Elementary Head Coach Information Meeting

October 20, 2015
Macomb Intermediate School District

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Agenda

We will cover
• Season calendar
• Available resources
• Workshop priorities
• 2016 event details
• Open House resources
• Quick Start Kits
• Sponsorship opportunities
• Resolving 2015 concerns
• Door prizes
• Q & A

We will not cover
• How to select team members
• How to read the tournament schedule and assign students to events
• Where to find event coaches
• How to build support & commitment
• Etc.

These important topics and more are covered at the New Head Coach Workshop, Nov. 4th
The Elementary Science Olympiad Calendar

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>September</td>
<td>Register team</td>
</tr>
<tr>
<td>October</td>
<td>Recruit &amp; select team</td>
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<tr>
<td>November</td>
<td>Recruit event coaches</td>
</tr>
<tr>
<td>December</td>
<td>You are here (Oct 20)</td>
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<tr>
<td></td>
<td>New Head Coach Workshop (Nov 4)</td>
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<td></td>
<td>Registration Deadline (Nov 30) (online information + payment received)</td>
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<tr>
<td>January</td>
<td>Event Coach Training (Jan 9, 2016)</td>
</tr>
<tr>
<td>February</td>
<td>Sign up for volunteer roles begins</td>
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<tr>
<td>March</td>
<td>L'Anse Creuse District Tournament, February 27</td>
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<td></td>
<td>South Macomb District Tournament, March 5</td>
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<td></td>
<td>Chippewa Valley District Tournament, March 12</td>
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<td></td>
<td>Utica Practice Event, March 22</td>
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<tr>
<td>April</td>
<td>Submit Team Picture</td>
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<tr>
<td></td>
<td>Final Registration</td>
</tr>
<tr>
<td>May</td>
<td>Tournament (Apr 23, 2016)</td>
</tr>
</tbody>
</table>
Available Resources

• **MSO Website Resources**  [www.macombso.org/elementary](http://www.macombso.org/elementary)
  – **Head Coach Handbook**
    • Covers many topics, from *Roles and Responsibilities of the Head Coach* to *Season Schedule and Milestones*
  – **Monthly Tips**
    • A injection of advice on what you, your event coaches and your students should be doing at the current point in the season
  – **Email alerts**
    • Anyone can sign up. Maybe your event coaches should.
  – **Presentations and memos you might have missed or misplaced**
  – **Event FAQs**
    • Answers to a question about specific events which clarify the rules.
  – **Old test archive**

• **Event Coach Training (Jan 9, 2016)**
  – An opportunity for your event coaches to hear from the actual event supervisor, and to ask questions
  – This year we will be offering more event-focused resource kits for sale

• **Mentors**
  – We can pair you with an experienced head coach who can be available to answer your questions.

• **Open House**
  – If you need help build interest in your school, we can help with hands-on displays that help make Science Olympiad tangible
Workshop Priorities

• Every year we conduct several workshops for students and event coaches
  – Last year we offered Reflection Relay and Crime Busters
• We would like your input on which events to choose
• You were given 3 “voting aids” on your way in
  – Please raise your hand if your school didn’t get a set
• You will get to vote on your way out
  – There are cups in the back of the room with event names marked on them
• Factors that you might consider:
  – What events have changed
  – What events would help your team the most
  – Events which will already have workshops offered in our community
    • Amazing Arthropods (Don’t Bug Me)
    • Rock Hound
    • Wildlife Safari
# 2016 Event Details

<table>
<thead>
<tr>
<th>New or Major Change</th>
<th>Moderate Change</th>
<th>Small or No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Amazing Arthropods</td>
<td>• Crash Car Eggspert</td>
<td>• A is for Anatomy</td>
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<tr>
<td>– Updated <em>Don’t Bug Me</em></td>
<td>• Rock Hound</td>
<td>• Crime Busters</td>
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<tr>
<td>• Bridging the Gap</td>
<td>• Starry, Starry Night</td>
<td>• Charged Up</td>
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<tr>
<td>• Precision Ping Pong Projectile</td>
<td>• Water Rockets</td>
<td>• Grasp a Graph</td>
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<tr>
<td>• Wildlife Safari</td>
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<td>• Reflection Relay</td>
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<td>• Simple Machines</td>
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<td>• Weather or Not</td>
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<td></td>
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<td>• Zowie Estimation</td>
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Complete event rules are available on the website under: [Elementary / Events](#)

When reading the rules: **Bold text** = changed from last year
Amazing Arthropods (updated Don’t Bug Me)

Students will study taxonomy, ecology, life history, and economic impact of the major terrestrial arthropod groups. They will also assemble a collection of arthropod specimens or specimen photographs.

• A test of multiple choice, matching, and true or false questions; 20 stations, with about 1 minute at each, with 4 to 6 questions, using a Scantron form.
• A supporting study guide, with references to appropriate sources is provided.
• The topics to study are organized as such:

<table>
<thead>
<tr>
<th>Arthropod Classes (6)</th>
<th>Insect Orders (12)</th>
<th>Species (18)</th>
<th>Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visually recognize, be familiar with the major groups included, their basic biology &amp; anatomy.</td>
<td>Visually recognize, use a dichotomous key to identify, be able to recount basic biology, life history and ecology.</td>
<td>Visually recognize, recount the taxonomy life history, ecology, economic impact and conservation status.</td>
<td>These general topics will help the student be more successful on this event.</td>
</tr>
<tr>
<td>• Arachnida</td>
<td></td>
<td>• American Burying Beetle</td>
<td>• Linnaean Classification</td>
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<tr>
<td>• Chilopoda</td>
<td></td>
<td>• Antlion</td>
<td>• Basic Arthropod Anatomy</td>
</tr>
<tr>
<td>• etc.</td>
<td></td>
<td>• etc.</td>
<td>• etc.</td>
</tr>
<tr>
<td>• Blattodea</td>
<td>• Coleoptera</td>
<td>• etc.</td>
<td></td>
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<tr>
<td>• etc.</td>
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<td></td>
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</tr>
</tbody>
</table>

• The collection may be pinned specimens, or photos of specimens that the students found.

Scoring:
• Test is 70% of the points; collection is 30% of the points
Bridging the Gap

Students will be given a mystery bag of materials with which to build a bridge. The bridge should be constructed to span the greatest possible distance while supporting a tennis ball at its midpoint.

- Teams will work in a dedicated space on the floor
- Items provided *might* include: straws, coffee stirrers, wooden skewers, paper clips, tape, string, paper, etc. This list is only an example.
- Students may bring a few tools: scissors, pliers, rulers
- They will be provided two boxes to allow pre-testing of their bridge
- Maximum allowed build time is **20 minutes**
- It must hold a tennis ball for **5 seconds**; students may touch their bridge when placing the ball, but not again after releasing the ball

**Scoring:**

- The longest bridge will win
- Ties will be broken in favor of the bridge that weighs less
Precision Ping Pong Propulsion

Students will design and construct a device to launch a ping pong ball at a target.

- No material restrictions for building the launcher
- Up to 10 balls must be launched individually
- 5 minute total time limit for launching
- Up to 8 teams will launch simultaneously

Scoring:

- It matters where balls end up
- Balls that remain in the center bucket score the most points (25 pts); those in the pool also score, but less (10 pts)
- Some balls are worth more than others
  - 2 balls have a multiplier of 3
  - 1 ball has a multiplier of 5
Wildlife Safari

Students will demonstrate their ability to identify fish of Michigan and answer questions from the *Fish of Michigan* field guide.

Teams will rotate among approximately 20 stations where they may view photographs of fish, fish anatomy, fish diseases and fish habitats.

- Each station will have 4 to 6 questions which will vary in degree of difficulty and will be graded accordingly. Question format will be multiple choice, and true/false.
- **All questions will be based on the *Fish of Michigan* field guide.**
- Tie breaker questions will be fill-in-the-blank format questions.

**Resources allowed:**

*Fish of Michigan* field guide (Adventure Publications).
A student-created field guide

Students may each bring one field guide, of either variety.

**Scoring:**

- Each correct answer will be worth between 1 and 3 points. For the tie breaker questions, exact spelling is not required. A secondary tie breaker will be based on the number of difficult questions answered correctly.
Moderate Change Events

Crash Car EggSpert
• Students will build a structure on top of a PineCar Racer. The structure will be designed to hold and protect an egg as the car is rolled down a progressively steeper series of ramps and crashed into an immovable barrier. A few building materials have changed. Also, from the specified list, a few items or quantities may be withheld in competition.

Rock Hound
• Students will identify various rock and mineral specimens and answer questions about the characteristics of these specimens. The emphasis this season is on Sedimentary rocks and minerals. Prior to the tournament, students may prepare one chart per team that can be used to help them during the event.

Starry, Starry Night
• Astronomical facts and concepts relating to the earth, moon, solar system, celestial sphere, stars and constellations. The rotating topic is deep space objects. That includes: galaxies and nebulae, as well as questions about the life cycle of stars.

Water Rockets
• Constructed such that the height of the rocket is no less than 28” tall and with a nose cone radius that is large enough that the inside of a 2-liter soda bottle cap cannot touch the nose of the rocket. Longest time aloft wins.
Small or No Change Events

A is for Anatomy
- Still human nervous, cardiovascular, and respiratory systems
- Questions are worth 1 or **2 points**

Crime Busters
- A few minor changes to the powders and types of evidence

Grasp a Graph
- Part 2 (drawing the graph) will be worth more points, and may include some questions on interpreting the data that was graphed.

Simple Machines
- Questions are worth 1 or **2 points**

Zowie Estimation
- Stations #2 and #3 have increased possible capacities

Reflection Relay
- Maximum time limit and score for the 3D challenge (Part 1) is reduced from 120 seconds to 60 seconds

Charged Up
- No change

Weather or Not
- No change
Open House Resources

• **What:**
  – 16 displays, corresponding to each event (see the example display)
    • Rules, example materials, outline of topics to coach, sample test questions, etc.
  – PowerPoint presentation
    • Can be the kickoff, or can be playing on a loop

• **How** you might use it:
  – Generate interest among students and families in your school at conference night, or for an event specifically targeted to specific grades
  – Create excitement among the students and families at the first team meeting. Get parents to commit to serve as event coaches.

• **Reservations:**
  – Experienced Coaches: sign up for a traveling kit
  – New Teams & Rookie Coaches: sign up for an Open House supported by MSO
Quick Start Kits & supplies

- Precision Ping Pong Propulsion kit
- Pins for bugs specimens (?)

Kits similar to last year
- Crime Busters
- Crash Car Eggspert (also Pinewood cars)
- Reflection Relay (how many need this?)
- Charged Up (how many need this?)

For sale at the Event Coach Training event, Jan 9th
- More information will be posted online beforehand
- Teams are not required to purchase these items to be successful
# Sponsorship Opportunities

## Event Sponsorship: ($100)

<table>
<thead>
<tr>
<th>Event</th>
<th>Sponsor</th>
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<tbody>
<tr>
<td>X Amazing Arthropods</td>
<td>Elite Pest Management</td>
</tr>
<tr>
<td>X A is for Anatomy</td>
<td>Dr. Jim Skoney</td>
</tr>
<tr>
<td>• Bridging the Gap</td>
<td>Open Mind Development</td>
</tr>
<tr>
<td>X Charged Up</td>
<td>Great Lakes Hobby &amp; Toy</td>
</tr>
<tr>
<td>X Crash Car Eggspert</td>
<td>Family Eye Care Associates</td>
</tr>
<tr>
<td>X Crime Busters</td>
<td>Warren Fraternal Order of Police</td>
</tr>
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<td>• Grasp a Graph</td>
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<tr>
<td>X Reflection Relay</td>
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<tr>
<td>X Rock Hound</td>
<td>Mt. Clemens Gem &amp; Lapidary Society</td>
</tr>
<tr>
<td>• Ping Pong Propulsion</td>
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<td>X Wildlife Safari</td>
<td>Detroit Zoological Society</td>
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If you know of a possible sponsor that might be willing to donate $1000 or more, please contact John Ogden at sponsorship@macombso.org
Resolving 2015 Concerns

• Many things went well last year; good sportsmanship, good scoring, a prompt awards ceremony. However....

• The amount of trash left in the SEC Field House
  – We paid a fine to the college for clean up
  – Actions to improve this situation:
    • We will issue every team a garbage bag at their team table, and maybe at each row on the floor
    • We will ask the college to be more attentive on emptying trash cans
  – Other ideas to help?

• What are your concerns?
Door Prizes

• We will draw ticket numbers; winners may select one of these 12 items:
  – 1 Multimeter (for Charged Up)
  – 1 Rocks and Minerals Quick Study Guide
  – 1 Anatomy Quick Study Guide
  – 1 Fish of Michigan Field Guide
  – 1 National Audubon Society Field Guide to Weather
  – 1 Star Finder planisphere
  – 1 Physics Workshop Kit
  – 1 set of 6 safety goggles
  – 4 Quick Start Kit vouchers*

* to be redeemed on Jan 9th
Questions & Answers

• What questions do you have?

• You may quietly leave if all of your questions have been answered

Thank you for coming!
Don’t forget to vote for workshops!