

What is Science Olympiad?

SCIENCE OLYMPIAD MISSION

Science Olympiad is a national non-profit organization dedicated to improving the quality of K-12 science education, increasing male, female and minority interest in science, creating a technologically-literate workforce and providing recognition for outstanding achievement by both students and teachers. These goals are achieved by participating in Science Olympiad tournaments and non-competitive events, incorporating Science Olympiad into classroom curriculum and attending teacher training institutes.

THE SCIENCE OLYMPIAD GOAL:

1. To create a passion for learning science by supporting elementary and secondary Science Olympiad tournaments at building, district, county, state and national levels with an emphasis on teamwork and a commitment to excellence.
2. To improve the quality of K-12 science education throughout the nation to change the way science is perceived and the way it is taught (with an emphasis on problem solving skills and hand-on, minds-on constructivist learning practices). This goal as accomplished through in-depth core curriculum training workshops and the distribution of curriculum materials to thousand of teachers.
3. To celebrate and recognize the outstanding achievement of both students and teachers in the areas of science and technology by awarding thousand of certificates, medals and scholarships.

PURPOSE OF THE SCIENCE OLYMPIAD TOURNAMENT:

1. To bring science to life, to show how science works, to emphasize problem solving aspects of science and the understanding of science concepts.
2. To develop teamwork and cooperative learning strategies among students.
3. To make science education more exciting so more students will enroll in science courses and engage in other science activities like science reading, fairs, meetings and field trips.

TEAM AND EVENT ASSIGNMENTS

Each Science Olympiad team will consist of a maximum of 15 students. EWMS may enter 2 or 3 teams.

STUDENT LUNCH MEETINGS

The Science Olympiad Student Coordinator (s) run the bi-weekly lunch meetings. They are held during lunch -time. The first meeting will be held on October in Warren Hall. The purpose of these meetings are to pass out general information, to check student progress, to address any questions or concerns that the students may have, and to share hints / information with other student participants.

STUDENT EVENT MEETINGS

The Parent Coaches will schedule the event meetings. The frequency and duration of the meetings will depend on the event requirements and the Coach's availability. .

REGIONAL COMPETITION

This is an **all day competition**. Students will need to arrive early for sign-in, preparation, and early set-up. Schedules, maps, and other information will be distributed before the competitions. Parent volunteers assist at team headquarters, monitoring events, and escorting students to event competitions

2009 – 2010 Science Olympiad Events- Division B

1. **Anatomy (B)** - Teams will be tested on their knowledge of anatomy and health concepts, skeletal.
2. **Bio-Process Lab (B)** - Teams will demonstrate biology laboratory skills related to selected topics.
3. **Compute This (B)** - Teams will be presented with a problem which requires quantitative data capture from the Internet and the presentation of data in a graphical format.
4. **Disease Detective (B)**- This event requires students to apply principles of epidemiology to a published report of a real-life health situation or problem, population growth.
5. **Dynamic Planet (B)** - Teams will work at stations that display a variety of earth science materials and related earth science questions. (earthquakes/volcanoes)
6. **Ecology (B)** - Students will answer questions involving content knowledge and process skills in the area of ecology and adaptation by examining different ecosystems, (grasslands/taiga).
7. **Battery Buggy (B)** - Students will construct a vehicle that uses electrical energy as its sole mean of propulsion.
8. **Elevated Bridge (B)** - Teams will design, build & test the lightest bridge to carry a maximum load.
9. **Can't Judge a Powder (B)** – Chemistry ID
10. **Experimental Design (B)** - Given a set of unknown objects, teams will design, conduct, analyze and write-up an experiment.
11. **Fossils (B)** - Students will identify, describe, and classify various specimens.
12. **Junkyard Challenge (B)** - Students will partially pre-construct a device with final construction and adaptation onsite to complete a published challenge.
13. **Meteorology (B)** - This event involves the use of process skills as applied to meteorology, everyday weather.
14. **Pentathlon (B)** - Teams will compete in an academic pentathlon to demonstrate their overall understanding of five major science content areas.
15. **Physical Science (B)** - Teams will demonstrate physics laboratory skills related to selected topics (wind).
16. **Solar System (B)** - Teams will identify stars, constellations, and deep sky objects and be knowledgeable about their evolutionary stages.
17. **Road Scholar (B)** - Requires the accurate interpretation and understanding of various map features using a variety of road and topographic maps.
18. **Science Crime Busters (B)** – Teams will identify the perpetrators of a crime or crimes by using paper chromatography and analysis of unknown solids, liquids, and plastics found at the scene of a crime.
19. **Trajectory (B)** - Teams will design, construct, calibrate and operate a device capable of launching a projectile into a target using energy provided by nonmetallic elastic solids.
20. **Wright Stuff (B)** - Teams will design and build a propeller propelled aerodynamic device for greatest time aloft.
21. **Write It/Do It (B)** - A technical writing exercise where students write a description of a contraption and other students will attempt to recreate it using only the written description.
22. **Ornithology**
23. **Shock Value-** (circuits)

We will need parent volunteers!

- Assistant Coordinators **(2)** at least one 7th grade parent to learn and coordinate the team next year
- Individual Event Coaches for each event (23 or more)**
- T-Shirt Coordinator **(1)**
- Regional Competition Monitors **(2)**
- Regional Competition Food Coordinator/Party Planners **(2)**

At least one parent or guardian for each student participant is expected to assist in some capacity!!

Please e-mail: EWMSScienceO@yahoo.com if you are interested in participating!

