

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 CO₂

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: CO₂ 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, CO₂ levels in the atmosphere have stayed below _____ PPM (parts per million). Today, CO₂ 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?