**Video Questions:**

1. What is the greatest geological mystery of all?
2. Why has it been difficult for scientists to determine the age of the Earth?
3. Why do scientists look to space to investigate how the Earth was formed?
4. What theory emerged about how the Earth first started to form?
5. What was the problem with this theory?
6. What evidence was found to support this theory in 2003?
7. How did Earth grow from a collection of dust particles into a planet?
8. What do geologists believe happened to Earth soon after it became a planet? How?
9. Sketch and label a diagram of Earth's layers.
10. How did density play a role in the formation of Earth's layers?
11. How did scientists like Ernest Rutherford try to determine the age of the Earth?
12. What major obstacle did scientists hit in their hunt for the age of the Earth?
13. What new approach did geologist C.C. Patterson take in the early 1950's to determine the age of the Earth? What was his reasoning?
14. According to Patterson, what is Earth's approximate age?
15. What new theory emerged in 1974 to explain the formation of the moon? What evidence supports this theory?
16. What did the analysis of amphibolites and banded iron formations in Canada indicate about the conditions on Earth approximately 4.3 billion years ago?
17. How did water get to Earth? What evidence supports this idea?
18. Why is life an essential element in Earth's geology?
19. What groundbreaking discovery did geologists make while examining meteor fragments at Allende, Mexico? Why was this important?
20. How has Earth's atmosphere changed over time? How did this change happen?