Welcome to Science Olympiad. There are many levels of participation. Some students see us as a club and some students would like to compete. As a club your commitment will be less. However if you would like to compete you can still have fun but the commitment will be greater. Any student in grade 6-9 who shows an interest and attends meetings and practices is considered to be a team member. You are responsible for finding information about meetings, coaches schedule and rules etc. Information about Science Olympiad is communicated to you using the Science Olympiad school wires page.

- Up to 45 students may compete at the Regional level. Three teams of fifteen students. Each team will have up to 5 additional alternate. \*Alternates participation in events is limited.
- Only 15 team members at the State level and beyond. <u>MOST STUDENTS WILL NOT</u> <u>PARTCIPATE AT THE STATE LEVEL.</u> \*The team may have up to 5-7 alternates. Alternates participation in events is limited.
- ALL team members may qualify to compete at the Regional level. Some team members will then qualify to compete at the State level but most will not. Those students who do compete cannot do well with out the support and help of the other team members.

## Regional Event- Saturday March 2, 2019

State Event April 5-7 2019

## In order to be chosen a competing team member the coaches will look that you:

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- 1. The least number of event scheduling conflicts.
- 2. Attend Meeting, Practices and workshops
- 3. Practice Multiple Events (3-6), You pick 1& and we assign the rest.
- 4. Excel at your events
- 5. Have a positive attitude; such as a willingness to compete in events that are not your top choice because they help the team achieve better results.
- 6. Study events that are only at the State Competition
- 7. Display appropriate behavior
- 8. Work independently and complete assignments on time
- 9. Are available for the Regional competition Saturday March 2nd from 6am-6pm
- 10. Are available April 5-7, 2019 for the State Level Competition.
- 11. Past Olympiad experience.

## <u>Regardless of whether you compete or not you are part of the team and will participate in other ways.</u> <u>ONLY 25 STUDENTS MAY TRAVEL TO THE STATE EVENT. YOU MUST EARN AN INVITATION IN</u> <u>ORDER TO TRAVEL WITH THE SCHOOL.</u>

In order to excel at your event here is an approximation on the time commitment needed. This is based on past performance of students and their standings and awards in events.

October- 2-3 hours a week November- 2-3 hours a week December- 3 hours a week January3-4 hours a weekFebruary5 hours a week

The week before the competition: 8 hours: including late nights – usually 6pm

The amount time is only an approximation. It may be more depending on the level of work completed, difficulty of event or number of events competing in.

Below is a list of the 2019 events. Please keep in mind that these events must be started now in order to be prepared in time. Not all events are open to all students. We are a competing team and will need to place students or limit the number of students in events.

- 1. Anatomy & Physiology: Exam on human Cardiovascular, Lymphatic & Excretory Systems
- 2. **Battery Buggy:** Construct a vehicle that uses electrical energy to travel a specified distance and stop as close to target point as possible.
- 3. **Boomilever:** Design and build a cantilever to support a minimal load & achieve a highest structural efficiency.
- 4. **Circuit Lab:** Complete tasks and answer questions about electricity & magnetism.
- 5. <u>Crime Busters:</u> (STATE ONLY EVENT) : Given a scenario, collection of evidence & possible suspects, perform a series of tests to solve a crime.
- 6. **Density Lab:** Exam and activities about mass, density, number density, area density, concentration, pressure & buoyancy.
- 7. <u>Disease Detectives:</u> (STATE ONLY EVENT) Exam on the study of disease, injury, health & disability in populations or groups of people.
- 8. **Dynamic Planet:** exam related to glaciers, glaciation & long –term climate change.
- 9. Elastic Launched Glider: Build an elastic launched glider that stays aloft the longest amount of time.
- 10. **Experimental Design**: Design, conduct and report the findings of an experiment.
- 11. **Fossils:** Use fossils to date and correlate rock units & ancient life using fossil identification and classification.
- 12. <u>Game On:</u> design and build an original computer game using the program Scratch incorporating a scientific theme.
- 13. Heredity: Exam on genetics
- 14. Herpetology: Exam on amphibians and reptiles.
- 15. <u>Meteorology</u>: Exam on basic weather principles with emphasis on interpretation of data, graphs, charts and images.
- 16. <u>Mystery Architecture:</u> Given unknown supplies build structures such as a tower, bridge, tunnel, arch or cantilever on demand.
- 17. <u>Potion & Poisons:</u> Exam and lab event on chemical properties & effects of toxic and therapeutic substances with a focus on household & environmental toxins & poisons.
- 18. **Road Scholar:** exam using State highway map, Road Atlas and Topographic maps.
- 19. <u>Roller Coaster:</u> Design and Build a marble roller coaster track so the marble finishes the track as close to a target time as possible.
- 20. **Solar System:** Exam on geological characteristics & evolution of the Earth's Moon & other rocky bodies in our solar system.
- 21. <u>Thermodynamics:</u> (STATE ONLY EVENT) Construct an insulating device to retain heat & complete an exam on thermodynamic concepts.
- 22. <u>Water Quality:</u> Exam on aquatic environments.
- 23. Write It Do it: One participant will write a description of an object and another participant will build the item based on the written description only.

24. Trial Event (1): To be announced

25. Trial Event (2): To be announced

26. Trial Event (3): STATE ONLY -To be announced

(\*Trial events are optional and do apply to team standings however medals may be earned by participants. ALTERNATES MAY COMPETE AT TRIAL EVENTS ONLY)