Enviro Science SDS

**Inquiry Question… What are the 3 biggest environmental concerns in North America and what needs to be done to reverse/solve/help these issues?**

3 Environmental concerns (no specific order)

-Greenhouse Gas Emission

-Climate Change

-Waste/Wasting

***Greenhouse Gas Emission:***

-burning of fossil fuels, deforestation, intensive agriculture cause rising levels of carbon dioxide

-levels of methane and carbon dioxide highest it’s been in half a million years

-main gases causing problems: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride

-Methane = produced naturally when vegetation is burned, digested or rotted without the presence of oxygen, released by cattle farming, waste dumps, rice farming and the production of oil and gas.

-Nitrous oxide, released by chemical fertilizers and burning fossil fuels

-these gases destroy the ozone layer

-to eliminate gases… energy efficient appliances, do not idol cars, recycle, limit burning of crops, filter air before releasing outdoors (factories), insulate properly on buildings, greenhouse gas inventory

***Climate Change:***

-Wildfire and insect outbreaks have been increasing

-Increased risk of deaths due to heat waves, water-borne diseases, and degraded water quality, respiratory illness among people in lower income

-droughts

-more wildfires

-heat related storms intensity level increases

-warming comes from the emission of greenhouse gases, mostly carbon dioxide

-chlorofluorocarbons were banned because they degrade the ozone layer

-to help with global warming… use energy efficient appliances, turn thermostat down 2 degrees in winter and up 2 degrees in summer, do not idol vehicles, use triple pane windows, insulate, recycle, have proper venting systems

***Waste/Wasting:***

-liquid waste = any form of waste in a liquid state

-solid waste = usually garbage, waste with no danger and in a solid form

-hazardous waste = waste with potentially dangerous risks

-organic waste = waste from animals and plants

-most common forms of waste are the things we throw our daily in our homes, storm water and sewage, chemical runoff of factories and animal waste

-average North American wastes 4.3 pounds of garbage per day

-80% of waste (including recyclable materials) go to the land fill every year

-use re-usable containers, use recyclable materials, re-use items that can be used more than once, avoid individually packaged products

***3 Pillars of Sustainability (social, economic, environmental):***

-relates socially because of how us humans need to and can make changes

-relates economically because these changes and theses effects will cost money if they get out of control

-related environmentally because this is about the environment