

**Science Olympiad
Goshen College Regional Tournament
February 13, 2016
Event Information**

This document integrates information from the following sources:

- Rules: These are repeated from the published rules because they need to be emphasized.
- National: http://soinc.org/official_rules_clarif as of 01/23/2016
- Indiana: <https://www.indianascienceolympiad.org/resources/clarifications.cfm> as of 01/23/2016
- Local: Conveyed during the Team Coaches and Event Supervisors Meeting on 01/23/2016. These may include suggestions for how the event should be run.

It is hoped that this document will be useful to both team coaches and event supervisors; however, all participants should check the above clarification links for any more recent postings. Helpful preparation materials for each event can be found at www.soinc.org.

AIR TRAJECTORY (BC)

National: 4.e. (4th sentence) should read "The far target may be anywhere up to 2.00 m (in intervals of 0.5 m for Regionals, 0.25 m for States, and **0.10 m for Nationals**) to the right or left of the imaginary centerline." (9/16/15)

Local: Targets are likely to be as was used at the Northridge Invitational: a blue short hard plastic target glued to a plastic sheet held down by cat litter. Placement position for the bucket could be done with masking tape or a mark over which the bucket with a 1 inch hole could be easily placed.

ANATOMY & PHYSIOLOGY (BC)

Indiana: B Division competitors may use a 3-ring binder.

ASTRONOMY (C)

BIO-PROCESS LAB (B)

Indiana: B Division competitors may use a 3-ring binder.

BOTTLE ROCKET (B)

Indiana: Will not be run; replaced with Roller Coaster.

BRIDGE BUILDING (BC)

Local: Jeremy will bring a new buster, assuming it is done. Tips of sticks should be used to steady not hold the bucket; sticks with springs can help ensure this. There needs to be sufficient sand for each competitor.

CELL BIOLOGY (C)

CRAVE THE WAVE (B)

Indiana: B Division competitors may use a 3-ring binder.

CRIME BUSTERS (B)

DISEASE DETECTIVES (BC):

Indiana: B Division competitors may use a 3-ring binder.

DYNAMIC PLANET (BC):

National: 4.e. should read "Calculate the buoyancy of a given watercraft in water samples of varying **density.**" (12/29/14)

Indiana: B Division competitors may use a 3-ring binder.

ELASTIC LAUNCHED GLIDER (B):

Rule 4b: "Once competitors enter the cordoned off competition area to trim, practice, or compete they must ... not receive outside assistance, materials, or communication. Teams violating these rules must be ranked below all other teams."

Local: For room dimensions, see Wright Stuff (C) below.

ELECTRIC VEHICLE (C)

Rule 4b: "Only competitors and supervisors must be allowed in the impound and track areas during the event. Once competitors enter the event area, they must not leave the area or receive outside assistance, materials or communication."

National: 2.k. add third sentence "**Vehicles may reverse travel direction during the run.**" (10/13/15)

Local: Be sure to have a fire extinguisher readily available.

EXPERIMENTAL DESIGN (BC)

FOOD SCIENCE (B)

Indiana: B Division competitors may use a 3-ring binder.

FORENSICS (C)

FOSSILS (BC)

National: The correct spelling for Sarcopterygii is **Sarcopterygii (9/11/15), also corrected were Calymene and Ichthyosauria (10/10/15)** (all 3 now corrected in **green** on the Official Fossil List on www.soinc.org)

Indiana: B Division competitors may use a 3-ring binder.

GAME ON (C)

GEOLOGIC MAPPING (C)

GREEN GENERATION (BC)

Indiana: B Division competitors may use a 3-ring binder.

HYDROGEOLOGY (C)

National: 2.b. should read "Students may bring a calculator, writing utensils, a protractor and **each team may bring one 8.5"x11" sheet of paper that may contain information on both sides in any form from any source.**" (11/19/15)

INVASIVE SPECIES (BC)

Indiana: B Division competitors may use a 3-ring binder.

Indiana: See separate list of species.

IT'S ABOUT TIME (C)

Local: Be sure to confiscate watches, cell phones, calculators, and any other timing devices. Make sure the test covers all five topics and is not too focused on similar topics. The room needs to be set up for 12 teams with impounding (La Lumiere's second team will not be competing in this event).

METEOROLOGY (B)

Indiana: B Division competitors may use a 3-ring binder.

MISSION POSSIBLE (B)

National: 4.d.iii. first sentence should read "Inclined Planes must be stationary and have an object pushed or pulled at least 10cm up **and along the surface of** the inclined plane to count for points." (10/13/15)

Local: Ask competitors about the task list in detail before the run to calm the competitors, ensure that the competitors had built the machine themselves, and prepare the judges for judging the run. Have a fire extinguisher readily available. If a step can be replaced with a ball, then it is not a wheel and axle. When competitors start the event, there should be no communication with coaches, parents, or other non-competitors.

PICTURE THIS (B)

PROTEIN MODELING (C)

REACH FOR THE STARS (B)

Indiana: B Division competitors may use a 3-ring binder.

ROAD SCHOLAR (B)

Indiana: B Division competitors may use a 3-ring binder.

ROBOT ARM (C)

National: 7.f. should read "The maximum number of points possible is **110.**" (9/11/15) **and** 6.g.iv. The competitors impart energy directly into the arm, base, Goal Cartons, **dice**, or Scoreable Items. (11/11/15)

Local: Will be run on a board. Have a few extra egg cartons because sometimes they get damaged by a team.

ROLLER COASTER (B)

Indiana: Replacement for Bottle Rocket.

Local: These devices can be quite large. Make sure that the impound area is protected from passersbys. Have a couple of tables as a placement option; however, most will want to have their devices placed on the floor. Measure to top of track, not top of device.

SCRAMBLER (B)

Rule 4a: "Only competitors and the ES will be allowed in the impound and track areas while the teams are competing. Once competitors enter the event area, they must not leave the area or receive outside assistance, materials or communication."

WIND POWER (BC)

Indiana: B Division competitors may use a 3-ring binder.

Local: The mount needs to be such that nothing will hit a blade that is within regulation space.

WRIGHT STUFF (C)

Rule 4b: “Once competitors enter the cordoned off competition area to trim, practice, or compete they must not receive outside assistance, materials, or communication. Teams violating these rules must be ranked below all other teams.”

Local: The flight events will be held in the Rec Fitness Center East Gym (see the picture below). The ceiling is about 30 feet high, and the fan will be turned off during the competition. This space is larger than what we have used in the past; however, note the possibility of landing on the indoor track halfway to the ceiling and the variety of obstacles in the ceiling area and around the periphery.



Local: It would be better to have the basketball back boards down. Have a fishing rod, fiber extension puller, and/or helium balloon available to retrieve planes that become stuck somewhere. The audience will be allowed on the gym floor behind the playing line in the area from which the above picture was taken. Place the check in/measurement table far from audience area, possibly by the exit to the stairway up to the indoor track. Make sure there are enough timers and someone who knows the event well.

WRITE IT/DO IT (BC)