

Science 8

Unit One - Sample Answer

Instruction:

- ▶ Answer all the following questions.
- ▶ Read the instructions carefully.
- ▶ Use proper grammar and writing skills.
- ▶ Remember to state, answers and support your response, where appropriate.

Question:

Carbon dioxide from car exhaust is a major green house gas which is directly affecting global warming.

- A) How is global warming affecting the glaciers located at the North and South Pole?
- B) Describe **two** impacts the affect may have on our global environment.

Sample Answer:

Global warming is having a major affect on the north and south pole ice-fields (glaciers). These glaciers are melting at alarming rates. Pollution from the burning of fossil fuel such as exhaust from automobiles is contributing to greenhouse gases which is depleting the ozone layer surrounding the earth. The depletion of the ozone layer is creating a greenhouse affect. The heat trapped in the atmosphere is raising the average global temperature causing the ice field to melt.

The melting glaciers are having significant impact on global environment. The impact range from the increase of the oceans' water level to the changing of existing ecosystems. If the all the ice in the arctic and antarctic melt the water level around global coastlines will rise drastically. Coastal towns will flood, displacing large populations of humans. The financial loss of property and the cost of relocating will be astronomical. In addition, biotic features such as plant life that are unique to the coastal shoreline habitats will be destroyed. The melting ice is also decreasing the temperature of ocean water. This temperature change is distressing aquatic and marine life. Organisms live within specific range of tolerances. When these ranges are at threshold limits, organisms suffer and may die. Other animals, such as the seal and polar bear, will struggle to survive. Seals which depend upon the ice flows as birthing pads will no longer have safe areas to birth their pups. Many newborn pups will drown. Polar bears will have no resting places to rest themselves after long swims.

In the future, if global warming goes unchecked then it may not only be the lives of smaller organisms at risk, it may, unfortunately, be the lives of an entire species - the human species.