

San Ramon Valley Science Olympiad 2019/20 Event Rules/Guidelines

1

A Broader World

Description:

This event will consist of a written test containing both MCQ and FRQ questions in which contestants will use their knowledge about environmental phenomena to answer questions regarding the Earth and its processes.

Concepts:

1. Ecosystems
2. Biodiversity
3. Populations
4. Earth Systems and Resources
5. Land and Water Use
6. Energy Resources and Consumption
7. Atmospheric Pollution
8. Aquatic/ Terrestrial Pollution
9. Global Change



Number of Participants: 2

Approximate Time: 30 minutes

The Competition:

Every team will be given an answer sheet. Team members may consult with each other during the test. Only one answer for each question will be accepted. Team members will answer 15 multiple choice questions and 5 free response questions in one sitting. Questions will be given in a test booklet.

Scoring:

At the end of the testing period, the questions and answer sheet will be collected from those teams who have not turned in their responses. Ties will be broken through FRQ score.

Resources:

Khan Academy: <https://www.khanacademy.org/science/ap-college-environmental-science>

Textbook:

http://www.mtcarmelacademy.net/uploads/1/1/7/5/11752808/living_in_the_environment_16th_edition_-_miller.pdf (Warning: May use lots of data to download website. Proceed with caution.)

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Don't Bug Me

Description:

This event will consist of a written test containing both MCQ and FRQ questions in which contestants will use their knowledge about insects to answer questions regarding their growth and physical features.

Concepts:

1. Insect Behavior
2. Insect Physiology
3. Insect Growth
4. Insect Anatomy
5. Insects as medicine
6. Habitats of insects
7. Environmental benefits from insects

NOTE: STUDY THE INSECTA CLASS

Number of Participants: 2

Approximate Time: 30 minutes



The Competition:

Every team will be given an answer sheet. Team members may consult with each other during the test. Only one answer for each question will be accepted. Team members will answer 15 multiple choice questions and 5 free response questions in one sitting. Questions will be given in a test booklet.

Scoring:

At the end of the testing period, the questions and answer sheet will be collected from those teams who have not turned in their responses. Ties will be broken through FRQ score.

Resources:

Purdue University: https://extension.entm.purdue.edu/401Book/default.php?page=know_insects
Virginia Tech: https://hampton.ext.vt.edu/content/dam/hampton_ext_vt_edu/entomology.pdf

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Word Problem Wizardry

Description:

This event will consist of a written test containing both MCQ and FRQ questions in which the contestants will use their knowledge about math to answer questions ranging from 4th-7th grade.

Concepts:

1. Rates
2. Probability
3. Mean, Median, Mode
4. Addition, Subtraction, Division, and Multiplication of rational and variables
5. Solving Mixed Fractions
6. Solving Distance and Time
7. Area, Volume, Perimeter of different geometric objects



NOTE: Most concepts are derived from the AMC 8 test (Test that involves 5th-8th grade math. REVIEW the EASY questions from the practice tests to perform well in this test)

Number of Participants: 2

Approximate Time: 30 minutes

The Competition:

Every team will be given an answer sheet. Team members may consult with each other during the test. Only one answer for each question will be accepted. Team members will answer 15 multiple-choice questions and 5 free response questions in one sitting. Questions will be given in a test booklet.

Scoring:

At the end of the testing period, the questions and answer sheet will be collected from those teams who have not turned in their responses. Ties will be broken through the FRQ score.

Resources:

AMC8: https://artofproblemsolving.com/wiki/index.php/2020_AMC_8 (Only do the easy questions as those are the ones that will be assessed)