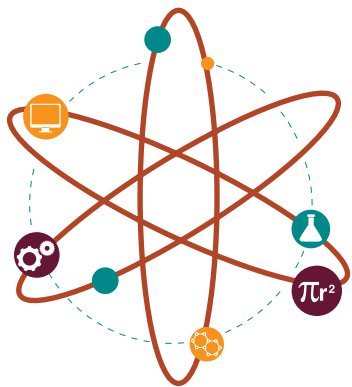


# TEACHER INFORMATION HANDBOOK



## FLINT REGIONAL SCIENCE FAIR

Inquire. Innovate. Inspire.



Serving students in Grades 4-12 from Genesee,  
Lapeer, Shiawassee, St. Clair and Tuscola Counties.

## WHAT IS THE FLINT REGIONAL SCIENCE FAIR?

FRSF is your regional fair affiliated with the **Society for Science and the Public** (SSP) through which High School students can access the Michigan (MSEF) and INTEL International Science & Engineering (ISEF) Fairs.

Middle School students can earn invitations to register for the Broadcom MASTERS (Math, Applied Science, Technology, and Engineering for Rising Stars) competition sponsored by SSP.



Students get the real recognition they deserve, including scholarships to help pay for college.

The objective of FRSF is to engage students in science/STEM outside the classroom. It provides opportunities to become self-motivated inquirers and experimenters finding new possibilities while having fun learning. Kids engaged in STEM have brighter futures, greater opportunities and options for rewarding careers not otherwise possible.

### Parents and Teachers Ask - What is the Value to Students?

- Self-motivation-- Students research a STEM area of their choice. Engaged students want to do more.
- Empowerment-- to think outside the box
- Confidence—that comes with experience
  - Learning strategies to identify and solve problems and doing hands-on experiments
  - Presenting results and talking with judges who are professionals in scientific and technical fields
- Getting recognition they earn
- Meeting other kids interested in learning and doing
- Develop life skills—presenting their ideas and sharing what they are learning



### Kids Ask -- Why Enter the Science Fair?

- Explore neat stuff on topics that interest you. You choose your topic.
- Learn problem solving techniques through hands-on experiments.
- It's a great way to discover new interests and talents and find out about careers that use science.
- Science Fairs encourage you to "think outside the box."
- Develop your presentation and interviewing skills.
- There are scholarships and prizes that can help pay for college.
- The satisfaction of using your brain and your hands.
- It's fun!

## RESOURCES FOR TEACHERS

Visit [www.flintsciencefair.org](http://www.flintsciencefair.org) for:

- Fair information and Registration
- Video and stories from the fairs
- Teacher and student resources
- A PowerPoint suitable for the classroom.
- FRSF Handbook
- Judges Handbook - "Important Information for Judges"

[www.flintsciencefair.org/teachers.php](http://www.flintsciencefair.org/teachers.php)

The ISEF Rules Wizard is a neat way to identify special rules and forms that apply to unique project situations.

(<http://apps.societyforscience.org/isef/students/wizard/index.asp>)

The Wizard is helpful to ALL students whose project involves human subjects, vertebrates or potentially hazardous biological agents (cultured microorganisms, R-DNA, fresh tissue, blood or body fluids, parasites). The Wizard will guide the student to determine all the pre-approvals, approvals, reviews, and forms needed for his/her specific type of project.

Send your students there before they begin their research!

[www.societyforscience.org](http://www.societyforscience.org)



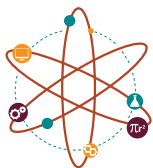
Subscribe to the FRSF mailing list for notices, news and to request material on our web site or email [info@flintsciencefair.org](mailto:info@flintsciencefair.org) For additional materials, questions or if we can assist you in any way, please do not hesitate to call or email.



## You be the judge!

We welcome you, the teacher, to be a judge at the fair. If you have not experienced a science fair judging is a great way to see what kids are doing, meet other professionals and provide encouragement to kids as they embark on their journeys with STEM.

Never judged before? Our Judges handbook "Important information for Judges" (available on our website) is a great resource.



### Considering hosting a local or district fair?

Maybe FRSF can help—identify judges and mentors, locate special equipment kids need, organizational ideas, judging strategies, etc. Ask and we will try.

## HOW DO MY STUDENTS GET STARTED?

1. Encourage them
2. Assist your students with picking an area of STEM that interests them.
3. Refer them to the FRSF web site and FaceBook page to learn about science fairs. They are great resources with links to help identify possible topics.
4. Suggest they talk with someone who knows something about the proposed topic--you, other teachers, parents, or neighbors.
5. Recommend mentors who are also available to help. FRSF might be able to help identify mentors.
6. Remind them to register on-line or by mail
7. Invite them to ask questions.

### Fees:

There is no registration fee, however a late fee of \$10 applies for individual registrations submitted after the published deadlines.

Local fair directors, whose fairs are held after the registration deadline, may use Block Registration to register students without penalty.

**Field Trips:** Plan a field trip to FRSF on Monday after the fair. Call (810) 762-9583, or email [fasdirector@hotmail.com](mailto:fasdirector@hotmail.com) to reserve a time.

## FRSF Weekend Schedule of Events

**Friday** Project set-up 3:00-6:30 pm at Kettering University.  
Preliminary Judging to identify Finalists (no students present).

**Saturday:** Judging interviews in the morning, open viewing in the afternoon, (usually after 2:00 p.m.) Finalists are interviewed by several individual judges or teams of judges. Non-finalists are interviewed by one judge.

**Sunday:** 1:30pm Elementary Award Ceremony; 3:15pm Junior & Senior Award Ceremony, open viewing and media interviews

**Monday:** Projects on display for school field trips.  
Project removal 3:00-7:00 pm.

"They need to make connections between the concepts they are learning and real life. We need to convince all students that science is connected to everything."

- Elaine Mackey



**Prizes** - FRSF believes all participants are winners so all receive a ribbon and bag of "goodies". Finalist prizes include scholarships, iPads, Kindles, gift cards, other awards and trips, the total value of which is approximately \$30,000.

**Finalists** - Each year FRSF awards approximately \$30,000 in prizes, scholarships and gift cards to Finalists in all divisions. Top prizes for Senior Division include an iPad2, scholarships and all-expense paid trips for four senior division winners to the INTEL International Science & Engineering Fair (ISEF). All senior division finalists win sponsorship to compete in the Michigan Science & Engineering Fair (MSEF).

Top prizes for Middle school students include Kindle Fires and scholarships and many earn nomination to apply for the Broadcom MASTERS competition. Elementary finalists win gift cards.

**Special Awards** - All FRSF participants are considered for the nearly 160 Special Awards presented each year by various professional organizations, individuals, institutions and government agencies.

**Teachers** - Science fairs help teachers bring learning to life. They provide a way to engage students in STEM inquiry (Science, Technology, Engineering & Mathematics) encouraging them to become investigators, actively supplementing and complementing what occurs in the classroom. FRSF rewards educators through the **Teacher of The Year Award** given annually to one individual via a nomination and judging process—see Teacher tab on the web site.

## A TEACHER'S PERSPECTIVE

### What Makes Science Fairs so Valuable to Students?

Science has to be experienced; you have to get the kids hands' dirty. Science is almost like a foreign language. There is an abundance of vocabulary and reading about concepts that students have to work through, but if the kids don't get to touch it, feel it, and play with it a bit – they won't retain any of the information. I have a passion for teaching science; students want to know how and why things work and that is the part I enjoy helping them discover. I think it is important for schools to hold science fairs and require students to participate.

- Elaine Mackey, Holly Academy FRSF "Teacher of Year 2010"

### Questions?

Email: [director@flintsciencefair.org](mailto:director@flintsciencefair.org)

Call: 810-762-9583



Subscribe to the FRSF mailing list for notices, news and to request material on our web site or email [info@flintsciencefair.org](mailto:info@flintsciencefair.org).



**Flint Regional Science Fair**

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