



2010 ESO Events & GPS Science Correlations



1. Aerodynamics

- a. **Event Description:** Each two-member team will build one paper airplane to be flown a distance of at least five meters, landing on a predetermined target. Airplanes must be of a folded aerodynamic design. Crumpled wads of paper do not qualify.
- b. **GPS Correlation(s):**
 - i. **S4P3; S3-5CS1; S3-5CS2; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS8**

2. Barge Building

- a. **Event Description:** The purpose of this event is to construct a barge using aluminum foil that can support a cargo of the largest number of objects without getting them wet.
- b. **GPS Correlation(s):**
 - i. **S4P3; S3-5CS2; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS8**

3. Bridge Building

- a. **Event Description:** This event is to test a student's ability to build a lengthy, strong, stable, and reproducible suspension bridge from common materials.
- b. **GPS Correlation(s):**
 - i. **S4P3; S5P1; S3-5CS2; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS8**

4. Crime Busters

- a. **Event Description:** Participants use test to identify unknown powders, match fingerprints and use paper chromatography to identify a note found at a crime scene.
- b. **GPS Correlation(s):**
 - i. **S5P2; S3-5CS1; S3-5CS3; S3-5CS8**

5. Deep Blue Sea



- a. **Event Description:** Each team will work cooperatively to answer questions, identify ocean flora and fauna, physical features and phenomena related to marine science.
- b. **GPS Correlation(s):**
 - i. **S3L1; S3L2; S4L1; S4L2; S5L1; S5L4; S3-5CS1; S3-5CS4; S3-5CS6; S3-5CS8**

6. Disease Detectives

- a. **Event Description:** Epidemiology uses science to study disease, injury, health, and disability in communities. This study involves: reasoning skills, such as those used by "disease detectives," comparison of risks (the chances of becoming sick or injured); and surveys to help describe different groups of people. The goal of the Disease Detectives event is to have students understand connections between things they may encounter in daily life and various health problems that affect communities, risks for disease/injury, and opportunities for prevention.
- b. **GPS Correlation(s):**
 - i. **S3L2; S4L1; S5L3; S5L4; S3-5CS1; S3-5CS4; S3-5CS6; S3-5CS8**

7. Don't Bug Me



- a. **Event Description:** The contestants are to distinguish insects from non-insects, identify various body parts, characteristics, habitats, ecological significance, life cycles, and major classes and orders of arthropods.
- b. **GPS Correlation(s):**
 - i. **S3L1; S3L2; S4L1; S4L2; S5L1; S5L4; S3-5CS1; S3-5CS4; S3-5CS6; S3-5CS8**

8. Grasp A Graph



- a. **Event Description:** Students will be asked required to demonstrate their skill at collecting and organizing information using pictographs, bar, line and pie graphs to solve problems.
- b. **GPS Correlation(s):**
 - i. **S3-5CS2; S3-5CS3; S3-5CS4; S3-5CS7; S3-5CS8**

9. “Knock Knock” – “Who’s There”



- a. **Event Description:** This event is designed to examine a student’s knowledge and awareness of his fellow travelers on the planet earth. Contestants will be asked to identify a variety of naturally occurring evidence that indicates the presence of, the passage or, or the existence of some living organisms in the environment.
- b. **GPS Correlation(s):**
 - i. **S3L1; S3L2; S4L1; S5L1; S3-5CS1; S3-5CS4; S3-5CS6; S3-5CS8**

10. Large Number Estimation

- a. **Event Description:** Students will be asked to estimate the answers to approximately twenty questions requiring an estimate between ten and one million.
- b. **GPS Correlation(s):**
 - i. **S5P1; S3-5CS2; S3-5CS3; S3-5CS4; S3-5CS8**

11. Mystery Architecture

- a. **Event Description:** This event is designed to test the student’s ability to think on their feet. They will be given a bag of materials to build a freestanding tower as high as they can. The tower should be constructed to support a tennis ball at its top.
- b. **GPS Correlation(s):**
 - i. **S4P3; S5P1; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS8**

12. Name the Scientist

- a. **Event Description:** Students will be required to identify prominent scientists and their contributions to their field(s).
- b. **GPS Correlation(s):**
 - i. **S3-5CS5; S3-5CS6; S3-5CS7; S3-5CS8; Various other GPS standards will also be addressed depending on the scientists studied**

13. Rock Hound

- a. **Event Description:** Students will be asked to identify various rock and mineral specimens. They will create charts that describe characteristics of common rocks and minerals.
- b. **GPS Correlation(s):**
 - i. **S3E1; S3-5CS1; S3-5CS5; S3-5CS6**

14. Treasure Hunt



- a. **Event Description:** Students will be given a “Treasure Marker” and a “Treasure Map” which will contain direction and distance data. They will use their own compass to locate a hidden treasure.
- b. **GPS Correlation(s):**
 - i. **S3-5CS1; S3-5CS2; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS8**

15. Simple Machines



- a. **Event Description:** Participants will move from one station to another for up to 15 stations. Each station will contain a picture or example of a simple machine. The student will be asked to identify the machine and answer a question about it, or use equipment to measure some variable such as length, force or weight.
- b. **GPS Correlation(s):**
 - i. **S4P3; S3-5CS1; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS7; S3-5CS8**

16. Water Rockets

- a. **Event Description:** Prior to the science Olympiad tournament, contestants will use 2-liter plastic soda bottles to build one or more rockets propelled by air pressure and water. The rocket that stays aloft for the longest time will win.
- b. **GPS Correlation(s):**
 - i. **S4P3; S3-5CS1; S3-5CS3; S3-5CS4; S3-5CS5; S3-5CS7; S3-5CS8**

17. Wildlife Safari

- a. **Event Description:** In this event students will demonstrate their understanding of basic ecological concepts such as food chains, food webs, components of habitat and the impact of modern technology on our environment. They will also demonstrate their ability to identify various plants, insects, birds, mammals, etc. through the use of reference materials such as field guides.
- b. **GPS Correlation(s):**
 - i. **S3L1; S3L2; S4L1; S4L2; S5L1; S3-5CS1; S3-5CS5; S3-5CS6**

18. Write It, Do It

- a. **Event Description:** The event tests competitor's ability to clearly communicate in writing and follow written directions. Student 1 will construct a simple structure using a set of provided materials. The same student will write a detailed description of the structure. Student 2 will use the detailed description provided by their partner to attempt to build the same structure using the same materials.
- b. **GPS Correlation(s):**
 - i. **S3-5CS4; S3-5CS5; S3-5CS7; S3-5CS8**

2010 State Elementary Science Olympiad Event & Registration Information

<http://webtech.kennesaw.edu/tbrown/esofall.htm>

A complete list of the Georgia Performance Standards referenced above may be found at www.georgiastandards.org