

2012 Division A Event Updates

As requests for clarification or interpretation of rules are received the questions and appropriate responses will be posted for all to read. The "new" or "updated" labels are to provide a quick visual means of determining whether or not you may have read the question/response previously. Entries are labeled as "new" for 10 days; entries are labeled as updated for another 10 days.

If you are familiar with RSS feeds you may set up a RSS aggregator (such as Google Reader) or your Email to automatically receive rules updates/clarifications feeds as they are posted. You can do this for new items as they are added as well as a separate feed for updates/clarifications that have been modified since they were posted. The RSS links are in the sidebar.

You can click on Download PDF in the sidebar to get all rules/clarifications formatted for printing.

NOTE: Event updates and clarifications that are posted here will be in effect for the Los Angeles County Science Olympiad on Saturday, February 25, 2012. Any other clarifications posted elsewhere do not apply to this regional.

Updates, Clarifications, Reminders (02/19/12)

Length of Elementary Events

Although the Elementary Science Olympiad Rules Manual describes various times for the events, all of the events are 30 minutes long. The times listed in the schedule are correct.

Elementary Event Tie Breakers

The rules manual may describe tie breakers for some of the events. In the Los Angeles Regional Science Olympiad, we do not employ tiebreakers. If two teams (or many teams) do equally well, they will receive the same number of points.

Organization of the Events

The event descriptions may describe certain tasks or organizational structure that may not be employed at the regional tournament. For example, "Name the Scientist" calls for a matching game - this specific tactic for organizing the event will not be employed this year. Many of the events will include stations, through which the students rotate. This allows a minute or two at each station.

Pens & Pencils

Students should be prepared with pens, pencils, etc. They should not expect that writing tools will be available for them at the event if they forget. They should also not assume that there will be pencil sharpeners in the room.

Don't Forget Names and Team Numbers on Papers!

Students should know their team number and write it on any response sheets that they turn in. They should also include their school name and their own names.

Duplicate Maps and Schedules

The Final Schedule should be posted soon. Please print copies for anyone from your team who may need one. Please do the same for campus maps, which can be downloaded from the website.

Making and Using a Key (02/19/12)

The event, "Making and Using a Key," will include a variety of animals from the list below that the students will identify. Students are to make their own key for these animals, before arriving at the Science Olympiad and bring it to the event. They will use this key to identify animals during the event.

They will need two keys, one for invertebrates, and one for vertebrates (students should be able to recognize vertebrates or invertebrates and then use the correct key). The specimens will be in jars or pictures. Some hints will be provided, for example, backbone, jaws, etc.

The list of possible animals to identify using the key they bring with them to the event is:

rat lizard beetle
mouse lamprey spider
dogfish earthworm tarantula
frog crayfish grasshopper
salamander jellyfish planarian
bat hydra snail
canary butterfly slug
parakeet moth clam worm
snake starfish millipede
turtle clam centipede
goldfish oyster tick

Sample Vertebrate Key

1a Hair present.....Class Mammalia

1b Hair absent.....go to 2

2a Feathers present.....Class Aves

2b Feathers absent.....go to 3

3a Jaws present.....go to 4

3b Jaws absent.....Class Agnatha

4a Paired Fins present.....go to 5

4b Paired fins absent.....go to 6

5a Skeleton bony.....Class Osteichthyes

5b Skeleton cartilaginous.....Class Chondrichthyes

6a Skin scales present.....Class Reptilia

6b Skin scales absent.....Class Amphibia

Sample Arthropod Key

1a Walking legs more than 5 pairs.....go to 2

1b Walking legs 5 or fewer pairsgo to 3

2a Legs, 1 pair for each body segment..Class Chilopoda

2b Legs, 2 pair for each body segment...Class Diplopoda

3a Antennae present.....go to 4

3b Antennae absent.....Class Arachnida

4a Antennae 1 pair.....Class Insecta

4b Antennae more than 1Phylum Crustacea

Problem Solving Inquiry

Question: I am trying to prepare my students for the Problem Solving Inquiry event. Is the question in written form? Do you know where I can find resources or examples of typical questions and good answers? I would really like to be able to show our team examples of what they can expect to see.

Answer: The problem they respond to may be in written form, a demonstration, a hands-on challenge, or any other problem solving scenario. There is no specific content listed that students should study in preparation. This event is about the student's ability to respond in writing to a problem solving situation. Clear, concise, legible writing is valued. Simply writing a lengthy response, perhaps fishing to get an important point in, is not required. (Posted 02/06/12)

Rock Hound

Question: Are there any size or content limitations on the chart the children prepare and bring to the event? What are the consequences for teams that don't follow rules relating to the rock and mineral chart (size, content, etc)? Are they still allowed to bring their chart into the competition?

Answer: The chart for Rock Hound should be of a "reasonable size" such that it would easily fit on a universal student desk. Students should be able to manage their chart in a small space as they move from station to station. As they use the chart it should not disrupt specimens or other nearby students. If the chart is disruptive or a nuisance, as deemed by the event supervisor, they will not be allowed to use it. (Posted 02/06/12)

Using Alternates

Question: Can alternates participate in any of the events?

Answer: No. There are no alternates at the Science Olympiad. You may have alternate students ready, in case someone gets sick or has a family emergency and is otherwise unable to participate on the day of the competition. Once you arrive with your team of up to 15 and file your [Team Roster](#) at the registration table, those students constitute your team. Other students who may have helped those 15 students prepare over the prior months are not part of your team. You may recognize them in other ways, but at the Science Olympiad they are not considered participants. (Posted 02/06/12)

Problem Solving Inquiry

Question: Can students bring notes and other references for the Problem Solving Inquiry competition?{

Answer: No. Notes, references, or or other papers may be brought into the event. Students should bring pencils/pens. (Posted 02/06/12)

Problem Solving Inquiry

These are the instructions for the Division A Problem Solving Inquiry competition.

Los Angeles County Elementary Science Olympiad Problem Solving Inquiry

Students will demonstrate problem solving skills as they respond to an open-ended inquiry problem presented during the event. A brief inquiry demonstration will be presented and the students will be asked to respond in writing to the demonstration. The demonstration may be presented by the event captain, available for hands-one exploration, or observed in a video.

Emphasis is placed on the ability to respond to the problem presented with clear inquiry strategies, scientific thinking processes, and ideas—rather than knowing or proposing the correct solution. Students should be able to observe carefully, think about what they see, and communicate ideas and questions.

In general terms, this includes

- What do you know?

What are your observations?

- What do you need to know?

What information do you need?

What new observations (experiment, something to try) would help you work on this problem?

- How can you verify your ideas?

What new observations would help you work on this problem or confirm your ideas?

Clarifications:

- It is not necessary for the students to have seen or explored the specific demonstration presented during the event.
- This is a written event. Students should be able to express their ideas clearly in writing, including legible writing.
- Diagrams may be included if they help express student ideas.
- Students may discuss their ideas quietly during the event.

Example: Cartesian Diver

The Cartesian Diver demonstration is presented and the question is posed: “What makes the dropper (or other item demonstrated) go up and down? Whether or not students know, or discover the correct solution, they should be able to clearly describe what they observe in some detail and clarity and a process for investigating their ideas about the demonstration. (If you are unfamiliar with the Cartesian Diver, there are many demonstrations available on-line).

Effective problem solving process will include:

- Observations are accurately described.
- Observations are clearly described in writing/diagrams.
- Any applicable sequence of is observations noted.
- Connection to prior experience is expressed.
- New questions are noted.
- “Need to know” questions are listed.
- “Valuable to try” experiments are described. (“I would like to try ... to find out if ...”)
- Ideas are supported by observations and data.

(Posted 12/1/11)

Trajectory

These are the instructions for the Division A Problem Solving Inquiry competition.

Los Angeles County Elementary Science Olympiad Trajectory

Students will demonstrate problem solving skills and an understanding of simple principles of trajectory as they respond to a trajectory task presented during the event. A trajectory launch device will be presented and demonstrated, following which a team of up to two students will attempt to launch an object using the device at several fixed targets. Targets may be near and/or far and may be placed horizontally and/or vertically. The type and function of the trajectory device will not be revealed until the event begins. This event may be held outdoors.

Emphasis is placed on the ability to collaborate as they engage in a few rounds of trial and adjustment to successfully complete the trajectory task. Time will be limited and the number of trials may be limited as directed by the event supervisor. Advice or interference from adults or other team members may result in disqualification.

There is nothing for the students to construct or bring to the Science Olympiad for this event. Notepads, clipboards, paper, pencils, pens, digital devices, or other recording materials are not permitted.

(Posted 12/1/11)

Ornithology

These are the instructions for the Division A Ornithology competition.

Los Angeles County Elementary Science Olympiad Ornithology

Students will demonstrate knowledge of a variety of birds found in the local Los Angeles urban area and

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surrounding mountains. Activities may include:

- General anatomy and adaptation
- Characteristics of bird behavior and life
- Identify birds by ear, including: Great Horned Owl, Quail, Red-tailed Hawk, Mourning Dove
- Understanding different kinds of feathers
- Understanding the function of different bird beaks

Students may be asked to explain and describe bird range maps like those found in field guides.

Students may be asked to demonstrate simple understanding of birding strategies, including binocular adjustment.

Specific questions will be limited to local birds, but students may benefit from an understanding of the major orders of birds in North America.

Students may be asked to demonstrate understanding of common features of birds and dinosaurs.

(Posted 12/1/11)

Teams and Team Members

A maximum of 15 students may participate on any team.

A maximum of five 6th grade students may participate on a Division A team.

A maximum of five 9th grade students may participate on a Division B team.

A maximum of seven 12th grade students may participate on a Division C team.

Middle schools may invite a maximum of five of their last year's 8th grade students to be part of the current Division B team.

(Posted 12/1/11)
