

INTERNATIONAL ENVIRONMENTAL SCIENCE OLYMPIAD



PUERTO RICO, DECEMBER 28-31, 2024

IESO Written and Fieldwork Sample Questions and Responses

In order to help students to further prepare for the Written and Fieldwork examinations at IESO, participants and families can use the following resources.

Written Examination

Format – short-answer questions with responses ranging from a word or number to a paragraph; calculation questions may be included

Questions – variable based on division (see below)

Time – 75 minutes

Divisions – High School (8 short-answer questions with multiple parts); Middle School (6 short-answer questions with multiple parts); Elementary School (5 short-answer questions with multiple parts)

Content tested – all aspects of Environmental Science; data analysis and interpretation and mathematical calculations may be assessed

The written examination will consist of 5 to 8 sets of short-answer questions that will assess concepts similar to those on the multiple-choice examination. These questions will require answers no longer than a paragraph per part in order to receive full credit. Some of these questions will involve analysis and interpretation of data, while others may involve mathematical calculations. Tutorials for the type of calculation questions students might see on the written examination can also be found on YouTube. Further examples of the types of questions students may see on the written exam may be found on the College Board website, on the Written Examination (WRT) from past International Geography Olympiad exams, or on past Written or Cartographic examinations from the IAC US Geography Championships.

Sample Questions and Responses

College Board provides numerous resources to help students prepare for AP examinations in [Environmental Science](#) and [Human Geography](#), including sample student responses with scoring guidelines. In addition, past exam questions and marking schemes (answer keys) can be found on the [iGeo website](#) and [IAC website](#). In particular, the two sample questions from College Board linked below should be instructive in showing writing expectations for students competing in the high school division. Younger students will not be expected to produce writing as clear or sophisticated in order to receive full marks but will still be expected to produce substantially correct answers.

[2021 AP Human Geography Free Response Sample](#)

[2024 AP Environmental Science Free Response Sample](#)

Fieldwork Exercise

Format –

Part 1 – data collection, observation, and measurement on a local beach

Part 2 – short-answer questions with responses ranging from a word or number to a paragraph; calculation, graphing, or mapping questions may be included

Questions and tasks – variable based on division (see below)

Time –

Part 1 – 3 hours

Part 2 – 75 minutes

Divisions – High School (4 data collection stations; 4 short-answer question sets); Middle School (4 data collection stations; 3 short-answer question sets); Elementary School (3 data collection stations; 2 short-answer question sets)

Content tested - all aspects of Environmental Science; data analysis and interpretation and mathematical calculations may be assessed

The fieldwork exercise will consist of two parts. Part 1 will involve separate stations of data collection and observations on a local beach. Instructions for each station and the tasks to be performed will be given as students arrive at that station on the day of the fieldwork. Part 2 will be a written examination that will involve use of the data collected to address environmental problems related to beach ecosystems. Some of these questions will involve analysis and interpretation of data, while others may involve mathematical calculations. Examples of the types of tasks and questions students may see on the fieldwork exercise may be found on the College Board website, on the Fieldwork Examination (FWE) from past International Geography Olympiad exams, or on past Written or Cartographic examinations from the IAC US Geography Championships (linked above in the written exam section).

Sample Questions and Responses

Preparing for the fieldwork exercise is slightly different than most test or academic preparation. While students will be expected to respond to short-answer questions based on their fieldwork observations in part 2, the data collection in part 1 will require students to **follow both written and verbal instructions** and to **carefully record their measurements and observations**. As such, there is not a tremendous amount of traditional 'studying' students can do to prepare.

The questions linked below will give students an idea what types of observations or tasks they might be expected to complete at IESO. In particular, task 2 of the 2016 iGeo FWE is of a similar type to those students may encounter. The marking scheme is also included to show expected responses.

[2016 iGeo FWE](#)

[2016 iGeo FWE Marking Scheme](#)