

National Science Olympiad, Spring 1997

Surfing the Net

Find answers to the following questions on the Internet. Write your answer and its location after each question.

1. An agarose gel is needed to perform electrophoresis. What natural material is the gel derived from?

URL:

2. Give an example of an acellular vaccine? How is an acellular vaccine produced?

URL:

3. What percentage of the butterfly species found in Trinidad are fruit-feeding species?

URL:

4. What is the empirical formula for a compound that is 69.58% Ba, 6.090% C, and 24.32% O?

URL:

5. Robert F. Curl, Jr., Sir Harry W. Kroto, and Richard E. Smalley are well-known scientists. Describe their discovery and the award they received.

URL:

6. Rayleigh used more than one method to measure the density of nitrogen. What element did this lead him to discover? What year?

URL:

7. How do stars form from gas?

URL:

8. What particles are accelerated in the Tevatron to produce quarks and leptons?

URL:

9. How are a particle's momentum and its wavelength related?

URL:

10. True or False: one of the predictions of global climate models is that if the world really is warming up there will not be changes in precipitation patterns.

URL:

11. In an earthquake, sections of the earth's crust slide past or under each other causing the ground to rumble and shake. What are these large sections called?

URL:

12. What type of volcanoes have eruptions of andesite and dacite and make up 60% of the world's volcanoes?

URL:

13. The Space Shuttle Atlantis is scheduled to meet with the Mir space station on May 15, 1997. What is the name of the mission specialist who will take up residence on Mir?

URL:

14. In the early 1980s, waterfowl in marshy areas of California's San Joaquin Valley started appearing with birth deformities. What element was causing the problem?

URL:

15. What are the three major types of galaxies?

URL:

Tuesday, November 3, 1998

[*Send Lisa a message*](#)