**The Antarctic Ozone Hole –**

**From Discovery to Recovery, a Scientific Journey**

1. What does the Ozone layer protect us from?
2. What products were found that release CFC’s into the atmosphere?
3. Where is the hole in the Ozone layer situated?
4. Identify the time of year that the Ozone levels become exceptionally low.
5. What gas was identified as the main cause of ozone destruction? Include the NAME and a DIAGRAM.
6. How is the chlorine atom broken off the CFC? Include TWO steps.
7. What is the chemical formula and structure for ozone?
8. Outline the method by which chlorine destroys ozone.
9. Why is the hole only over Antarctica?
10. What did the “Montréal Protocol” in 1987 decide?
11. Describe the current status of the ozone layer.
12. List the possible consequences of a severely depleted ozone layer.
13. When is it predicted that the ozone hole will close?
14. Not only do CFC gases destroy ozone, they are also powerful greenhouse gases. What does this mean?
15. Extension Question: Climate change will affect the ozone layer. Greenhouse gases will cause heat to be deflected away from the ozone layer and hence it will become even cooler. This will
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the number of polar ice clouds
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the chlorine/ozone reactions
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the ozone layer recovery
1. Extension Question: What is the impact of an ozone hole on rain fall patterns?

**THE OZONE STORY IS NOT FINISHED**

**HUMANS HAVE A HUGE ROLE TO PLAY IN THE PROTECTION OF OUR PLANET**