

Name: \_\_\_\_\_

## OUR CLIMATE OUR FUTURE VIDEO QUESTIONS

### Chapter 2: Living Large

1. Name four examples of how we take up space that we cannot see directly.
2. How many football fields worth of Earth's resources does the average American use to live?
3. How many Earths would we need to have enough resources if everyone lived like Americans?
4. Living large uses a ton of energy, mostly produced from burning \_\_\_\_\_  
\_\_\_\_\_, in the forms of \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_  
\_\_\_\_\_.
5. We now know that burning fossil fuels is causing Earth's temperature to \_\_\_\_\_  
\_\_\_\_\_.

### Chapter 3: Fossil Fuels and CO<sub>2</sub>

6. Which element is the main ingredient of life?
7. What is produced when you burn carbon (which is contained in anything that is or was living)?
8. Why are coal, oil, and natural gas called fossil fuels?
9. What were the conditions 300 million years ago that eventually formed coal, oil and natural gas.
10. About \_\_\_\_\_% of the energy used today comes from fossil fuels.

## Chapter 4: CO<sub>2</sub> and Climate Change

11. The atmosphere is made up of gases, mostly \_\_\_\_\_ and \_\_\_\_\_, with small amounts of \_\_\_\_\_.
12. Greenhouse gases (GHGs), like \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_, make up less than \_\_\_\_ % of the Earth's atmosphere.
13. GHGs block \_\_\_\_\_ from leaving the Earth's atmosphere in a process called the \_\_\_\_\_.
14. Why is it good to have some GHGs in the atmosphere, but not too much?
15. Over the last 800,000 years before humans existed, CO<sub>2</sub> levels in the atmosphere have stayed below \_\_\_\_\_ PPM (parts per million). Today, CO<sub>2</sub> levels are over \_\_\_\_\_ PPM.
16. Higher temperatures cause the Earth's \_\_\_\_\_ cycle to go into overdrive, causing weather to become more \_\_\_\_\_.
17. Based on the map in the video, circle below how climate change is impacting where you live.

**Losing permafrost | sea levels rising | worse heat waves | severe droughts  
more destructive storms and hurricanes | flash floods | bigger wildfires  
more spread of diseases | worse pollen allergies**

## Chapter 6: Is it Real?

18. Climate has changed naturally throughout history, but how is climate change today different?
19. If climate naturally changes slowly, it gives organisms more time to \_\_\_\_\_.
20. What percent of climate scientists agree that humans are causing climate change?
21. Why might some try to convince people climate change isn't happening regardless of the science that shows that it is?

## Chapter 8: The Solutions

22. To protect ourselves against the worst effects of climate change, scientists said that we shouldn't allow global temperatures to go above \_\_\_\_\_°C and we've already gone up about \_\_\_\_\_°C.

23. Most fossil fuels are burned to produce \_\_\_\_\_ and \_\_\_\_\_.

24. Fossil fuels are usually burned to produce steam to turn a turbine for energy production. What are two different ways to turn a turbine to generate electricity without using fossil fuels?

25. How can we burn fewer fossil fuels in relation to our transportation?

26. Why are wind, water, and solar power called renewable energy?

27. What are two ways that you could use less energy?

28. Switching over to renewable energy can create more well-paying jobs than staying with fossil fuels. Name a possible green career from the video or another that you can think of.

29. What can you say about the cost of renewable energy now?