

EXPERIMENTAL DESIGN DRAFT RULES 17

1. DESCRIPTION: This event will determine a team's ability to design, conduct, and report the findings of an experiment actually conducted on site.
A TEAM OF UP TO: 3 EYE PROTECTON: C APPROXIMENT TIME: 50 minutes
2. EVENT PARAMETERS: Students must bring goggles and a writing instrument(s) and may bring a timepiece, any kind of measuring devices, or a non-programmable non-graphing calculator. Chemicals that require other safety clothing will not be used.
3. THE COMPETITION:
 - a. The teams must design, conduct, and report the findings of an experiment actually conducted on site that addresses the assigned question/topic area provided by the event supervisor. The assigned question/topic area should be the same for all teams and allow the participants to conduct experiments involving relationships between independent and dependent variables (i.e., height vs. distance).
 - b. Each team will be provided with identical sets of materials by the event supervisor at either a distribution center or in an individual container. The materials will be listed on the board or placed on a card for each team. If provided, both the card and the container will be considered part of the materials. Each team must use at least two of the provided materials to design and conduct an experiment. The identity of the materials will be unknown until the start of the event.
 - c. Teams will be provided, provided by the event supervisor, with an outline based on a standard laboratory format (see the event page at www.soinc.org for an example) to follow when recording their experiment along with additional paper to record data, graphs and procedure.
 - d. When a team finishes, all materials must be returned to the event supervisor along with all written materials and reports.
4. SCORING:
 - a. High Score wins
 - b. Scoring will be done using the scoring checklist found on the Science Olympiad website (www.soinc.org).
 - c. Points will be awarded dependent upon the completeness of the response. Zero points will be given for no responses as well as illegible or inappropriate responses.
 - d. Ties will be broken by comparing the point totals in the scoring areas in the following order:
 - i. Variables,
 - ii. Procedure,
 - iii. Analysis of Results,
 - iv. Graph,
 - v. Data Table.
 - e. Any student not following proper safety procedures will be asked to leave the room and will be disqualified from the event.
 - f. Any team not addressing the assigned question or topic area will be ranked behind those who do, because not conducting an experiment is a violation of the spirit of the event.