Worksheet: *An Inconvenient Truth*

**1. What is the most vulnerable part of the Earth and why?**

The most vulnerable part of the earth is the atmosphere. In this movie, Al Gore says that the atmosphere is quite thin.

**2. Describe how global warming occurs.**

The first step to global warming is that the suns heat waves pass through the atmosphere. The next step, which is the problem, is that some heat waves are trapped by the atmosphere. The earth absorbs most of the radiation but only some of the energy is sent back into space. But as time goes by we are polluting our earth which then thickens the atmosphere that makes Global warming happen faster and faster.

**3. The Earth’s temperature fluctuates but what is its general trend?\_\_\_\_\_\_\_\_**

The earth’s general fluctuation trend is varies. It goes up and down. It seems that both up and down parts are rising slightly. The up part rises a little higher than the down part. Some might only notice a difference by mid 1960’s.

**4. The Earth’s carbon dioxide levels fluctuate from summer to winter. What causes this natural fluctuation?**

The reason earth’s temperature fluctuates is because most of the land on our earth cover the northern hemisphere instead of the southern hemisphere. When the northern hemisphere is facing the sun (during summertime), the leaves are able to breathe in CO2. When the northern hemisphere is tilted away from the sun (in the fall/winter), the leaves fall and breathe out CO2.

**5. What can bubbles of atmosphere trapped in glacial ice tell us?**

The bubbles of atmosphere in a glacier give the amount of CO2that was in the air the year when it was snowing. It can also tell us what the climate was the year when it was snowing very accurately.

**6. How do measurements of carbon dioxide and temperature compare?**

Measurements of 1,000 years of CO2 and temperature compare very much the same. The CO2 rises at one point and it seems closer to 90o than when the temperature rises. Also, it seems like the temperature changes a little more but they both end up at about the same point. The same thing with the 600,000 year graph is also very much alike.

The reason storms are becoming stronger is because the temperature in the oceans is rising. As the storm passes over warmer water, the speed of the storm/hurricane gets faster and faster.

**7. What is the main reason that storms are becoming stronger?**

The reason storms are becoming stronger is because the temperature in the oceans is rising. As the storm passes over warmer water, the speed of the storm/hurricane gets faster and faster.

**8. The movie mentions “canaries in a coal mine.” What is meant by this and what are the “2 canaries” for global warming?**

The 2 canaries of global warming are: Antarctica and the arctic. What is meant by canary in a coalmine is that the arctic is getting faster results than everywhere else.

**9. What are some ecological problems that can result from global warming?**

There are some ecological problems that can result from global warming. One of these problems is that the bugs in our world aren’t being killed by the frost anymore. There are also new diseases such as sars from the other new species. Lately, global warming has been melting parts of Greenland and Antarctica. If both Antarctica and Greenland melted 100%, sea level all over our planet would raise around 40 feet.

**10. What are the 3 factors mentioned that lead to a collision between civilization and the Earth?**

1 of the 3 factors that could lead to a collision between civilization and earth is that the population is growing quite quickly. More people = more water, which could effect our water supply. The 2nd factor is that the technology is growing quite quickly as well and the society doesn’t need manual equipment/tools. The 3rd factor is that the evolution of the planet is growing fast. We don’t really notice or care that global warming is happening so it seems like nothing is changing.

**11. What are 3 misconceptions about global warming?**

The 3 misconceptions about global warming are:

i) That there is disagreement about what and how global warming is happening.

ii) That global warming seems fake due to the lack of speed of how long it takes to see a difference in global warming.

iii) That we don’t have the tools or are unable to decrease or help the issue about global warming.

**12. What is one environmental problem that was solved by the U.S. leading the way and other nations following?**

The issue that the USA has already started to solve is phasing out the chemicals that are causing the problems of global warming.

**13. What can you do to reduce your carbon emissions?**

Some things that you can do to help global warming and reducing the amount of CO2 emissions are:

* Change light bulbs to compact fluorescent bulbs: *you can save 150 pounds of CO2*
* Turn off the lights when not required: *you can save thousands of CO2*
* Plant trees: *you can save 1 ton of CO2*
* Adjust the thermostat: *you can save around 2,000 pounds of CO2*
* Don’t purchase packaged products: *you can save 1,200 pounds of CO2*
* Recycle: *you can save 2,400 pounds of CO2*