

1. **DESCRIPTION:**

Technical writing skills are an important part of an engineer's or a scientist's ability to communicate precisely and clearly. This event will test a competitor's ability to effectively communicate with a colleague in writing by having his or her partner construct a device from this written description.

**A TEAM OF:** 2

**APPROXIMATE TIME:** 55 Minutes

 2. **THE COMPETITION:**

a. A student is shown an object (which may be abstract) built from, but not limited to, such items as science materials, inexpensive materials (e.g., straws, push pins, Styrofoam balls, paper cups, Popsicle sticks, etc.) or commercial sets (e.g., Googplex, K'nex, Tinker Toys, Lego, Lincoln Logs, etc.).

b. The student has twenty-five (25) minutes to write a description of the object and how to build it. There will be no advantage to finishing early. Only numerals, words and single letters may be used. Symbols, drawings and diagrams are not allowed, with the exception of common punctuation and editing symbols. Printable punctuation marks/editing symbols that can be produced on a PC standard 101 key keyboard by pressing a single key or a single key in combination with the shift key may be used. These must be used in their normal context and not as symbols to form a key/code. All abbreviations (not symbols) must be defined either at the beginning or when the abbreviation is first used. No prepared abbreviations or labels will be permitted.



c. The supervisor of the event will pass the description to the remaining team member who will take the description and attempt to recreate (build) the original object in twenty (20) minutes.

d. Supervisors will attempt to use different materials than the materials that were used last year.

 3. **SCORING:**

a. The team that builds the object nearest to the original and has properly written instructions is declared the winner.

b. Any improper use of symbols or codes (including use of words or letters as codes) will result in the team being assessed a 5% penalty for each different type of infraction.

c. **Points** will be given for each piece of material placed in the proper connection and location compared to the model.

d. Pieces that are connected correctly beyond the incorrect connection will be counted in the score. No penalty will be assessed for parts that were not used.

e. Time for the construction phase will be used as a tiebreaker.

**National Science Education Standard: Content Standard G: Science as a human endeavor** "Some scientists work in teams and some work alone, but all communicate extensively with others."