Your virtual on-line “packet” contains:

Event Judges Instruction. Details about scoring your event.

Other hints and information. Miscellaneous things you might want to know.

Rules for your event. I will put them on the web here early on Friday, February 12:
http://web.mst.edu/~pringle/science_olympiad/science_olympiad_2016/Supervisors/rules/
No fancy web page, just a list of the files. These are copyrighted; please do not distribute them. I will
remove the rules some time on February 14, unless I am asked to take them down earlier.

Score sheet. This should be turned in to room 208 Physics as soon as possible after completion of your
event. Don’t leave until your score sheet has been “approved” by a scorekeeper. Get your scoresheet
approved, then eat! You can print a copy beforehand, or get one in 208 Physics.

Evaluation form. Your comments will help make this event better in the future.

Event appeal form. Follow the instructions on this form if a team has an unresolved problem with
your event. Appeals are unlikely, but please take a minute beforehand to read this form so you know
what to do if an appeal is necessary.

List of schools. You may find it handy if a student uses a “non-standard” school name on papers
he/she turns in. For example, Cuba Middle School is Crawford Co. R-II.

To find out which schools have signed up for your events: go to
http://web.mst.edu/~pringle/science_olympiad/science_olympiad_2016/Events/
and click on “schedule of events with times your team requested.” You can download or view files
showing which teams have signed up for which time slots. These spreadsheets will be updated
periodically up to the day of the event. There will probably be changes and late sign-ups on the day of
the event. This web site will contain the most up-to-date information about Science Olympiad
activities. If at all possible please allow teams to participate whenever they show up.

Policies on Constructed Devices, Interference, Cheating, and Vandalism. These policies are
now required by the National Science Olympiad. They are included in this packet for your
information only. Please read them. (You don’t have to sign anything!)

Schedule of Events with Room Assignments. The schedule with room assignments is available
here:
http://web.mst.edu/~pringle/science_olympiad/science_olympiad_2016/Events/
Check your room assignment and quickly report any problems. If any last-minute on-the-spot room
changes are needed, please post signs and directions to the correct room.

Please print the forms mentioned above (except the Policies forms) and take them with you
to your event!
Event Judges Instructions

*Please read and follow these instructions. It is very important that we follow consistent procedures and be fair to all teams competing.*

**Team Identification:** at the regional competition, event supervisors do not need to check participant names against rosters. Please do double check that the name of the school written *(legibly!)* on the student’s answer sheet *(make sure they give their school name!)* matches the name of a school on the score sheet included in this packet. Make sure that all participant names are written legibly.

**Scoring:** the score sheet (included in this packet) has four columns—the school name, a school identifier *(e.g. B-10 or C-6)*, a “raw score” column, and a “place” column. Enter the team’s score in the “raw score” column (the possible score will vary from event to event). Then, based on the “raw score,” assign a place to every team in the competition.

The number entered in the “place” column is based on the following system: 1 for first place, 2 for second place, etc. The team with the lowest overall sum of “place” points will be the Science Olympiad winner. If a team makes an honest effort to participate but cannot receive a score (e.g. a device completely fails to perform), enter a score of “P” and the number N in the place column, where N is 13 for Division B and 9 for Division C. If a school does not participate in an event, or a team makes no effort to participate, enter NS in the “score” column and N+1 in the “place” column. Every team that gets a NS gets the same “place.”

Not all schools will participate in all events.

**Important!** Some events may involve disqualifications, particularly for safety violations. Check your rules carefully for disqualification criteria. Here is how to score in such a case. Normally the top team gets 1 point and the lowest team gets N points, where N is the number of teams entered (N=13 for division B and N=9 for division C). Some event rules may not call for disqualifications for out-of-specification devices, but instead tell you how to rank such devices. If a team does participate but is disqualified under event rules for technical reasons, or for safety violations, and the event rules do not address scoring the disqualification, give the team N points. Teams that are disqualified for misbehavior or cheating should be given a score of “DQ” and a place of N+2, and some indication of the reason should written on the score sheet. Policies for handling serious violations, including interference and cheating, are given later in this packet, and detailed instructions for scoring are also given. Refer to [http://soinc.org/scoring_guidelines](http://soinc.org/scoring_guidelines) for National guidelines.

**Ties:** No ties are allowed. Determine criteria for tie-breakers before you begin scoring. Check the official rules for instructions on tie-breakers. Indicate your tie-breakers on the papers you turn in to scoring. This is critical. There can be no ties in Science Olympiad!

**Submitting Scores:** Bring student papers, answer keys, scoring calculation sheets, along with the completed official score sheet to room 208 Physics. Please wait to be released by a scoring official. If you wish to keep and use student papers after the event, please contact the local tournament director. If convenient or appropriate, I would appreciate also receiving a copy of your “event” (whatever materials you hand out to the contestants). Either written or electronic copies are OK (electronic is better).

**Event Rules:** Unless otherwise stated, it is generally understood that, if notes, resources, calculators, actions, etc. are not excluded, then they are permitted unless they violate the spirit of the problem. No direct or electronic communication is permitted with external resources, including people, places, etc., during the competition.
Other hints and information.

I gave you a link to the rules above. You should post a copy or have them available during the event.

I suggest you post a sign on the door of your event room (or some other appropriate spot) with the event name prominently labeled.

You should also post signs in your building guiding students to your room.

Middle school students are not used to moving between buildings in a short period of time. Please let latecomers participate in your event (if possible), but do not restart for them or allow extra time.

If your facilities and the nature of your event permit it, you are encouraged to allow parents, coaches, siblings, and other visitors into your room to observe. Of course, communication with contestants is strictly forbidden during the competition.

Follow the rules!

Have fun. You want participants to leave feeling they were in a tough but fair competition.

“Headquarters” will be in room 208 Physics. I may not be there all of the time.

I can also be reached by cell phone. The number is 573-368-8912. Use this number to reach me with any questions or concerns that must be taken care of right away. I have not activated voice mail on this phone, so if you call and get no answer, or if you get hung up on, try again.

If observers ask to take pictures: taking pictures or videos of your own team is allowed. Taking pictures or videos of someone else’s team is forbidden, unless that team gives written permission.

Interference Policy

The interference policy makes it sound like parents and guests are not even allowed in event buildings. This is not true. Many parents will accompany their children, especially middle schoolers.

If your event involves a written test, or facilities or safety considerations require it, parents and other guests should wait outside the room. If your event involves a device performing, such as Wheeled Vehicle, Scrambler, or Mission Possible, observers are welcome. Observers should stay out of rooms for “Closed” events. Observers are welcome for “Open” events. I will leave it up to your discretion whether your event is Open or Closed. I prefer as many events to be Open as possible. If possible, write “Event Closed to Onlookers” or “Event Open to Onlookers” on a sign and post it near your event.

If you judge a team participating later may gain an advantage by watching (or having someone else watch) your event, the event should be Closed. Example: Experimental Design should be Closed.

Once the event starts, NO ONE is to communicate with competitors (except in emergencies).

Be friendly, answer questions, but if someone has a complaint about your event, tell them to have their team’s coach talk to you. Parents do complain occasionally. If they address their complaint towards you, tell them that the Regional Director has ordered you to discuss items of complaint with coaches only.
### 2016 Missouri Science Olympiad

**Event Scoresheet**  
**B Division – Region V**

<table>
<thead>
<tr>
<th>Event</th>
<th>Judge</th>
<th>Team</th>
<th>#</th>
<th>Score</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Columbia Independent School</td>
<td>B-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cuba Middle School</td>
<td>B-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gentry Middle School Blue</td>
<td>B-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jefferson Middle School</td>
<td>B-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oakland Middle School Red</td>
<td>B-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rolla Middle School</td>
<td>B-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smithton Middle School Black</td>
<td>B-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smithton Middle School Gold</td>
<td>B-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Patrick’s School</td>
<td>B-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steelville Middle School</td>
<td>B-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waynesville Middle School</td>
<td>B-11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>West Middle School Blue</td>
<td>B-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>West Middle School White</td>
<td>B-13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCORING:** Record the raw score in the score column. Assign a place to every team and put the place in the place column. 1<sup>st</sup> place = 1, 2<sup>nd</sup> place = 2, etc. **There can be NO TIES.** If a team makes an honest effort to participate but cannot receive a score (e.g. a device completely fails to perform), enter a score of “P” for “participation” and 13 in the place column. There can be more than one team with a placing of 13. If a team does not participate in an event, enter NS (for “no show”) in the score column and 14 in the place column. See Judges Instructions for scoring for disqualifications. Turn in all graded papers, data sheets and score sheets to headquarters, room 208 Physics.
2016 Missouri Science Olympiad  
Event Scoresheet  
C Division – Region V

Event _____________________  
Judge_____________________

<table>
<thead>
<tr>
<th>Team</th>
<th>#</th>
<th>Score</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battle High School</td>
<td>C-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columbia Independent School</td>
<td>C-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuba High School</td>
<td>C-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hickman High School</td>
<td>C-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rock Bridge High School Gold</td>
<td>C-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rock Bridge High School Green</td>
<td>C-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rolla High School</td>
<td>C-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steelville High School</td>
<td>C-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waynesville High School</td>
<td>C-9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SCORING: Record the raw score in the score column. Assign a place to every team and put the place in the place column. 1st place = 1, 2nd place = 2, etc. **There can be NO TIES.** If a team makes an honest effort to participate but cannot receive a score (e.g. a device completely fails to perform), enter a score of “P” for “participation” and 9 in the place column. There can be more than one team with a placing of 9. If a team does not participate in an event, enter NS (for “no show”) in the score column and 10 in the place column. See Judges Instructions for scoring for disqualifications. Turn in all graded papers, data sheets and score sheets to headquarters, room 208 Physics.
Region 5 Science Olympiad 2016
Judges Evaluation

Name _________________________  Event ______________________________

Total number of helpers ____________
Number of teams participating in your event ____________

The Event

a) What suggestions do you have, if any, for rule changes for your event?

b) How would you rate the difficulty of your event based on student scores?
   Too easy                           Appropriate                           Too difficult
   Comments?

c) Did any problems come up? How did you handle them?

d) Were the facilities appropriate for your event? If not, what type of facility is needed?

(continued)
e) Was your event scheduled appropriately? If not, what suggestions do you have?

f) Did you understand the scoring adequately? If not, what further instructions were needed?

g) General reactions to the event:

**The Tournament**

List any comments or suggestions about any aspect of the tournament.
REGION 5 SCIENCE OLYMPIAD
EVENT APPEAL FORM

Event ________________________________  Location ______________________
Team Name ____________________________  Division ______________________
Team Concerns:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
______________________________
Coach’s Signature

Judge’s Response:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
______________________________
Judge’s Signature

Coaches are to take the completed form to Room 208, Physics Building. Judges must be notified of all appeals prior
to the end of their event. If appeals are made during the last time slot for an event, judges are asked to keep that
event set up for 30 minutes. The decision of the Appeal Committee is final.

RULING: _____________________________________________________________________
________________________________________________________________________
Remember: event supervisors are extremely busy during the competition. Please do not interfere with an
event while it is in progress.

1. Make an attempt to resolve the problem with the event supervisor before submitting a written appeal.

2. This form must be turned in to tournament headquarters within 30 minutes after the completion of the event. If circumstances
prevent filing within this time limit the Appeals Committee may, at their discretion, accept a late appeal.

3. Please be specific in your appeal. Be sure to identify the exact rule/procedure that you feel was not followed. Appeals that are
general in nature may be rejected by the Appeals Committee. This form must be signed by the official coach of the team.

4. The event supervisor (judge) must sign this form before it is submitted to the Appeals Committee. If time permits he/she may
enter their response on this form, or enter the time notified and respond to the Appeals Committee before the final scoring for the
event is completed.
This is a list of all schools that registered to compete. It is possible that some might not actually participate. Sometimes students will use “alternate” names for their schools. I have listed a few that I am aware of.

**Division B Schools**

<table>
<thead>
<tr>
<th>School</th>
<th>City</th>
<th>Also Known As</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia Independent School</td>
<td>Columbia</td>
<td>CIS</td>
</tr>
<tr>
<td>Cuba Middle School</td>
<td>Cuba</td>
<td>Crawford Co. R-II</td>
</tr>
<tr>
<td>Gentry Middle School Blue</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>Jefferson Middle School</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>Oakland Middle School</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>Rolla Middle School</td>
<td>Rolla</td>
<td>RMS</td>
</tr>
<tr>
<td>Smithton Middle School Black</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>Smithton Middle School Gold</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>St. Patrick School</td>
<td>Rolla</td>
<td></td>
</tr>
<tr>
<td>Steelville Middle School</td>
<td>Steelville</td>
<td></td>
</tr>
<tr>
<td>Waynesville Middle School</td>
<td>Waynesville</td>
<td></td>
</tr>
<tr>
<td>West Middle School Blue</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>West Middle School White</td>
<td>Columbia</td>
<td></td>
</tr>
</tbody>
</table>

**Division C Schools**

<table>
<thead>
<tr>
<th>School</th>
<th>City</th>
<th>Also Known As</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battle High School</td>
<td>Columbia</td>
<td></td>
</tr>
<tr>
<td>Columbia Independent School</td>
<td>Columbia</td>
<td>CIS</td>
</tr>
<tr>
<td>Cuba High School</td>
<td>Cuba</td>
<td></td>
</tr>
<tr>
<td>Hickman High School</td>
<td>Columbia</td>
<td>HHS</td>
</tr>
<tr>
<td>Rock Bridge High School Gold</td>
<td>Columbia</td>
<td>RBHS</td>
</tr>
<tr>
<td>Rock Bridge High School Green</td>
<td>Columbia</td>
<td>RBHS</td>
</tr>
<tr>
<td>Rolla High School</td>
<td>Rolla</td>
<td>RHS</td>
</tr>
<tr>
<td>Steelville High School</td>
<td>Steelville</td>
<td></td>
</tr>
<tr>
<td>Waynesville High School</td>
<td>Waynesville</td>
<td></td>
</tr>
</tbody>
</table>

**Notes for 2016:**

In Division B, West Middle School is bringing two teams. Make sure West Middle School teams indicate whether they are the Blue team or the White team when you score them, and make sure to treat them as completely separate teams. Also, Smithton Middle School is bringing a Black and a Gold team. The Gold team is very small, but treat them as a separate team.

In Division C, Rock Bridge High School is bringing two teams. Make sure Rock Bridge teams indicate whether they are the Gold team or the Green team when you score them, and make sure to treat them as completely separate teams.
MISSOURI SCIENCE OLYMPIAD CONSTRUCTION DEVICES POLICY

In accordance with the rules and ethics of Science Olympiad, the underlying principles and intent of the Science Olympiad establish a mandated student performance. Any project, device or assembly is to be constructed by a student or team of students. The Rules and Code of Ethics of the Science Olympiad declares “One or more of a 15-member team must have constructed all pre-built devices presented for judging.” The process of design and resultant product is the students’ responsibility. All components must be made by the student or, if permissible, by the event rules, available by purchase. Students will assemble the device.

Safety shall be of paramount importance. Students will be encouraged to use tools and technology within their age-related safety range. Certain tools and methods may be hazardous and beyond the abilities of various age groups. Specific tools may include power drills and saws, wood or metal lathes, welding equipment, milling machines or metal casting equipment. The use of chemicals should also follow age-appropriate use rules.

Adults may act as facilitators in the building process by asking questions, offering ideas or suggestions and providing references. The adult assistance may include teaching underlying principles, skills, use of tools and adherence to safety rules. No component of the project shall be constructed or assembled by an adult. The student must prepare the entire structure, including accompanying charts, graphs or notes.

However, Science Olympiad endorses adult mentoring of teams and realizes that adults do instruct students on proper techniques on the use of tools. Providing an adult does not interfere with, alter, build or compromise the student or group design, adults may assist by performing restricted tasks not available to a student (such as drilling a hole in a metal plate or operating a power saw). This type of limited help does not compromise the integrity of a student-built device.

Tournament officials must rely on the integrity of principals, coaches, students and parents involved in Science Olympiad. Astute and professional Event Supervisors will be able to evaluate student compliance as such:

- Event Supervisors may extensively question the lead student as to the design and construction of the device. Questioning may include the overall design and construction as well as the component parts and how they operate and function within the device. Other students on the device team may also be questioned.
- Each team coach and administrator will be required to certify that all work presented for the tournament complies with the building and use of tools recommendations above.

If the students on the device team cannot answer the questions correctly and/or the coach cannot verify that the device was student-built, then the Event Supervisors have grounds to believe the students did not design and build the device. The team will be disqualified from the event and scored accordingly.

_________________________________________   ___________________
Head Coach         Date

_________________________________________   ___________________
School Administrator or Principal      Date

For judges’ information. No action is required on your part.
Missouri Science Olympiad  
INTERFERENCE POLICY

Schools participating in the B and C Division State Science Olympiad Tournament must submit a copy of the Interference Policy signed by both the coach and principal of the school. **The signed statement is to be submitted at the time of the team’s acceptance of the invitation to participate in the state tournament. No team shall compete without this signed policy.**

Penalty points may be assessed for the following:

1. For a student, coach, teacher, chaperon or parent entering a building or area where events are set up for the competition or are being held, without proper authorization to do so, five (5) penalty points may be assessed.

   Only those students actually competing in an event and those teachers who may be assigned to assist in the conducting of an event may enter areas where events are held. All other persons are to remain out of the building or the area at all times.

2. For a student, coach, teacher, chaperon or parent interfering with or disrupting the conduct of an event, the event team will be immediately disqualified and the team will be assessed disqualification points based on the level of tournament.

Note this policy applies to any person in attendance at the Olympiad.

I have read and understand the Missouri State Science Olympiad policy on acceptable behavior including the prohibition of vandalism and discourtesy, and I have discussed this with the team members, and will accept the consequences of violation of the policy as assessed by the Missouri State Science Olympiad officials.

__________________________________________  
School Name

__________________________________________  ____________
Principal               Date

__________________________________________  ____________
Coach                Date

For judges’ information. No action is required on your part.
Missouri Science Olympiad
Cheating Policy

Schools participating in the B and C Division State Science Olympiad Tournament must submit a copy of the Cheating Policy signed by both the coach and principal of the school. The signed statement is to be submitted at the time specified by your regional director. No school will compete without the signed policy.

1. An individual who cheats during the competition will be penalized by disqualification of the team from that event. Disqualification results in a score that is three points greater than the number of teams registered in the region.

2. If cheating occurs by a team in more than one event, or in successive years, the team may be disqualified that year, or the following year, from the entire competition.

3. If an event team, or team member, or anyone associated with the team, deliberately takes an action that impairs the ability of other teams to fairly compete, that team will be disqualified from the event and be awarded three points greater that the number of teams registered in the region. In addition, the event team member(s) involved in the incident, may be ineligible for any future Science Olympiad competitions. Furthermore, the teams may be penalized points not to exceed the value of two last place rankings.

I have read and understand the Missouri State Science Olympiad policy on acceptable behavior including the prohibition of vandalism and discourtesy, and I have discussed this with the team members, and will accept the consequences of violation of the policy as assessed by the Missouri State Science Olympiad officials.

________________________________________
School Name

________________________________________  _______________
Principal               Date

________________________________________  _______________
Coach                Date

For judges’ information. No action is required on your part.
VANDALISM

Schools participating in a B or C Division Regional Science Olympiad Tournament must submit a copy of the Vandalism Policy signed by both the coach and principal of the school. The signed statement is to be submitted at the time of the team’s acceptance of the invitation to participate in the state tournament. No school shall be allowed to compete without the signed policy.

1. If a team member or members or persons associated with a team commit(s) an act of vandalism, the team will be disqualified from the competition and will receive no points. No member of that team will be awarded a medal in any event. An individual who commits an act of vandalism may be barred from future competitions.

2. Each sponsoring school must agree to pay the cost of repairing damage from any act of vandalism. A school must pay this restitution, and obtain permission to compete again before it can register a team for the Science Olympiad in a subsequent year.

3. Vandalism means a deliberate action which results in damage to property. This includes, but is not limited to, graffiti, damage to facility property and damage to the personal property of competitors, judges and spectators.

I have read and understand the Missouri Regional Science Olympiad policy on acceptable behavior including the prohibition of vandalism and discourtesy, and I have discussed this with the team members, and will accept the consequences of violation of the policy as assessed by the Missouri Regional Science Olympiad officials.

________________________________________
School Name

________________________________________  _______________
Principal               Date

________________________________________  _______________
Coach                Date

For judges’ information. No action is required on your part.