



TRI COUNTY SCIENCE & TECHNOLOGY FAIR

PUTNAM <> WESTCHESTER <> ROCKLAND

Organized by **The Putnam Children's Discovery Center, Inc.**

A not for profit organization per 501 (c) 3

www.DiscoveryCtr.org

Mailing address: PO Box 222 Carmel, NY 10512

TRI-COUNTY SCIENCE & TECHNOLOGY FAIR

2022 VIRTUAL FAIR

ELEMENTARY & MIDDLE SCHOOL

RULES AND REGULATIONS

Please note it is "assumed" that a Fair official- ie teacher, principal or department chair is reading these rules even though they are made public

Eligibility:

- The Tri-County Science and Technology Fair is open to all students in public and private schools as well as home schooled children grades K-12 located in Westchester, Rockland, and Putnam Counties. Students may reside outside of these counties as long as the school is physically within the county limits. Example: a student lives in Connecticut while attending a private school in New York.
- The first **Twelve** projects per division are covered by a flat fee. Additional projects can be entered but they will incur an additional fee, see chart herein.
- Elementary Division is K-4
- Middle School Division is grades 5-8
- A school that spans across the divisions may submit students in each division. Example a K-5 school may send up to 24 projects within grades K-4 and up to 27 projects from grade 5.
- We will use the term "project" to represent an exhibit. A project can have 1, 2 or 3 students contributing to it and will have a single poster board regardless of number of contributors.
- **Team:** We define team as students all attending the same school. They can be in different grades within that school however a 5th grader on a team of students in 6th, 7th, 8th grade would not be able to advance to Broadcom with the teammates.

**** Please note HS (grades 9-12) have different rules, please find online at www.DiscoveryCtr.org.*

Entry Fees and Admissions:

- \$275 per school flat fee (up to 12 projects) until January 31 entry fee if school is contained in one division.
- \$325 flat fee (up to 12 projects) until January 31 if school spans two divisions (i.e. K-5 spans two of our divisions K-4, 5-8 and each division may send 12 projects)
- An additional 12 exhibits in elementary division and extra 15 exhibits in middle school can be added. \$30 for solo; \$35 double; \$42 a project with three contributors when added before January 31. **Elementary division cannot exceed 24 and middle school cannot exceed 27 projects.** See chart.

1

Tri County Science & Technology Fair is done with cooperation from:
 Science Teachers Association of NYS (Westchester Section); Westchester Putnam Technology Educators and Science Professionals
 Grand Sponsor Pepsi R&D; additional support from Kohls Associates in Action

Entry Fees and Admissions continued:

Flat Rate Division Fees

When you have exceeded 12 projects use additional projects fees

Price Valid Dates	Single Division (K-4 or 5-8) <i>Up to 12 projects</i>	Double Division (ex K-5, 3-6, k-6) <i>Up to 12 projects</i>	Additional Solo Projects	Additional Two Contributors Projects	Additional Three Contributors Projects
Until January 31	\$275	\$325	\$30	\$35	\$42
February 1-28(29)	\$325	\$375	\$35	\$42	\$45
March 1-14	\$400	\$450	\$40	\$48	\$55
March 15-31	\$500	\$550	\$55	\$75	\$90
With permission April 1	Not applicable	Not applicable	\$100	\$100	\$100

Pandemic Exceptions

- Students that participated in a previous Tri County Fair may enter directly if their school is not holding a competition.
- Schools that cannot hold a Fair live or Virtually and cannot determine who to send at the school level can allow parents to contact us directly and it will be first come, first serve up to 24 projects on the Elementary level and 27 projects on the Middle School level with no duplications. For example, if a fourth parent wants to enter in Biology and three projects have already done so from a school that category will be closed on that level.
- **Fee Structure for a direct entered project is as follows:**

Prices Valid Dates	Individual Contributor	Two Contributors	Three Contributors
Until January 31	\$50	\$65	\$75
February 1-28 (29)	\$60	\$75	\$85
March 1-31	\$75	\$90	\$95
With permission April 1	\$100	\$100	\$100

Above fees are paid online with a debit or credit card

Lemleson Award

The Lemelson Early Inventor Prize is to be awarded to one **nationwide** middle school project (6th, 7th or 8th grade) that meets the invention award criteria:

- Demonstrates problem-solving by identifying a critical problem.
- Applies empathy and STEM knowledge to find a practical solution.
- Displays entrepreneurial thinking by developing a tangible invention

Please encourage students to consider this as an option. Since this is an invention, you can suggest this as a multiyear endeavor.

2
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Categories

- **BIOLOGY**
- **CHEMISTRY**
- **EARTH/SPACE**
- **ENGINEERING/TECHNOLOGY**
- **ENVIRONMENT**
- **HEALTH & MEDICINE**
- **MATHEMATICS/COMPUTERS**
- **PHYSICS**

- **PSYCHOLOGY (middle school only)**

Please note only three projects per category. You do not need to fill every category. Example you could send 3 Biology: 1 Chemistry, no Earth / Space.

FAIR TIMELINE

- **Now through March 31** students should develop their poster boards and videos.
- **Around the beginning of march, teachers will receive a permission slip link, that should be forwarded to the parents of the participating students.**
- **March 31 is the absolute last day to have parent permissions slips into us. (Prefer by March 15th)**
- **April 1st** registration ends. Either a teacher has entered the student, or the student has paid to enter.
- **April 2nd** Parents of your students will receive an email from the Fair with a link to upload video, posterboard and answer questions for judges. Please make sure JNewman@DiscoveryCtr.org is “friendly” so it does not end up in spam.
- **April 5th midnight (NY time zone)** is the deadline to complete the link for the judging process to begin.
- **April 24-30** winners will be announced on YouTube and by email.

GENERAL RULES

1. Parents are required to fill out permissions slips allowing their child(ren) to participate in the Virtual Fair. You will be asked to upload these as you enter each project.
2. Students using live humans in their research must indicate that the project is in compliance with an IACUC or IRB protocol. Only exception is if the student is studying their own family members and **MUST** have written permission from each person. Parents can sign for their minor children. This implies that the minor children are the siblings / cousins of the person creating the exhibit. Email these permissions to JNewman@DiscoveryCtr.org.
3. Your students should create a poster board using Free PowerPoint Templates for Posters - Science Fair. While we are not advertising this site this is one of the places we found. <http://posters4research.com/templates.php> . Students should choose a poster board with 3 columns 36 x 48. Students will be required to turn the Poster Board into a **PDF**. They may also upload it in the original format. If choosing the latter, then **BOTH** the pdf and original format need to be uploaded.
4. Registered students will receive an email sent to the parent’s email address after April 1 with questions and a place to upload the poster board and video.

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5. FREE Video Editing Sources: VSDC (Windows) iMovie (Mac) have been recommended to us although we have never used them.
6. All videos MUST be on YouTube set to UNLISTED so only the person with a link will have access.
7. We expect the video, poster board and answers will be viewed by 3 judges and possibly a Tri County volunteer if needed.
8. We have asked the judges to respect the judging process and view your video privately, although we have no control over this.
9. While children are home and likely in casual mode, if they decide to be in the video, we recommend that they dress accordingly to the standards they would employ if they were presenting at school.
10. Students do not have to appear in their video, they can narrate it through voiceover/off camera.
11. If a project has received awards from a previous contest, **we ask that you crop out / do not include any awards.**
12. If applicable, students should include in their video any demonstration involving their experiment.
13. Post Fair only send us pictures from your school ceremonies where you have permission from the parents. Often schools like to do accolades to their winners. We would love to have those as well.

SPECIFIC RULES TO ELEMENTARY (K-4) DIVISION

1. The video should be 3-5 minutes.
2. If you are on a team and you are unable to merge videos made separately together, please note there is an area for up to three team member videos to be placed on the entry form. Each team member should pick an aspect of the project to address. Divide the time however you wish as long as the videos collectively do not exceed 5 minutes.
3. Each project will be judged three times.
4. Please note each project will be judged using the Elementary Division criteria in the table below.

Elementary School Division:	
20%	Creative Ability
20%	Scientific Thought
20%	Thoroughness
20%	Skill
20%	Clarity

SPECIFIC RULES TO MIDDLE SCHOOL (5-8) DIVISION

1. 10% of our Fair in grades 6-8 (current grade student is in now) will be eligible to participate in Broadcom Masters www.societyforscience.org/broadcom-masters/
2. During the registration process teachers will be asked if their students can represent their school at Broadcom Masters if they win at Tri County. Please ask parents in advance. This will be on the permission form but ask parents if they leave this blank if their intent is to participate, or not participate.
3. Additionally, there is an opportunity for Inventors in grades 6-8 (current grade student is in now). These students need to be identified early. (See criteria below)
4. We are looking for an 8–10-minute presentation uploaded to YouTube set to “UNLISTED” so only someone with the link can view it. This needs to be narrated by the student(s) who did the project. In many cases you may have something you are demonstrating, and you can recreate your experiment in the video.
5. If this is a solo project (just one student) the video should be 8-10 minutes with the caveat that you don’t need to fill up the time. (I don’t know what this means)
6. Team projects may upload up to three videos through the entry form, though it is preferred that they are all merged into one video. If you need the separate video option each team member should pick an aspect of the project to address. **Teams may divide the 10 minutes if it mirrors the number of contributors and collectively does not exceed 10 minutes.** Students should not feel obligated to fill the time, less is more. (Does it have to be 8-10 minutes or not? Don’t fill the time is confusing. If you want “less is more” just say that videos should not exceed 10 minutes.)
7. Each exhibit will be judged by at least three and by as many as five separate judges independent of one another, and each exhibit will be seen by the same number of judges.
8. Please note each project will be judged using the criteria in the table below.

Lemelson Award

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Middle School Division:	
25%	Creative Ability
25%	Scientific Thought
15%	Thoroughness
15%	Skill
20%	Clarity

Judging Criteria

refer to Division as to how it is weighted

A. Creative Ability

Is this an original idea or an original approach to a new idea? Both are good. Did you show the ingenuity in the materials, apparatus & techniques or did you just buy a kit? Did you demonstrate the ability to improvise and adapt? Is the project a collection, or is it a purposeful one?

B. Scientific Thought

Does your exhibit show: organized procedures, accurate observations, controlled experiments, cause & effect reasoning, theories, analysis, and synthesis? Weight is given to the likely amount of real study and effort represented in the exhibit. The project cannot be just a demonstration or an attractive display.

C. Thoroughness

How completely have you explored or studied the problem? You should record evidence you have gathered as data in notebooks, journals, or logbooks. Include bibliographies, charts, tables, and graphs. Be sure to identify experimental organisms and/or apparatus.

D. Skill

Is your workmanship good? Do you show evidence of mastery of techniques? Did you construct your own apparatus? Overall construction and “look” of the project should be neat, organized, easy to read, sturdy, and self-supporting.

E. Clarity

Does the display clearly explain what you did? A neatly written, well-organized poster board that is easy to follow provides clarity. Things which ensure clarity are labels, guide marks, well written descriptions, emphasis on important items, labeled graphs, labeled tables, legends underneath graphs and tables. Which of these does your display have?