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#### FINAL PROJECT RESEARCH

# **Impacts on the Ocean from Climate Change:**

- 1. Coral Bleaching
  - a. Loss of coral reefs (more than 50% in the world have been destroyed)
  - b. Destruction of entire ecosystems, extreme loss of biodiversity.
- 2. Ocean Deoxygenation
  - a. Fish are unable to breath in the water.
- 3. Ocean Acidification
  - a. pH levels in the ocean are rising, killing fish.
- 4. Fish Migration
  - a. Destruction of ecosystems and warming seas are causing sea creatures to migrate in new, unnatural ways.
- 5. Sea Level Rise
  - a. As our planet warms, the polar ice caps are melting into the oceans, causing sea levels to rise.
  - b. Destruction of human society, cities.
- 6. Plastic Islands
  - a. Mass plastic waste in the oceans congregates into massive floating islands of plastic.
  - b. Animals are killing by toxins in plastic, as well as by choking on them when mistaking them for food.
- 7. Polar Ice Melt
  - a. Warming planet is causing the ice caps to melt, only aiding in the warming process.
  - b. Destruction of arctic ecosystems, extinction of species (polar bears).
- 8. Warming Seas
  - a. Warming seas contribute to ocean acidification, coral bleaching, and several other things listed above.

### **Human Activity which Contributes to Climate Change**

- 1. Industry
  - a. Creates emissions and waste through mass shipping. Also utilizes enormous amounts of energy powered by fossil fuels.
- 2. Energy
  - a. Fossil fuels which power our cities and create electricity are detrimental to our environment, releasing enormous amounts of greenhouse gases.
- 3. Residential
  - a. Enormous amounts of energy is consumed through residential living, and waste is generated as well.
- 4. Agriculture
  - a. Animal digestion releasing enormous amounts of methane, a primary greenhouse gas.

#### 5. Waste

- a. Waste fills our landfills, which is then burned, generating greenhouse gases.
- b. Plastic waste fills our oceans, creating plastic islands.

### 6. Transportation

a. Transportation is a primary source of carbon dioxide emissions.

## **Concept:**

I plan to relate this project through the use of diagrams. After reading about diagrams and how they relate to explaining the internet, I felt that they could serve as a useful tool in simplifying the complex issue of climate change. The goal of this project is to create a diagram with explores the impacts of climate change on our oceans. The diagram will act as a way to explain how the various consequences tie together. More importantly, the goal of the diagram is to illustrate that every aspect and consequence of climate change is linked and relates to one another. The target audience of this project is essentially anyone who has been victim of the our information saturated society (with regards to climate change). It is my hope that this target audience will get a simplified and clearer knowledge of climate change and its consequences because of this diagram and film.