

2017 NCSO Elementary Event Descriptions

3, 2, 1, Blast Off! (Science as Inquiry)

Prior to the tournament, teams construct two rockets designed to stay aloft for the greatest amount of time. Rockets are made from 2 liter soda bottles and pressurized with air and water. In 2017, parachutes are allowed and rockets will be launched at 60 psi.

Animal Adaptations (2.L.1, 4.L.1)

Teams will be assessed on their knowledge of various animal adaptations and how those adaptations benefit the animals in difference types of environments.

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 2017, the focus will be on trees, amphibians, and 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 and which ones are North Carolina state symbols.

Bone & Brawn (3.L.1, 5.L.1)

Students will demonstrate their knowledge of the skeletal and muscular systems.

Bridge-a-Roni (Science as Inquiry, 4.P.2)

Teams will design and build ahead of time the lightest bridge from only pasta and glue, with the highest structural efficiency possible (lightest bridge that holds the most weight, up to 10 kg). Each team may bring and enter only one bridge.

Data Crunchers (Measurement & Data, Science as Inquiry)

Teams will demonstrate their understanding of mathematical concepts. Teams will need to be able to graph data and interpret graphs to make observations about trends in the data represented. Teams will also need to be able to estimate and measure basic units of length, weight, volume, and temperature and perform calculations of area, perimeter, volume, time, money, fractions, percentages, addition, subtraction, multiplication, & division.

Describe It, Build It (Science as Inquiry)

Teams will be judged on their ability to effectively communicate by having one team member write a description of how to build a device and having his or her partner re-construct the device from raw materials.

Energy Transfer (2.P.1, 3.P.3, 4.P.3, 5.P.2)

Teams will describe characteristics of light, sound, and heat energy. They will explain how each form works, identify examples, and describe how one form can be converted or transferred to another form.

Genes R Us (2.L.2, 5.L.3)

Teams will demonstrate an understanding of traits that may or may not be inherited, be able to explain why organisms share similarities and differences, and use Punnett squares to predict inheritance patterns of certain characteristics.

Marshmallow Catapult (Science as Inquiry)

Teams will build in advance a device constructed out of specified materials to launch a marshmallow at a target placed on the floor. The goal is to land as close to the center of the target as possible.

Movers & Shakers (3.E.2)

Teams will be assessed on their knowledge of earthquakes and volcanoes and related land formations.

Newton's Notions (1.P.1, 3.P.1,4.P.1, 5.P.1)

Teams will be assessed on their knowledge of forces and motion.

Ocean Motion (3.E.1, 3.E.2, 5.E.1)

This event will test a team's knowledge of the currents, waves, and tides in Earth's Oceans.

Rock Star (3.E.2, 4.P.2)

Teams will demonstrate their knowledge of rocks & minerals, the rock cycle and geologic maps.

Science Charades (Science as Inquiry)

Team members will take turns drawing clues for a set of scientific terms or concepts from across all 3rd - 6th grade science and math objectives for their teammates to guess. Teams of up to 3.

STEM Design Challenge by ThermoFisher (Science as Inquiry)

Teams of 3 will be given a challenge to complete in advance using only K'nex pieces. They must practice designs in advance but build on site.

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. 2017 topics include identifying unknown powders, distinguishing between different types fingerprints and tool marks.

Trajectory (Science as Inquiry)

Teams will bring with them a device constructed out of specified materials to protect a raw egg from breaking when tossed over a bar or barrier and allowed to fall to the floor or pavement. The goal is to keep the egg from cracking or breaking during its impact with the floor or pavement.

Weather Permitting – (K.E.1, 2.E.1, 5.E.1)

Teams will be assessed on their knowledge of conducting investigations and using appropriate technology to build an understanding of weather and climate with a special focus in 2017 on climate.