## **Data Investigations (30 Minutes - Based on Team Schedule)**

**Description**: This event tests participants' knowledge of creating and interpreting data tables and graphs. This event has a written test and may/may not include "hands-on" stations.



# Participants per Team: 2

#### Spirit of the competition:

➤ It is a rules violation if coaches, parents, mentors, or spectators enter the competition area or communicate with the team members at any time during the competition. Violation of this rule will place the team below all other teams.

<u>Teams need to bring</u>: Pencils, and a four function Calculator.

Safety Requirements: None

### The Competition:

Teams will demonstrate understanding of this content in any or all of the following ways:

- Collect data with metric measuring devices (length, mass, or volume) and represent that data in a correctly labeled graph or data table
- Plot data points, make and interpret data tables, draw and interpret graphs, including what trends can be predicted from the data shown
- Make estimates of data between or beyond the data points given.
- Calculate fractions or percentages based on charts, tables or data.
- Calculate the mean, median, and mode for a set of data.
- Distinguish between accuracy and precision and identify outliers in a set of data.
- Identify types of questions (numerical, categorical, data that changes over time) when collecting data.

### Scoring:

- Points will be awarded for each correct response.
- Ties will be broken by the accuracy or quality of answers to select questions chosen by the event leader prior to the competition.

#### **Possible Resources:**

Division A will not release previous tests, or the exact resources used by the Event Supervisor or test writer for any events. The listed resources are meant as a starting point. It is up to the competitor to research further.

Data Crunchers | NC Science Olympiad