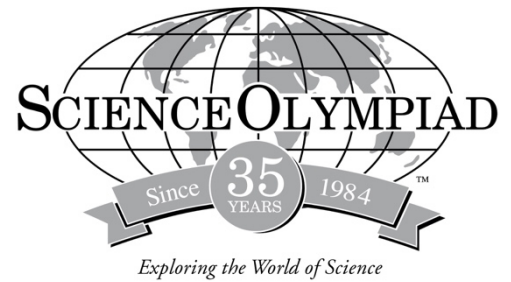


Dear Students & Parents,

We are excited to start a new year of Science Olympiad at Dixie Middle School! Science Olympiad is a team of 15 students that will compete in 23 science events. There are 3 competitions that they will compete in:



| Competition | Date | Location |
|-------------|------------------------------|----------------------------|
| District | Jan. 26 th , 2019 | Desert Hills Middle School |
| Region | Mar. ?, 2019 | Southern Utah University |
| State | Mar. 30 th 2019 | University of Utah |

If you make the team, you will need to commit to all 3 competition dates, so put them on the calendar now. Please make us aware of any possibilities of other events you may have in March (sports, dance, etc.)

Science Olympiad team members will be required to attend one after school mentoring session per week. Those dates will be determined at a later time. Please make sure that your after school time is free from other activities. Students who are successful in their events work hard during those after school mentoring sessions and outside school. Each student needs to work at home and school in order to be ready for the competition. Mentor participation is required to assist each student in gathering data, practicing, building and studying for their events. Each student is required to have an adult mentor (could be a parent) to assist in each event. These mentors will need to attend at least one mentoring session per month with additional support at home.

Fees: \$50. This fee covers the cost of t-shirts, travel and hotel expenses. **This fee is due by Sept. 28th.** Students will pay the fee to the finance office and give the receipt to Mrs. Scholes

Before applying for the team, please go over the attached event list. More info may be obtained at <http://soinc.org> We are DIVISION B.

Students who wish to apply for the team must complete the application form on the back of this letter and return it to Mrs. Scholes by Tuesday, Sept. 4th

Thank you and we look forward to an exciting year!

Mrs. Scholes, Mrs. Heath, Mrs. White

Please contact me with any questions: anisa.scholes@washk12.org

Student Name: _____ Grade: _____

Email: _____ Phone # _____

See the attached sheet describing the 2019 events. Then go to <http://soinc.org> to see more information about the events (Division B) What 3 events are you most interested in?

1. _____

2. _____

3. _____

alternate _____

What skills do you feel you can contribute to the team?

What other activities are you participating in? (math counts, sports, etc.)

If I am selected as a member of the team I will devote as much time as necessary to be the best prepared that I can be for the tournaments. (Student Signature) _____

Parent Information: Name(s): _____

Email address: _____ Phone #: _____

Are you willing to assist your student in preparing for their events? ____ Yes ____ No

If my student is selected as a member of the team, I will aid them in researching, organizing and practicing for their event throughout the year. (Parent Signature) _____

If the mentor is not a parent, please fill out the mentor section below.

Mentor Information: Name(s): _____

Email address: _____ Phone #: _____

Are you willing to assist your student in preparing for their events? ____ Yes ____ No

If my student is selected as a member of the team, I will aid them in researching, organizing and practicing for their event throughout the year. (Mentor Signature) _____

2019 SCIENCE OLYMPIAD EVENTS

ANATOMY AND PHYSIOLOGY- Understand the anatomy of the human body systems: cardiovascular, lymphatic and excretory.

BATTERY BUGGY- Teams will construct a vehicle that uses electrical energy as its sole means of propulsion, quickly travels a specified distance, and stops as close as possible to the Target Point.

BOOMILEVER- Teams will design and build a Boomilever meeting requirements specified in the rules supporting a minimum load and to achieve the highest structural efficiency.

CIRCUIT LAB- Participants must complete tasks and answer questions about electricity and magnetism.

CRIME BUSTERS- Given a scenario, a collection of evidence, and possible suspects, students will perform a series of tests that along with other evidence will be used to solve a crime.

DENSITY LAB- Participants compete in activities and answer questions about mass, density, number density, area density, concentration, pressure and buoyancy.

DISEASE DETECTIVES- Participants will use investigative skills in the scientific study of disease, injury, health and disability in populations or groups of people.

DYNAMIC PLANET- Students will use process skills to complete tasks related to glaciers, glaciation and long-term climate change.

ELASTIC LAUNCHED GLIDER- Prior to the tournament teams design, construct, and test elastic launched gliders to achieve the maximum time aloft.

EXPERIMENTAL DESIGN- This event will determine a participant's ability to design, conduct and report the findings of an experiment conducted entirely on site.

FOSSILS- Teams demonstrate their knowledge of ancient life by completing selected tasks at a series of stations including but not limited to fossil identification, answering questions about classification, habitat, ecologic relationships, behaviors, environmental adaptations and the use of fossils to date and correlate rock units.

GAME ON- This event will determine a team's ability to design and build an original computer game using the program Scratch incorporating the scientific theme provided to them by the supervisor.

HEREDITY- Participants will solve problems and analyze data or diagrams using their knowledge of the basic principles of genetics.

HERPETOLOGY- Participants will be assessed on their knowledge of amphibians and reptiles.

METEOROLOGY- This event emphasizes understanding of basic meteorological principles with emphasis on analysis and interpretation of meteorological data, graphs, charts and images.

MYSTERY ARCHITECTURE- At the beginning of the event, teams will be given a bag of building materials and instructions for designing and building a device that can be tested.

POTIONS AND POISONS- This event is about chemical properties and effects of specified toxic and therapeutic chemical substances, with a focus on household and environmental toxins or poisons.

ROAD SCHOLAR- Participants will answer interpretive questions that may use one or more state highway maps, USGS topographic maps, Internet-generated maps, a road atlas or satellite/aerial images.

ROLLER COASTER- Prior to the competition, teams design, build, and test a roller coaster track to guide a ball or sphere that uses gravitational potential energy as its sole means of propulsion to travel as close as possible to a target time.

SOLAR SYSTEM- Students will demonstrate an understanding and knowledge of the geologic characteristics and evolution of the Earth's moon and other rocky bodies of the solar system.

THERMODYNAMICS- Teams must construct an insulated device prior to the tournament that is designed to retain heat and complete a written test on thermodynamic concepts.

WATER QUALITY- Participants will be assessed on their understanding and evaluation of aquatic environments.

WRITE IT DO IT- One student will write a description of an object and how to build it, and then the other student will attempt to construct the object from this description.