

Astronomist Dr. JJ Kavelaars
Principal Research Officer, National Research Council of Canada

1. What is Dr. JJ Kavelaars' role at the National Research Council of Canada?

- A. Astronaut
- B. Principal Research Officer
- C. Nobel Laureate
- D. Professor of Astronomy

Answer: _____

2. What telescope was used by Dr. Kavelaars and his team to discover moons around Uranus?

- A. Hubble Space Telescope
- B. New Horizons Telescope
- C. Hale 200-inch Telescope
- D. James Webb Space Telescope

Answer: _____

3. What is a key technological advancement that has revolutionized modern astronomy?

- A. Satellite imaging
- B. Charge-Coupled Devices (CCD)
- C. Solar panels
- D. Space shuttles

Answer: _____

4. According to Dr. Kavelaars, what is essential for the existence of life on distant planets?

- A. Proximity to the sun
- B. Organic liquids in the Goldilocks zone
- C. High oxygen levels
- D. Advanced civilizations

Answer: _____

5. What does the New Horizons mission primarily aim to study?

- A. The atmosphere of Jupiter
- B. Distant objects in the solar system, including Pluto
- C. The Sun's magnetic field
- D. Exoplanets outside the solar system

Answer: _____

6. What motivated Dr. Kavelaars and his team to search for moons around Uranus on their first night of observation?

- A. They were specifically assigned this project by their professor.
- B. They were brainstorming alternative ideas after realizing their initial plan wouldn't work.
- C. They wanted to test a new telescope.
- D. They had prior knowledge of moons near Uranus.

Answer: _____

7. What advice did Dr. Kavelaars give to young people about pursuing their interests?

- A. Focus only on practical career paths.
- B. Chase their curiosity, as it can lead to unique discoveries.
- C. Avoid risks in professional endeavors.
- D. Rely on established knowledge rather than exploring new ideas.

Answer: _____

****Written Response Questions****

8. Describe the discovery process of the moons around Uranus as explained by Dr. Kavelaars. Why was this discovery significant in the field of astronomy?

9. Explain how advancements in imaging technology, such as CCDs, have transformed the field of astronomy. Include specific examples provided by Dr. Kavelaars.

10. Dr. Kavelaars emphasizes curiosity as a driving force in scientific discovery. Reflect on a time when your curiosity led you to learn something new or solve a problem. How did it impact you or others?
