

Division B Event Descriptions

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.