EPS 200 Name: \_\_\_\_\_\_Answers\_\_\_\_\_\_

Birth of The Earth Video Questions

1. Scientists think that the early Earth was completely molten. According to the video, what caused the Earth to heat up to the point that it melted completely? (**radioactive elements**)

2. As soon as the Earth melted, layers began to form. Why did the Earth’s materials separate into different layers? (**dense materials sank; less dense materials floated**)

3. After the Earth melted, what caused the outside of the Earth to form a solid crust? (**space is cold – it cooled the Earth’s surface**)

4. What method did scientists use to figure out the age of the earth? (**radioactive dating**)

5. Scientists used rock samples to find the age of the earth. Where did they get those samples? (**meteorites**)

6. Based on the most accurate measurements, how old is the Earth? (**4.5by 4.567by years old**)

7. How do scientists think the moon was created? (**a collision between another planet and the Earth**)

8. There is not as much iron in the moon as there is in the Earth. This is a clue suggesting that the moon formed from material that came from \_\_\_\_\_\_\_\_\_\_\_. (**material from the Earth’s crust and mantle**)

9. How old are the oldest rocks that have been found on the Earth? (**about 4.3by**)

10. How old are the Earth’s oceans? (**about 4.3by**)

11. Scientists know that oceans existed at that time (previous answer), because rocks from that age contain a

mineral that only forms in the presence of water. This mineral is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (**magnetite**)

12. Scientists think that much of the Earth’s water was brought to Earth by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (**meteorites**)

13. The discovery of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in meteorites suggest that the building blocks of life came from space. (**amino acids**)

14. Before about 3.5 billion years ago, there was no oxygen on the Earth. Scientists think the Earth’s oxygen

was first produced by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**cyanobacteria or blue-green algae**).

15. These bacteria created oxygen using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (**sunlight and water)**

16. Where did all of our planet’s coal, oil, and gas deposits come from? (**Decaying plants and animals**)

17. Where did limestone and chalk come from? (**marine animal skeletons**)