

2019 STEM Fair Rules and Guidelines

Registration:

- There are 4 STEM categories in each class: K, 1, 2, 2Q, 3, 3Q, 4, 4Q, 5, 5Q
 - **Science:** Investigations in the fields of Physics, Chemistry, Biology, Environmental Science or Combination themes
 - **Technology:** Demonstrations of coding, video games, or computerization
 - **Engineering:** Innovations with mechanical models, electrical circuits, or robots
 - **Mathematics:** Explanations of important Math concepts or student-designed games and puzzles illustrating those concepts
- **Each student can register one entry and under one category only.** If you need help, we can help you classify your project.
- Students may work on their projects individually or as a team. Team Project entries will be judged according to the higher-grade participant in the team. All students on the team should attend Smith Elementary.
- The deadline will be strictly enforced because the Committee needs time to plan the logistics of the event based on registrations.

Project Requirements and Restrictions:

- Project details must be presented on a tri-fold display board of size 36"x48".
- Power outlets in the gym are extremely LIMITED. Although we will try to accommodate requirements as much as we can, **we strongly recommend that you bring well-labeled extension cords, power strips and charged laptops.** The school or PTSA cannot provide those things this year.
- The school or PTSA are not liable for damage to expensive or non-replaceable personal property items. Use those things as a part of the project at your own risk.
- **Project *displays* may NOT include:**
 - Live animals, pets or insects.
 - Matches or open flame. **NO FIRES OF ANY KIND!**
 - Chemicals which are toxic, flammable or dangerous.
 - Electricity passing through an un-insulated wire.
 - Blood or gory animal or body parts.
 - Uncontained liquids of any kind (e.g. volcanoes, water tables etc).
 - Chemical reactions. **NO CHEMICAL REACTIONS OF ANY KIND!**
 - Explosions. **NO EXPLOSIONS OF ANY KIND!**
- Any project which must incorporate any of the above elements can be done at home. You can make a video or take pictures and display them.

Project Submissions:

- All students will **submit their tri-folds and projects on the day of the fair at a pre-assigned time.**
- Specific times for project set up will be assigned to each student/team after Registration closes.

Judging:

- **Judging will precede the public display and hands-on demonstration event between 4pm - 6pm.**
- **Students in grades K-2 are strongly encouraged to be present during judging; students in grades 3-5Q will be required to be present during judging.** This is intended to give the kids a chance to receive constructive feedback from STEM field experts and it will also enable the judges to comprehend the projects better as well as evaluate the student's understanding of the subject.
- **Specific times for project judging will be assigned to each student/team** after Registration closes.
- The main attributes for judging at each level will be **creativity, thoroughness, and clarity with an emphasis on student's independent work** with minimum adult supervision. Detailed Judging Criteria are attached.
- Judges will be field experts from local companies and educational institutions outside the immediate Smith community.

Awards:

- As with last year, the students will be competing only against themselves to earn the most points out of a possible 25 points. The following awards will be given in each category in each grade.
 - Excellence (20-25 points)
 - Achievement (10-20 points)
 - Participation (<10 points)
 - **Dolphin Choice Award** (popular vote by students)
- Awards will be awarded/displayed during the public part of the event from 6-8 pm.

Project Retrieval:

- At the end of the fair, **all projects must go home with participants by the end of the event.** Any projects remaining at the end of the event will be discarded.

If you have any questions or concerns, please contact us at stem@smithptsa.org.

Thank you and Good Luck!