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| Greenhouse Gases | -Methane, Nitrous Oxide, HFC’s, CFC’s & Carbon Dioxide  -causes are car exhaust, factory smoke, burning fossil fuels & deforestation |
| Deforestation | -when trees are cut down and there are not enough trees to take in extra carbon dioxide that is in the air |
| Greenhouse Effect – what happens when ultraviolet rays come to Earth from the sun? | -they are converted (changed) into infrared rays (heat) as it is absorbed by Earth  -some rays are reflected back into space from clouds & atmosphere  -some rays reflect off of the Earth’s surface |
| What are the ways Carbon Dioxide can get out of the atmosphere (carbon sinks) | -oceans absorb the extra carbon dioxide in the air  -trees/plants take in carbon dioxide |
| Climate | -a conditions of weather over a 30 year period  -best way to know a location’s typical weather in a specific time of year |
| Weather | -day to day conditions such as air pressure, humidity, temperature, and cloud coverage |
| Fossil Fuels | -long term carbon storage made from decomposing organic matter that gets buried in soil  -it is exposed to heat and pressure over millions of years  -we use fossil fuels for electricity production, cars, trains, planes, and factories  -scientists predict that there will be long-term consequences of overusing fossil fuels  -burning fossil fuels puts lots of carbon dioxide into the atmosphere |
| Climate Change | -natural causes are the Sun and Volcanos  -human causes are burning fossil fuels, use of chemicals that cause excessive heat trapping |
| Carbon sink | -the natural ways that carbon is taken out of the atmosphere (oceans and trees/plants) |
| Renewable resources | -fuels that can be re-made  -is better for humans and the environment  -examples: solar energy, hydropower (from water), wind power, etc. |
| Non-renewable | -fuels that cannot be re-made  -are more detrimental to humans and the environment from not being able to make more  -examples: oil, carbon, natural gas (these are all fossil fuels) |
| Direct relationship | -a relationship between two or more items in which they both go in the same direction (one goes up and the other goes up or one goes down and the other goes down) |
| Indirect (Inverse) relationship | -a relationship between two or more items that are opposite to one another (one goes up and the other goes down) |
| Greenhouse effect | -the heating of the Earth due to gases trapping heat near the Earth’s surface.  -it can be bad when there is overheating of the Earth’s atmosphere due to lots amount of carbon dioxide  -remember the demonstration where I covered the jar with plastic to close it in and make an “atmosphere” and the thermometer heated up more quickly after we trapped the gases in with it.  -it is important to be able to keep the Earth warm for humans, plants, and animals |
| Carbon cycle | -where carbon is taken in by eating plants or animals that have eaten plants.  -carbon is extracted (taken) from the ground as fossil fuels (oil, natural gas, coal)  -humans exhale carbon back into the air  -automobiles also give off carbon gases when they burn fossil fuels  -trees take in carbon from the air  -excess (extra) carbon is taken in by the oceans  -if there were less automobiles then, there would be less carbon in the atmosphere  -less usage of fossil fuels  -more long-term carbon storage as fossil fuels |