Name	Date	Period

Video worksheet: Cosmos "The World Set Free"

	HONORS BIOLOGY: UNIT 9
Di	rections: Answer the questions as you watch episode 12 of Cosmos: A Spacetime Odyssey
1.	What planet is Neil deGrasse Tyson talking about when he says it used to be paradise?
2.	How hot is the surface of Venus?
3.	What are the clouds that block the Sun on Venus made of?
4.	Which country landed a probe on Venus in 1982?
5.	What is the difference in the way carbon is stored on Venus and on Earth?
6.	What living thing created the White Cliffs of Dover?
7.	What would Venus have needed in order to store carbon in the form of a mineral?
8	What on Earth primarily controls the amount of carbon dioxide in the air?

9. What did Charles David Keeling manage to do in 1958?
10. How can scientists read the "diary" of the Earth written in the snow?
11. What major event in history is the starting point of the exponential rise of carbon dioxide in the atmosphere?
12. How much carbon dioxide do volcanoes add to the atmosphere on Earth every year?
13. How did scientists conclude the extra carbon dioxide in the air contributing to climate change was not made from volcanoes, but instead comes from burning fossil fuels?
14. How much extra carbon dioxide are humans putting into the atmosphere every year by burning fossil fuels?
15. How much additional carbon dioxide has been spewed into the atmosphere since Carl Sagan first warned about doing so in the original "Cosmos" television series in 1980?
16. What do Neil deGrasse Tyson and his dog walking on the beach symbolize?
17. How are the polar ice caps an example of a positive feedback loop?

18. At what rate are the Arctic Ocean ice caps receding now?
19. How is the permafrost near the North Pole melting increasing carbon dioxide levels?
20. What are two ways we know that the Sun is not the cause of the current global warming trend?
21. What amazing invention did Augustin Mouchot first display in France in 1878?
22. Why was there no interest in Augustin Mouchot's invention after he won the gold medal at the fair?
23. Why did Frank Shuman's dream of irrigating the desert in Egypt never come to be?
24. How much of the wind's power would have to be tapped in order to run all of civilization?
25. The manned missions to the moon were a direct result of what period in the United States' history?
26. Who were the first group of people to stop wandering and begin civilization by using agriculture?