**Scientific Method Challenge Rules**

**General Concept:** Based on the given a set of materials, teams of 3 design and outline an experiment using the Scientific Method. Schools may submit any number of teams of 3. The best performed and designed experiment wins.

**Time:** 30 minutes

**Competition:**

* Judges will distribute sheets of blank printer paper to each group. Each group will sit at a table with the provided materials.
* An event supervisor with a timer will indicate the start of the competition time with a countdown.
* Group members collaborate with each other to design an experiment using the materials provided at the competition. Not all materials need to be used for the experiment.
* Once having determined the experiment, competitors have to fill out an answer sheet that prompts students to:
  + Write a hypothesis
    - “If..., then...”
  + Collect data in the form of an organized table
  + Define independent and dependent variables
  + Make a graph
  + List observations
  + State any conclusions about the experiment and observations

**Materials:**

* Possible materials: Any 4 of these 5 materials will be provided at competition.
  + 5 pennies
  + Ping pong balls
  + Toothpicks
  + Styrofoam cups
  + Straws
* Provided materials: These materials will be provided to all teams at competition.
  + Up to 15 in. Tape
  + Up to 18 in. String
  + 3 sheets of blank paper
  + 6 Rubber bands
* Provided tools:
  + Stopwatch
  + Rulers
  + Pencils, sharpies