2017 VASO - Division A Event Descriptions

Building Events - Maximum Number of Participants per School: 2 students per 15 registered or portion thereof. (Register 1-15 students 2 may participate per event; 16-30 students 4 per event; 31 and above 6 students per event.) All students will work in teams of 2 against each other.

Engineering Enigma – (60 minutes)

Description: Students will demonstrate their engineering skills by building and testing a device for given materials. The nature of the device will remain secret until announced by the Event Supervisor to the students behind closed doors. All students from the same school must participate at the same time.

Gunk – Elasticity (60 minutes)

Description: Teams will make a material called "Gunk" from three specific materials in order to meet either the criteria for highest bounce or for longest stretch.

Gunk – Ice Cream (60 minutes)

Description: Using given materials, teams will create the tallest free standing ice cream sculpture possible. Teams may also answer questions about the properties of carbohydrates, sugars, and starches found in ice cream.

Rube Goldberg – (60 minutes)

Description: Teams will demonstrate their understanding of the six simple machines by creating and testing a "Rube Goldberg" device.

Straw Egg Drop – (60 minutes)

Description: With supplied materials by the Event Supervisor, teams will make a device out of straws and masking tape to hold a large raw egg. The device containing the egg will be dropped from a fixed height to a target.

Tower Building – (60 minutes)

Description: Teams will build a strong, stable tower from plastic drinking straws and masking tape. The team that builds the highest tower with the fewest straws while holding a mass no less than 100 grams and no more than 500 grams will be the winner.

Wright Stuff – (30 minutes)

Description: Each team will build one paper plane for the longest time aloft. Students will provide an estimate of their time before their flight.

Write it, Do it – (60 minutes)

Description: For this event one student will write a description of an object and how to build it, and their partner will try to rebuild the object from their description.

Testing Events – Schools may send 6 students in groups of 2 no matter how many students they have on their team.

Anatomy – (30 minutes)
Description: Teams will demonstrate their understanding of the digestive system and food borne illnesses. This event may cover the parts of these systems and their functions.

Astronomy – (30 minutes)
Description: Teams will demonstrate knowledge of the life of a star from birth through death and beyond.

Weather of Not! – (30 minutes)
Description: This competition will test the students' knowledge of weather topics to possibly include meteorological terms, techniques, events and instruments.

Shock Value – (30 minutes)
Description: Teams will answer questions and may do hands-on activities involving direct current circuits, basic electricity, and magnetism.

Optics – (30 minutes)
Description: Teams will participate in an activity involving the positioning of mirrors to direct a laser beam towards a target. Teams will also test their knowledge of geometric and physical optics.

Rocks and Minerals – (30 minutes)
Description: Students will demonstrate their knowledge on how rocks and minerals are formed and reformed.

Orienteering – (30 minutes)
Description: This is an orienteering event. Teams will follow a set of directions using map, pacing and compass skills to find locations within the Science Olympiad competition. This event may be held outdoors in good weather.

Marine Species – (30 minutes)
Description: Students will demonstrate their knowledge of the marine animals that inhabit the midnight zone of the ocean.

Ecology – (30 minutes)
Description: Students will demonstrate their content knowledge of the North American Temperate Deciduous Forest.

Multiple Student Events

Build a Barge – Six Students: 2 Teams of 3 students per school (30 minutes)
Description: Teams will build a sail boat on-site, with their air power alone they will sail the boat in a rain gutter, load the boat with as much weight as possible, and then sail the boat back past the starting line.

Pentathlon – Five Students: 1 team of 5 - (30 minutes)
Description: Five physical skills are interspersed with science questions in an obstacle course that will be run in a relay race style where each student passes the baton or tags the next student. A sixth physical skill and science question may be performed by the group.

Picture This – Six Students: 2 Teams of 3 students per school (30 minutes)
Description: Team members will take turns drawing representations of a set of scientific terms or concepts (not scientists) while the other team members guess the term being drawn.