

## **Division A Event Descriptions for 2017**

**A MATTER OF MATTER:** Teams will be asked questions or will conduct experiments at stations as they relate to the properties of matter. Safety goggles are required

**DEEP BLUE SEA:** This event will test students' knowledge about oceanography.

**ESTIMANIA** Students will be asked to estimate answers to questions or complete task related to estimation.

**MISSION POSSIBLE:** Participants will design, build, bring, and test a Rube Goldberg-like device which incorporates up to 20 unique Action Transfers and uses up to five forms of energy in accomplishing a given task in two (2) minutes. Devices will be constructed prior to the competition. This is a PRE-BUILT EVENT

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**MYSTERY POWDERS:** A team of two contestants will be asked to identify a mixture of common white household powders. Safety precautions MUST be used. These include wearing self-brought safety goggles, washing hands and not taste-testing. Bring writing instruments.

**NAME THE SCIENTIST:** Teams will identify prominent scientists and their contributions to their fields.

**PLENTIFUL PLANTS:** This event will consist of a written test in which the contestants will view models, slides, pictures, or specimens of various plants, their life cycles and parts. Structure, function, and habitat may be test.

**PICTURE THIS – SPACE:** The objective is to have a team member draw a representation of a particular space term or concept for team members who must guess the term while watching it being drawn

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**REFLECTION RELAY:** Three team members cooperate to bounce a light beam (from a laser pointer, etc.) onto a predetermined target.

**STRAW EGG DROP:** Each pair of students will make a device of straws and masking tape, supplied on-site by the event supervisor, to hold a large, raw egg. The device containing the egg will be dropped from a

fixed height to a target. This is an ON-SITE BUILT EVENT. Teams will be required to build during the building construction period as shown on the published schedule prior to the start of all events. Teams will test their devices later in the day.

TENNIS BALL CATAPULT: Students will build and calibrate their own free-standing (not hand held) trajectory device that must be capable of “lobbing” a tennis ball at a target placed between 2 and 5 meters. Students MUST bring and wear impact-resistant safety goggles. This is a PRE-BUILT EVENT.

TOWERS: This event is designed to test the student’s ability to think on their feet. They will be given a bag of materials to build a freestanding tower as high as they can. The tower should be constructed to support a tennis ball at the top. This is an ON SITE BUILD EVENT. Teams will be required to build during the building construction period as shown on the published schedule prior to the start of all events. Teams will test their devices later in the day.

WATER ROCKETS: Prior to the competition, teams will build a rocket propelled by air pressure and water out of a 2-

liter plastic soda bottle. The rocket that stays in the air for the longest time will win. This is a PRE-BUILT EVENT. Safety goggles are required.