	Event	Description	# Students	Min.
1	Backyard Biologist	Teams will be assessed on their knowledge of living organisms that they may encounter in their own backyard. In 2018, the focus will be on trees, plants, and birds. Teams will be required to identify organisms from a provided list and know about the habitat and conditions required for growth of the organisms.	2	45
2	Barge Building	Construct a barge using aluminum foil that can supports a cargo of the largest number of objects without getting them wet.\	2	20
3	Bridge Building	This event tests a students' ability to build a lengthy, strong, stable, and reproducible suspension bridge from common materials.	2	45
4	Crime Busters	Participants use tests to identify unknown powders, match fingerprints and use paper chromatography to identify a note found at a crime scene.	2	60
5	Data Crunchers	Teams will demonstrate their understanding of metric measurement by estimating and measuring length (meter), mass (gram), fluid volume (liter), angles, and temperature (Celsius). Teams should also be able to create and interpret data tables, bar graphs, line graphs, pie charts, and pictographs and make basic calculations that include time, money, fractions and percentage.	2	45
6	Deep Blue Sea	This event will test students' knowledge about oceanography.	2	20
7	Disease Detectives	Epidemiology uses science to study disease, injury, health, and disability in communities. This study involves: reasoning skills, such as those used by "disease detectives;" comparison of risks (the chances of becoming sick or injured); and surveys to help describe different groups of people (for example, kids in school classes and people in neighborhoods). The goal of the Disease Detectives event is to have students understand connections between things they may encounter in daily life and various health problems that effect communities, risks for disease/injury, and opportunities for prevention. The event will also help student to understand general categories of causes of disease and injuries	1 or 2	50
8	Grab a Gram	Teams will cooperate to pick up fifty (50) grams of two different sets of material.  There will be two rounds using different substances (preferably different densities) in each round.	2	60

	Event	Description	# Students	Min.
9	Mystery Architecture	This event is designed to test the students' 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 its top.	2	30
10	No Bones About It	A team of 2 students will identify bones and pictures of bones at stations throughout the room. J They will also be required to answer questions found on cards at the stations pertaining to bones. Only the <u>Scientific Names</u> of the bones will be accepted as correct.	2	30
11	Paper Rockets	Each team will build and fly a paper rocket using materials, which will be provided.	2	45
12	Rock Hound	Students will prepare charts, identify various rocks and minerals and describe their characteristics.	2	20
13	Starry, Starry Night	This event will test students' knowledge of astronomy in two parts	2	30
14	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.	2	45
15	Water Rockets	Prior to the tournament, contestants use a 2-liter, plastic soda bottle to build one or more rockets propelled by air pressure and water. The rocket that stays aloft for the longest time will win.	2	10
16	Weather or Not	This competition will test the students' knowledge of meteorological terms, techniques, and events.	2	45
17	Which Way's North?	Teams of up to two students will attempt to navigate themselves around a state road map.	2	50
18	The 24 Game	Participants use problem solving skills combined with their knowledge of mathematics (addition, subtraction, multiplication and division) to make the number 24 using the 4 numbers provided on the game cards.	2	45