

Washtenaw Elementary Science Olympiad 2016

Brief Event Descriptions

(Workshops will be scheduled after the January Event Coaches Meeting)

Aerodynamics (2nd and 3rd grades)

Participants will build and fly paper airplanes for distance, time and accuracy.

Back To Nature (4th and 5th grades)

Workshops: Students only

Rotating topics in Natural Science for 4th and 5th grade competitors. For WESO 2016 the event content will be an extension of the 2nd and 3rd grade Feathered Friends content.

Barge Building (2nd grade)

Participants will construct a barge using the given material that can support a cargo of the largest number of weighted objects without getting them wet.

Circuit Wizardry (4th and 5th grades)

Workshops: Coaches and Students

Participants will be tested on basic electrical circuit concepts, components, schematics (reading and understanding) and ability to design and build a simple circuit from a functional description.

Disease Detectives (all grades)

Students will be tested on their knowledge as well as observational, analytical, and investigative skills in the study of disease, risk, spread, and prevention, with a focus on population growth causes of public health problems.

Estimania (all grades)

Teams will be asked to estimate answers to questions of measurement or numerical approximation.

Feathered Friends (2nd and 3rd grades)

Workshops: Students only

Participants will be tested on bird identification by sight and sound, anatomy (structure and function), life history and habitat characteristics of birds.

Gravity Racer (2nd and 3rd grades)

Each team will build a vehicle and utilize gravity to reach a target.

iCompute (4th and 5th grades)

Workshops: Coaches only

Participants will be tested on their knowledge of basic computing concepts, including hardware and software, their understanding of how computers solve problems, and their ability to create a simple program.

In Bloom (2nd and 3rd grades)

Workshops: Students only

Students will be tested on their knowledge of plants, including grasses, flowers, and trees.

Map Reading (all grades)

Workshops: Coaches only

Students will use their map reading skills to answer geographic questions.

May The Force Be With You (4th and 5th grades)**Workshops: Coaches and Students**

Stronger, Faster, Higher - understand and use simple machines to solve problems or accomplish tasks.

Mystery Architecture (all grades)

Each team will be given a bag of materials to build a structure that can support a tennis ball. The tallest structure wins.

On Target (all grades)

Each team will build missiles, utilizing a precision straw as the missile body. The accuracy of the missiles launched indoors at a fixed target will be tested.

Pasta Bridges (2nd and 3rd grades)

Participants will build a bridge using the materials supplied (a variety of dried pasta and clay) to support a cup (in the middle of the bridge) with as many small weights as possible.

Photon Phun (all grades)**Workshops: Coaches and Students**

Teams will use mirrors to aim a light beam at stationary targets in a darkened room. 4th and 5th grade teams will also answer written questions on the behavior and properties of light.

Potions (4th and 5th grades)

Each team will answer questions about basic chemistry concepts and complete several simple chemistry experiments exercising basic lab skills and safety procedures.

Straw Tower (4th and 5th grades)

Each team will build a tower for strength and height using drinking straws and straight pins.

To Infinity and Beyond (all grades)**Planetarium Show: Students only**

Using a planetarium, charts, and a written test, students will demonstrate an understanding and basic knowledge of the solar system and its elements (including apparent motion of the sky, planets and moons, constellations and stars, asteroids, and comets).

Water Rockets (3rd, 4th and 5th grades)**Workshop: Coaches Only**

Students will build a rocket with the specified materials. Teams will earn points for rocket launches as well as answering questions about rocket construction and flight.

Write It, Build It (4th and 5th grades)

Team members are shown a "picture" and will write a description. In a separate room, other team members are given the pieces of the "picture" and the written description in an attempt to rebuild the "picture".