2020 NCSO Elementary Event Descriptions

3, 2, 1, Blast Off! (3.P.1, 5.P.1, Science as Inquiry)
Prior to the tournament, teams will construct up to two rockets designed to keep a standard ping pong ball aloft for the greatest amount of time.

Backyard Biologist (1.E.2, 1.L.1, 2.L.1, 3.L.2, 6.L.1)
Teams will be assessed on their knowledge of living organisms that they may encounter in their own backyard. In 2020, the focus will be on trees, amphibians & reptiles. Teams will be required to identify organisms from a provided list and know about the habitat and conditions required for growth of the organisms.

Body Builders (3.L.1, 4.L.2, 5.L.1)
Teams will demonstrate knowledge of the major systems of the human body in terms of their functions necessary for human life.

Data Crunchers (Measurement & Data, 5.P.1, NC.4.MD.4, NC.4.NF.2, NC.5.MD.2, NC.6.SP.1-5.)
Teams should be able to create and interpret data tables, bar graphs, line graphs, pie charts, and pictographs and perform simple experiments to collect data, graph their results and make predictions.

Describe It, Build It (Science as Inquiry)
Technical writing skills are an important part of an engineer or scientist's abilities to communicate precisely and clearly. This event will test a team's ability to effectively communicate by having one team member write a description of how to build a device and having his or her partner construct the device from raw materials using their partner's description.

Duct Tape Challenge (Science as Inquiry)
Teams will arrive at the competition and be given a set of materials, including Duct Tape, and a task. They will then have a given amount of time to complete whatever task they are assigned, such as building the tallest tower, widest bridge, most buoyant boat, etc. The task parameters will be clearly outlined for the teams. At the end of the build time, teams will test their structures to determine the winner.

Ecology Experts (3.E.2, 4.P.1, 5.L.2, 6.L.2)
Teams will be assessed on their knowledge of Deserts, Grasslands, & Forest ecosystems and biomes. Topics include but are not limited to the ecology of the biomes and the roles and interactions of living and nonliving things within them.

Energy Matters (3.P.2, 3.P.3, 4.P.1, 4.P.2, 4.P.3, 5.P.2, 5.P.3)
Teams will be assessed on their knowledge of the physical properties of matter and the behavior of solids, liquids, and gases before and after they undergo changes or interactions as well as energy forms, transfer of energy, physical changes, and changes in states of matter due to heating and cooling.

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Fossil Frenzy (4.E.2)
Teams will be assessed on their knowledge of geologic time, fossils, dinosaurs, and the fossilization process.

Metric Mania (Measurement & Data, Geometry)
Teams will demonstrate their understanding of metric measurement by estimating and measuring length, mass, fluid volume, angles, and temperature and be able to make calculations based on these measurements.

Pasta Tower (Science as Inquiry)
The objective of this event is to design and build a tower, constructed only of pasta and glue, with the greatest structural efficiency, capable of supporting a load of up to 10 kg.

Planet Protectors (1.L.1, 4.L.1)
Teams will be assessed on their knowledge of human interaction with the earth, including interacting positively and negatively with the environment, resource use, and consequences of these interactions.

ProGamers (Information & Technology)
Teams of students will use the Scratch 3.0 programming language to recreate a game being shown to them on a screen in the room.

Ramp and Roll (3.P.1, 5.P.1)
Teams will build a ramp and vehicle to travel a certain distance and stop as close to the finish point as possible at the tournament.

Science Headbands (Science as Inquiry)
Team members will take turns asking questions to guess clues for scientific terms or concepts from across all Essential Standards for Elementary Math & Science. Teams of up to 3.

Sky Quest (1.E.1, 3.E.1, 4.E.1, 6.E.1)
Teams will be tested on their knowledge of the solar system. Topics include the sun, moon, planets, rotation and revolution, moon phases, seasons, space exploration missions and identification of constellations/stars/asterisms based on a provided list.

Super Sleuths (3.P.2, 4.P.2, 5.P.2, Science as Inquiry)
Given a mystery scenario, evidence, and a list of possible suspects, teams will be expected to perform a series of tests to draw specific conclusions about the scenario and suspects. The test results along with other evidence will be used to solve the mystery of the scenario.

Weather Permitting – (K.E.1, 2.E.1, 5.E.1)
This event will test the team's knowledge of conducting investigations and using appropriate technology to build an understanding of **Severe Storms.**