Name _____

National Geographic: The History of Earth

Directions: Watch the National Geographic episode, The History of Earth. If you miss something the video is linked on my website for you to go back and answer. Make sure to add details and additional information.

Approximate Minutes 0:00-20:00

1. What pulls the rocks together to make a planet?

2. What were the conditions of our Earth 4.54 billion (4540 million) years ago? (Temperature? what gases are available? Solid surfaces?)

3. What happens when the planet crashes into Earth?

4. How long does a day last when Earth is first formed? Why?

5. What is inside the meteors that were striking Earth 3.9 billion (3900 million) years ago?

6. Why is the ocean's tides so high and strong 3.9 bay (billion years ago)?

7. Where do the small islands come from 3.8 bya?

8. What are the "chemical soup" chemicals responsible for?

9. What is are the underwater bacterial colonies called?

10. What organisms are the first to photosynthesize?

11. What is the single most important element on Earth for life?

Approximate Minutes 20:00-40:20

1. 1.5 bya, what was the name of the super continent?

2. What is the driving force that splits the super continent?

3. Why isn't the Sun's heat trapped inside the planet's atmosphere?

4. What is the nickname of Earth during this ice age?

5. What releases the Earth from this very long frozen period?

6. What oxygen-rich chemical does the chemical reaction between ultraviolet light and ice make?

7. What did primitive bacteria evolve into?

8. What is the Cambrian explosion?

9. What are some examples of living organisms around during the Cambrian explosion?

10. What is so special about Pikaia?

11. When did the first land plants arise?

12. Why is Tiktaliik special?

Extra Credit: Approximate Minutes 40:00-60:00

1. What organism do all 4-legged vertebrates come from?
2. What type of organisms do Meganeura represent?
3. Millipeds, spiders and bugs are called_____.
4. Why is the egg an evolutionary breakthrough?
5. The coal and fossil fuels that we burn today comes from plants that dies_____years ago.
6. What happened in the Siberian mountains that changed Earth?
7. What is the name of the first extinction?
8. What gas does the ash from the volcanic eruption go into the atmosphere and create acid rain?
9. What is left in the oceans after the Siberian explosion/eruption?
10. What is the name of the supercontinent?
11. Where did the dinosaurs come from?
12. At what rate do the continents move?

Extra-Extra Credit: On your own, finish the video and Write 10 ADDITIONAL facts that you learned the last 30 minutes of film.