Video Guide: NOVA→ Origins: "How Life Began"

1. Describe the conditions of the early Earth's atmosphere.
2. What kind of acid is produces in caves with high concentrations of hydrogen sulfide?
3. What is a "snotite"?
4. How do "phlegm balls" demonstrate the resilience and biological range of tolerance?
5. What were the intriguing results of Stanley Miller and Urey's experiments?
6. Describe the relationship between amino acids and proteins.
7. What kind of geologic evidence did the rock formations of Greenland provide in terms of the origin of life on the planet Earth?
8. What evidence is there to support the argument that complex organic molecules originated from extraterrestrial sources, and contributed to the formation of life on Earth?
9. According to the video, is it possible that complex organic compounds brought within comets could actually survive an impact?
10. What evidence did the deep mines of South Africa provide?
11. Describe the conditions and energy basis for deep see vent communities.
12. What is the significance of stromatolites (cyanobacteria) in terms of evolutionary theory?
13. About 560 million years ago, what major evolutionary event triggered a change in the Earth's atmosphere?
14. What is the beneficial effect of ozone in the upper atmosphere (in the stratosphere)?

- Do Not Write on this sheet!

- Write your answers on a separate piece of paper!

- RETURN!!!