Discussion Question Answer Key

Luis Alvarez: Dinosaurs, Pyramids, and Bubble Chambers

1. What kind of Detectors did the Scientists use to discover the Hidden chamber in the Egyptian Pyramid? How much do these particles weigh compared to the electron? Are they harmful?
   a. Muon. 200x more. No

2. How are the particles used in the detectors created?
   a. When the atmosphere interacts with Cosmic rays

3. Where was Luis Alvarez Born? Where was his family from?
   a. San Francisco, Cuba

4. Where did Alvarez go to school?
   a. University of Chicago

5. Name one of the things Alvarez developed in his time working with the US Government
   a. Transponders
   b. Linear Dipole array antenna for precision bombing
   c. Ground Control Airlift System
   d. Detector to find Nuclear Reactors

6. What was Alvarez’ Involvement in the Manhattan Project?
   a. Measured the power of the blast

7. Alvarez is most famously known for building the first what?
   a. Bubble chamber

8. After his Nobel prize winning work Alvarez worked on 3 other major projects. Where? What were they?
   a. Pyramid Radar with Muon Tomography
   b. Analysis of the Kennedy Photos
   c. Alvarez Dinosaur extinction theory

9. What was the metal used to create the Alvarez theory?
   a. Iridium

10. How did Luis Alvarez die?
    a. From throat cancer in 1988