5. Observations of wild or domestic animals in their normal habitat where no contact with individual animals is involved require only a Human/Animal Research Form.
- 6. Weight loss in animals is one significant sign of stress or toxicity and maximum permissible weight loss or growth retardation of any experimental or control animal is 15 percent.
- 7. Acid rain, insecticide and herbicide toxicity studies using live vertebrate animals are prohibited. Tissue and invertebrate studies are recommended as alternative models for testing.

To provide for humane treatment of animals, an animal care supervisor who is knowledgeable in the proper care and handling of laboratory animals must assume primary responsibility for the conditions under which the animals are maintained.

No research may be undertaken with vertebrate animals that involves anesthetics, drugs, thermal procedures, physical stress, organisms pathogenic to man or other vertebrates, ionizing radiation, carcinogens or surgical procedures, unless these procedures are performed UNDER THE DIRECT SUPERVISION OF AN EXPERIENCED AND QUALIFIED SCIENTIST OR DESIGNATED ADULT SUPERVISOR IN AN INSTITUTION LABORATORY. In addition to the Qualified Scientist, a Designated Adult Supervisor will be required when the research is not conducted in the Qualified Scientist's laboratory.

These Rules and Procedures have been excerpted from the International Science and Engineering Fair Rules.

^{*}If required by School Review Committee due to possible risk to animals or humans.

HUMAN/ANIMAL RESEARCH FORM

*Required For All Projects Using Animals or Humans

MUST BE COMPLETED PRIOR TO DOING ANY ANIMAL OR HUMAN RESEARCH

B. Starting Date of Experiment: C. Purpose of Experiment: D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.	Type or Print		
School: Teacher's Name: A. Title of Project: B. Starting Date of Experiment: C. Purpose of Experiment: D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.	Student Individ	dual / Group Name(s):	
Teacher's Name: A. Title of Project: B. Starting Date of Experiment: C. Purpose of Experiment: D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.	Grade:	Category:	
Teacher's Name: A. Title of Project: B. Starting Date of Experiment: C. Purpose of Experiment: D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.	School:		
A. Title of Project:			
B. Starting Date of Experiment: C. Purpose of Experiment: D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.			
D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.			
D. Describe how the animal(s) / humans will be used in this experiment. Include provisions for animal care and safety. For Human Research, include procedures to minimize any risks: Signature of Student: I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.	C. Purpos	se of Experiment:	
I certify that I have reviewed the research plan prior to the beginning of the experiment and it does comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.			al
comply with the Animal or Human Research Rules of the Hillsborough Regional Science Fair.	Signature of S	itudent:	
Date:Signature:Chairperson - School Review Committee	Date:	Signature:Chairperson – School Review Committee	
*Signature of Adult Supervisor (Human Research)			
*Signature of Animal Care Supervisor:			
*If required by School Review Committee due to possible risk to animals or humans.			

ADULT CHAPERONES

All participants must be accompanied to the Hillsborough Regional STEM Fair by an official adult designated by the school. This sponsor is responsible for supervision of the participants during the fair.

SECURITY

The Hillsborough Regional STEM Fair Committee will make every effort to safeguard all projects and equipment. **EXPENSIVE EQUIPMENT SHOULD NOT BE DISPLAYED**. Facsimiles should be used to prevent loss or damage. Students may display equipment of appropriate size during judging if it follows the rules and regulations for displays and is removed <u>immediately</u> after judging.

DISPLAYS

- A. Students may have assistance with basic display construction: however, arrangement of display material on the display board must be done by the students.
- B. MAXIMUM AREA FOR DISPLAY IS 40 cm DEEP, 122 cm WIDE AND 100 cm HIGH. ANY DISPLAY SHAPE OR DESIGN IS SUITABLE AS LONG AS IT FITS INTO THE MAXIMUM DISPLAY AREAS. All displays must be self-supporting.
- C. Students may display models only during judging. Students must keep models with them until their category is called to the judging area. Models may **NOT** exceed the display space on the table in front of their project board. **Models must be removed by the student when their judging category is released.**
- D. STEM FAIR PARTICIPANT OR SCHOOL NAMES/LOGOS MAY NOT APPEAR ON DISPLAY MATERIALS OR BACKGROUND PAPERS PRIOR TO JUDGING. K-2 class projects may have student first names, while grades 3-5 should have no reference to the participant's name anywhere on the project. Students who participate in data collection activities in any grade level may be identified on the project by first name only. Identification, sent to teachers by the committee, must be placed on the center back of the display in a location that is not visible to judges or officials. A label, providing the project identification number will be furnished and must be attached to the back of the project, a different label will be on the front and another label on the log.
- E. The Regional STEM Fair directors reserve the right to reject projects they deem inappropriate.
- F. Photographs depicting the participant(s) involved with his/her projects are permissible. Schools may not be identified. No school T-shirts worn in photographs.

DISPLAY RESTRICTIONS

- A. Chemicals and any liquids (including household products), soils, foods, gases, open flames, and explosives may not be displayed. Wrappers may be used on displays instead.
- B. Pictures of dead or dissected animals may not be displayed.
- C. Plants or plant parts may not be displayed.
- D. Controlled or illegal substances, including over the counter drugs, prescription drugs, alcohol, or tobacco may not be part of the entire display.
- E. Knives, syringes, or any sharp objects are not to be displayed.
- F. The exhibition of human/animal parts is prohibited.
- G. Any item that could be easily pulled off and swallowed will be removed or secured by the screening committee.
- H. Glass items and plastic "baggies" are not to be displayed.
- I. Straight pins, staples, and tacks are not to be used to secure materials onto display boards.

HILLSBOROUGH REGIONAL STEM FAIR JUDGING CRITERIA

All STEM fair projects will be judged by a team of judges using a rubric.

Judging Criteria for Individual and Small Group Projects:

The student has completed an experiment using the scientific method/ engineering design process.

- The student identified all parts of the scientific method or the engineering design process.
- The sample sizes and population sources were carefully chosen.
- The variables of each experiment were clearly defined.
- The controls of the experiment are clearly defined.
- Replications and duplications were utilized.
- The student anticipated the problems encountered.
- The student related the work to that reported in the research.
- The data were collected in quantitative units, measurements, or qualitative descriptions.
- Several trials (5) were done; not just one.
- The study was completed or brought to a logical stopping place.
- Students could support their conclusion based on evidence and data collected.
- The experimental protocols were handled with skill.
- The experiments were designed with care and anticipation.
- Data measurements were done precisely.
- The study was skillfully designed and was not too complicated.
- Technical problems were overcome and not merely avoided.
- Graphs, photography, and any data displayed showed evidence of student's involvement.
- This study was the student's and excessive help was not utilized.

The STEM Fair experiment log includes a chronology and anecdotal notes of the project: (dates, specific things that were measured, any changes in the project, etc.)

- Students kept a dated log of project implementation.
- Students have anecdotal notes of the chronology of the project.
- Students included specifics of their projects, materials, how things were measured (students should use measurements and tools they have used in math class)
- Students showed reflections in their log based on evidence and observations throughout the experimental process.
- Students kept notes of the background research that they collected in order to make their hypothesis statement.
- Students reflected on the outcome of their project, how things could have changed, other questions they may have based on their research.
- Students kept anecdotal notes on problems that they encountered with their research and reflected their changes.

Communication of data (graphs, data, 5 trials, students are able to discuss trends)

- Students kept quantitative and qualitative data.
- Students displayed their data in a table, chart or other visual.
- Students accurately graphed their data.
- Students were able to discuss the trends in their data.
- Students completed 5 trials (They do not need to average).
- Students kept their measurements consistent.

Student Interview

- Students are able to explain why they chose their topic and project.
- Students area able to articulate the real world implications of their project.
- Students were able to cite evidence from their project to support their conclusion.
- Students are able to explain their variables and data.
- Students were able to articulate their findings and explain what they would want to find out next.

HILLSBROUGH REGIONAL STEM FAIR PARTICIPANT ENTRY FORM K - 2 CLASS PROJECTS AND ESE NON JUDGED PROJECT

Scho	ool:				
Gra	de Level Circle one:	K, 1st,	2nd,	ESE - Non-Judged	
٠.	e or print MPLETE PROJECT TITL	E AS IT APPI	EARS ON	YOUR DISPLAY:	
Brie	f Description of experime	ent:			
Tea	cher's Name:				
		First		Last	
	reby certify that this exhil to the best of my knowle		•	mprovement thereto) during the c s and regulations.	urrent school year
	ve pre-screened this proj cher Initial in each box:	ect and verify	that the fo	ollowing components have been c	ompleted.
	Prohibited items are n I have reviewed and foll This project follows the	ch Form (if appoint on display lowed the Hills scientific mether the control of t	olicable) v (refer to sborough nod or eng	out a data log will be disqualified a rules and regulations). Regional STEM Fair rules and regineering design process. hits (40cm deep x 122cm wide x 1	gulations.
TEA	CHER SIGNATURE:				
DAT	· c .				

HILLSBROUGH REGIONAL STEM FAIR

PARTICIPANT ENTRY FORM 3RD - 4TH - 5TH INDIVIDUAL PROJECTS

Circle one Category:

School:			Life Science (LS) Earth/Space (ES
Grade Level:			Physical Science - Matter (PSM)
			Physical Science - Energy (PSE)
Project Title			Math/Computer/Engineering (MCE)
			Behavioral Sciences (BS)
			20
Registrant's Name:	First	Last	
		Lasi	
Teacher's Name:(For Program)	First	Last	
(FOI FIOGRAIII)	FIISt	Lasi	
Brief description of experime	ent:		
Engineering Fair and for the	ne Hillsborough County F Ilsborough Regional Scie	Public Schools to use ence and Engineering	e Hillsborough Regional Science and photographs of my child and his/her Fair. I understand that these may be
that it has our consent as at as specified in the rules ar individual. It also has NO	n approved STEM Fair Pr nd regulations, <u>and was i</u> items that are prohibite Physical Features form	oject. To the best of one one of the previously done and for display for I had and we understand and and one of the control of	b) during the current school year and bur knowledge it is the child's own work a small group project or by another ave double-checked and initialed on ad agree to abide by the rules and
We have pre-screened this STEM Fair Log (req		the following compo	nents have been completed:
	method or engineering de	esian process	
Human/Animal Res	earch Form (if applicable)	• .	
Prohibited items a	re not on display (refer t		5)
Freestanding displa	y size within limits set fort	J	•
_	name, and school name	_	
Student Signature:			
Teacher Signature:		Date:	

HILLSBROUGH REGIONAL STEM FAIR PARTICIPANT ENTRY FORM 3RD - 4TH - 5TH AND ESE JUDGED PROJECTS SMALL GROUP

Life Science (LS) Earth/Space (ES)
Physical Science - Matter (PSM)
Physical Science - Energy (PSE)
 Math/Computer/Engineering (MCE)

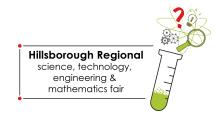
Circle one Category:

School:			Math/Computer/Engineering (MC
Grade Level:	-		Behavioral Sciences (BS)
County Public School	ols to use photographs ering Fair. I understand		nal STEM Fair and for the Hillsborough taken during the Hillsborough Regional ia releases.
Find	Lord	Parent Signature:	date:
First	Last	Daniel C'anal	1.1.
First	Last	Parent Signature:	date
		Danast Cinnatura	dete.
First	Last	Parent Signature:	date:
		Descrit O'cont.	Late
First	Last	Parent Signature:	date:
Teacher's Name:			
(For Program)	First	Last	
We hereby certify that that it has our conser as specified in the rindividual. It also ha Elementary Checkl	at this exhibit was cons nt as an approved STE ules and regulations, a is NO items that are ist of Physical Featu	M Fair Project. To the best of o and was not previously done a prohibited for display for I ha	b) during the current school year and ur knowledge it is the groups own work a small group project or by another ave double-checked and initialed on ad agree to abide by the rules and
We have pre-screer	ned this project and v	erify that the following compo	nents have been completed:
STEM Fair L	og (required)		
	ientific method or engin	eering design process.	
Follows a sci Human/Anim Prohibited in Freestanding	al Research Form (if a	pplicable)	
Prohibited in	tems are not on displ	• •	
Freestanding	•	its set forth in rules and regulati	ons
_		chool name are not visible anyw	
Student Signature:			Date:
Student Signature:			Date:
Student Signature:	•		Date:
Student Signature:			Date:
Teacher Signature:			Date:

2016-2017 GENERAL TIMELINE

	-
August / September	Discuss STEM Fair and science projects with faculty. Organize a Science Steering Committee and appoint a chairman for the STEM Fair. Set a date for School STEM Fair and optional parent meeting - Schedule an optional parent meeting to discuss science projects and STEM Fair.
August September	Teachers introduce components of a project and complete a Mock STEM Fair Experiment with the class. *Topic *Purpose *Hypothesis *Procedure Materials Variables Step-by-Step Directions *Data *Graphs *Conclusions *Keeping a STEM Fair log of the experiment
August- November	 Student(s) select topics, write purpose, hypothesis and procedure and begin conducting experiment. Human/Animal Research Form (p. 8) must be completed, if needed, BEFORE work begins. Teachers continuously provide conferencing and feedback in student STEM Fair log, give encouragement to students and discuss student graphs, and conclusions.
November December	 Finalize the school fair and plan to have time for viewing by students, parents and teachers. Make sure all students receive recognition for participation. Check for media coverage.
December	 Select student representatives for Hillsborough Regional STEM Fair and complete all paperwork for entry deadline. Allow time to secure signatures of students, parents and teachers with completed checklists.
December 9, 2016	- DEADLINE for School Registration Form and Registration Fee \$75.00 for Hillsborough County Public Schools \$150.00 for Private Schools and Charter Schools
December 9, 2016 through January 5, 2017	- Enter data into the online entry system. Print one copy of the online entry form.
January 2, 2017 January 3, 2017 January 4, 2017 January 5, 2017	- CHECK IN Regional STEM Fair entry forms (paperwork) Location: USF Patel Elementary - Forms must be hand-delivered to Check In (refer to page 3). Incomplete or late paperwork will result in student projects being ineligible for judging.
February	Have a wrap-up session on the STEM Fair with the students. What ideas did students generate from other students? What steps would help improve the experience for next year? Prepare student for oral questions from judges.
February 14, 2017	- HILLSBOROUGH REGIONAL STEM FAIR JUDGING Tampa Convention Center
February 15, 2017 5:30 pm	- HILLSBOROUGH REGIONAL STEM FAIR AWARDS CEREMONY Tampa Convention Center

Hillsborough County Public Schools



MEMORANDUM DATE: August 2016

TO: Elementary Administrators

FROM: Shana Tirado, Supervisor, Elementary Science

SUBJECT: Hillsborough Regional STEM Fair Registration Form

If your school is choosing to participate in the Hillsborough Regional STEM Fair February 2017, please complete the information below to indicate your intent **and** the name of the STEM Fair contact person for your school. This information will facilitate the online procedure.

Elementary Division registration fee: \$75.00 for Hillsborough County Public Schools \$150.00 Private Schools and Charter Schools

Please make checks payable to Hillsborough County Regional STEM Fair.

Return this form to:

Shana Tirado, Elementary Science Department

901 E. Kennedy Blvd. Tampa, FL 33602-3408 **Due date: December 9, 2016**

If you have any questions, please contact my office at 272-4479.

2017 HILLSBOROUGH COUNTY REGIONAL STEM FAIR ELEMENTARY DIVISION REGISTRATION FORM



We:	ARE participating in the Hillsborough Regional STEM Fair. ARE NOT submitting entries for the Hillsborough Regional STEM Fair, and hosting a school wide Science STEM Fair on	
SCHOOL:		
Address:		
Phone #		
Please Print: STEM FAIR (CONTACT PERSON(s):	
Email Address		