ACADEMIC COMPETITIONS CURRENTLY AVAILABLE AT MANTUA ELEMENTARY SCHOOL Summary, September 6, 2017

Below are summaries of the different types of academic competitions available at Mantua Elementary School. Please be aware that these teams and competitions *are neither run nor funded by the school or the PTA*, rather teams (and some competitions) are run and funded by parents and coaches (i.e., parent volunteers) at the school. As such, it is the parents and coaches who coordinate and run the individual teams or competitions, not the school, PTA, or the academic competition coordinator. As such, we are in need of parent volunteers to coordinate Mantua's participation in a number of the competitions, as indicated on the signup at Academic Competition Interest Signup located at http://mantuapta.org/programs.html. Additionally, as these competitions are run under the auspices of the Mantua PTA, all team coordinators and coaches will need to fill out a Team Contact Form.

If you would like to sign up to participate in a competition, please go to the signup at http://mantuapta.org/programs.html. Interest signup will close on September 22nd for most competitions. A number of the competitions are *team competitions*; therefore, you will be notified mid-October of other families interested in forming a team. For non-team competitions (e.g., AMC-8), a parent volunteer will contact you by mid/late-October.

If you need to reserve a room at the school for a meeting associated with an academic competition, please contact Vanessa Hall at <a href="mailto:mai

AMC-8

- **Competition Synopsis**: The AMC 8 is a 25-question, 40-minute, multiple choice examination in middle school mathematics designed to promote the development and enhancement of problem-solving skills. The examination provides an opportunity to apply the concepts taught at the junior high level to problems which not only range from easy to difficult but also cover a wide range of applications. Many problems are designed to challenge students and to offer problem solving experiences beyond those provided in most junior high school mathematics classes. High scoring students are invited to participate in the AMC 10.
- **Deadlines:** Registration is open now. The contest will be held in November.
- **Ages/Grade Team Requirements:** Test is for 6th graders
- **Other Requirements:** Requires an adult volunteer to coordinate and be in charge.
- **Team:** Individual-basis
- Web Address: http://www.maa.org/math-competitions/amc-contests/amc-8
- Mantua Informational Contact: Please volunteer to coordinate! mantuacompetitions@gmail.com

DESTINATION IMAGINATION

- **Competition Synopsis:** Destination Imagination encourages students to have fun, take risks, focus and frame challenges while incorporating STEM (science, technology, engineering, and mathematics), the arts and service learning. Participants build on their strengths while learning patience, flexibility, persistence, ethics, respect for others and their ideas, and the collaborative problem solving.
- **Deadlines:** Registration Winter 2017, Regional Competition TBD (typically early March), State Competition Spring (March 24, 2018)
- **Ages/Grade Team Requirements:** Rising Stars/Early Learners (K-2nd), Elementary (3rd-5th), Middle (6th-8th), Secondary (9th-12th), University
- **Other Requirements:** Requires an adult coach and registration fees (~\$105-160), and each team must provide a Volunteer/Appraiser for the competition (or pay \$175+/competition)
- **Team:** 2-7 team members/team
- **Web Address:** http://www.divirginia.org/ (national), http://www.divirginia.org/ (Virginia)
- Mantua Informational Contact: Vanessa Hall <u>mantuacompetitions@gmail.com</u>

FIRST LEGO LEAGUE (FLL) -- NOTE: REGISTRATION MAY BE ALREADY COMPLETED

- **Competition Synopsis:** FLL is an annual competition centered around three main components: Lego Robotics using the EV3 or NXT Mindstorm set, in which kids design and race a robot to accomplish a number of missions; a project, in which teams research problems centered on a given theme and find original solutions; and teamwork. The theme of the competition changes from year to year.
- **Deadlines:** Registration opens mid-May and ends sometime in September; Regional and State Competitions run September-November 2017; National and World in the following winter and spring. **Register next Summer for 2018**
- **Ages/Grade Team Requirements:** Ages 9-14 on January 1st of the competition year.
- Other Requirements: Requires two adult coaches and registration fees with both USFIRST and VA DC FLL, a Challenge Set, and a robot kit. Estimated start-up costs for a team are over \$900, half of which is for the purchase of the robot set. It is suggested that teams work with sponsors.
- **Team:** 2-10 members
- **Web Address:** www.firstlegoleague.org, www.vadcfll.org
- Mantua Informational Contact: Please volunteer to coordinate! mantuacompetitions@gmail.com

FLL Junior

- **Competition Synopsis:** The goal of Jr. FLL is to develop teamwork skills, discover real-world math and science, design and build a challenge-related model using LEGO components, and create a Show-Me poster and practice presentation skills.
- **Deadlines:** Rolling registration (ending Spring 2018), as Jr. FLL is a "soft" competition and the projects are displayed online in the Online Showcase.
- **Ages/Grade Team Requirements:** Grades K-3 (ages 6-9).
- Other Requirements: Requires two adult coaches and registration fees, a field mat and a robot set. Estimated start-up costs for a team are less than \$500, most of which is for the purchase of the robot set.
- **Team:** 2-10 members
- Web Address: http://www.usfirst.org/roboticsprograms/jr.fll
- Mantua Informational Contact: Please volunteer to coordinate! mantuacompetitions@gmail.com

FUTURE PROBLEM SOLVING (FPS)

- **Competition Synopsis:** FPS engages kids in creative problem solving applied to an interdisciplinary study of issues that may crop up in the future. Students are invited to research a series of preselected topics and to analyze future scenes, identify their most salient challenges, and propose a solution as well as an action plan to carry it out.
- **Deadlines:** Year-long competition. Registration opens September 1st. First problem must be postmarked by early October. Qualifying problem submitted in February for advancement to state.
- **Ages/Grade Team Requirements:** Grades 4-12. There is a classroom-based non-competitive component for K-3.
- Other Requirements: Requires one adult coach and registration with VA FPS. Registration fees are ~\$140 per team of up to four students, and ~\$50 for individuals. Additional costs usually involved for purchase of reading materials and other coaching aids, TBD by the coach.
- **Team:** Individuals or teams (2-4 members).
- Web Address: www.vafps.org
- Mantua Informational Contact: Please volunteer to coordinate! mantuacompetitions@gmail.com

MANTUA SCIENCE FAIR

- **Competition Synopsis:** Mantua's ES Science Fair provides an excellent opportunity for students to apply the scientific method to conduct independent research. Students will present their research in March and will be evaluated by a panel of judges. The top projects will advance to Fairfax County's Elementary and Middle School Science and Engineering Fair. If we have enough interest, we will try to have a school science fair in advance of the county fair. Otherwise, organizers will have students display their project boards after the county fair at Mantua.
- **Deadlines:** Please see the web address below for updated deadlines. Mantua's ES Science Fair would be held in March. Fairfax County's Science Fair will be held at GMU in April or May 2018.
- **Ages/Grade Team Requirements:** 1st 3rd graders will compete in Early Elementary Division while 4th -6th graders will compete in Upper Elementary Division.
- **Other Requirements:** Requires volunteers with science or engineering background to judge. We will also need volunteers to set up and clean up during Mantua's ES science fair.
- **Team:** This is an individual event (one student/project) but a number of students who can compete at Mantua's ES Science fair. The top projects that will advance to the next level will be announced.
- **Web Address:** hthttp://www.fcsefair.com/
- Mantua Informational Contact: Rebecca Levorson, <u>mantuasciencefair@gmail.com</u>

MATH COUNTS

- **Competition Synopsis:** TJHSST students are running a MATHCOUNTS program at Mantua. MATHCOUNTS is a national program that involves improving math skills and representing Mantua in competition. Weekly meetings will be held in which the TJ students will teach Mantua 6th graders how to solve math problems similar to those that will appear in the actual competition.
- **Deadlines:** Weekly meetings will start in October (on a weekday evening at Mantua ES TBD). Competition will be held on a Saturday morning in Feb 2018.
- **Ages/Grade Team Requirements:** 6th graders **ONLY**.
- **Other Requirements:** Registration fee of \$25-\$30 per team member, payable in January once the team is selected.
- **Team:** A team of ten students will be chosen to participate in the competition held at a local school.
- Web Address: http://mathcounts.org/
- Mantua Informational Contact: Please volunteer to coordinate! mantuacompetitions@gmail.com

THE NATIONAL GEOGRAPHIC BEE

- **Competition Synopsis:** The National Geographic Bee is an annual competition organized by the National Geographic Society, designed to inspire and reward students' curiosity about the world. Each year, thousands of schools across the United States participate in the National Geographic Bee, competing for college scholarships and the glory of being the National Geographic Bee Champion.
- **Deadlines:** Registration is open now. The qualifying test will be held before Feb 2, 2018.
- **Ages/Grade Team Requirements:** A minimum of six (6) students from any of the eligible grades (4-6) must be physically present and actively participate in the school level competition.
- **Other Requirements:** Registration fee -- \$120 per school until December 21, 2017, and \$140 from December 22, 2017 until registration ends on January 26, 2018
- Web Address: http://nationalgeographic.org/bee
- Mantua Information Contact: Serena Chan, serena.chan@gmail.com

THE NATIONAL SPELLING BEE

- **Competition Synopsis:** The Scripps National Geographic Bee is an annual competition with the purpose of helping students improve their spelling, increase their vocabularies, and learn concepts and develop correct English usage that will help them all their lives. Each year, thousands of schools across the US participate in the Spelling Bee, competing for college scholarships and other prizes.
- **Deadlines:** Early Bird Enrollment Period (August 22, 2017 through October 15, 2017). Regular Enrollment Period (October 16, 2017 through December 15, 2017)
- Ages/Grade Team Requirements: Must be younger than the 8th grade (as of Feb 1, 2018)
- Other Requirements: Early Bird Registration per school (\$151). Regular Enrollment Registration per school is \$226. Enrollment includes a free one-year subscription to Britannica online for kids.
- Web Address: http://spellingbee.com/
- Mantua Information Contact: Susheela Ganesan, reply2susi@yahoo.com

ODYSSEY OF THE MIND

- **Competition Synopsis:** It is an international educational program that provides creative problem-solving opportunities for students from kindergarten through college. Team members apply their creativity to solve problems that range from building mechanical devices to presenting their own interpretation of literary classics.
- **Deadlines:** Coaches meeting in mid November (optional); Registration is Jan 2018; Regional Competition is Feb/March 2018; State Competition late Spring 2018.
- **Ages/Grade Team Requirements:** Division is determined by your oldest team member. Primary is K-2 (This is an un-scored division.), Division 1 is K-5th; Division 2 is 6 8th grade; Division 3 is 9 12th grade; Division 4 is post high school.
- Other Requirements: Requires a school membership (~ \$135); after the membership is bought, the extensive problem descriptions are mailed (additional memberships can be purchased at a reduced price). Requires a regional competition day registration fee for each team (~\$70). Each team must provide a Judge and a Volunteer for the competition.
- **Team:** Up to 7 team members per each team; each school may host 1 team per Division per Problem. There are ways to have mixed school teams.
- Web Address: http://www.vaodyssey.org/ (VA)
- Mantua Informational Contact: Please volunteer to coordinate! mantuacompetitions@gmail.com

SCIENCE OLYMPIAD - Div. A

- **Competition Synopsis:** Science Olympiad tests students on their science knowledge in up to twenty events centered on specific scientific topics. Students can compete in either test based (written) or building events.
- **Deadlines:** Registration opens in early January. Competition will be held in Spring 2018.
- **Ages/Grade Team Requirements:** 3rd -5th graders.
- Other Requirements: Requires an adult coordinator who acts as the liaison between participating students and competition organizers. Also, parents are expected to volunteer to coach all team members for the events. In the event the number of students who are interested exceeds the number of spots allotted to each school, priority will be given to students whose parents or guardians are available to coach. Additional volunteers are required to run some events on the day of the competition. Fee might be \$15-\$20/student plus the price of a team t-shirt.
- **Team:** Last year, 45 kids per school permitted. Students will compete in teams of two per event.
- Web Address: https://sites.google.com/site/vasodivisiona/
- Mantua Informational Contact: Abraham McAllister at <u>mantuascienceolympiad@gmail.com</u>

SCIENCE OLYMPIAD - Div. B

- **Competition Synopsis:** Science Olympiad tests students on their science knowledge in over two dozen events centered on specific scientific topics. Students can compete in either test-based (written) or building events.
- **Deadlines:** Registration is open and closes in November, but there is a late fee for those who register after early November. Invitational (Dec.), Regional (Feb.), State (April.), and National (May) tournament schedule TBD.
- **Ages/Grade Team Requirements:** 5th -8th graders. 5th graders can compete either in Div. A or Div. B but not both.
- Other Requirements: Requires a school-based sponsor/teacher as the liaison between the Head Coach of the participating students and competition organizers. Parents are expected to volunteer to coach all team members for the events. In the event the number of students who are interested exceeds the number of spots allotted to each school, priority will be given to students whose parents or guardians are available to coach. Additional Volunteers will be required for running some events on the day of the competition. Fees: \$260 for one team and \$430 for two teams. Teams can compete in Invitational Tournament for an extra fee. Competing in Invitational tournament is not mandatory.
- **Team:** Two teams of max. 15 members each. Only the best teams from the three regional tournaments will advance to State tournament. The winning team of the State Tournament will advance to the National Tournament.
- **Web Address:** http://virginiaso.com/
- Mantua Informational Contact: Serena Chan <u>mantuascienceolympiad@gmail.com</u>

X-STEM Team

- **Competition Synopsis:** The X-STEM team is done under the aegis of the biannual USA Science Engineering Festival and will be held in Washington, DC in April 2019. The X-STEM team runs every other year, as the festival occurs only every other year. X-STEM team members may have an opportunity to be invited to attend private workshops and exhibits in connection with the festival. Also, they have an opportunity to have a stall at the festival for reduced rates.
- **Ages/Grade Team Requirements:** Grades 3 and up with preference to older grades.
- **Other Requirements:** Requires at least two adult volunteers to run the club. On day of symposium, need additional volunteers.
- **Team:** No limitations, but each member should be willing to do mini science project (if needed).
- Web Address: www.usasciencefestival.org/
- Mantua Informational Contact: Please volunteer to coordinate! <u>mantuaxstem@gmail.com</u>