Name _____

How Did the World Come Together to Protect the Ozone Layer?

High above our heads, the ozone layer protects life on Earth like a giant invisible shield. It blocks dangerous ultraviolet (UV) rays from the sun, which can cause skin cancer, eye damage, and harm to animals and plants. In the 1980s, scientists made a shocking discovery: this protective layer was being destroyed.

They found a large hole in the ozone layer above Antarctica. The damage was caused by man-made chemicals called CFCs (chlorofluorocarbons). These chemicals were used in everyday items like spray cans, refrigerators, and foam products. When released into the air, CFCs slowly rose into the atmosphere. There, they broke apart ozone molecules, making the protective layer thinner.

This discovery was a global wake-up call. Everyone on Earth depended on the ozone layer, so something had to be done—fast. Scientists, leaders, and citizens from many countries began to speak out and take action. In 1987, leaders from around the world signed an agreement called the Montreal Protocol.

The Montreal Protocol was a plan to stop using harmful chemicals that damaged the ozone layer. It was signed by almost every country on Earth. Governments promised to ban or reduce the use of CFCs and replace them with safer alternatives. This was one of the first times so many countries worked together to protect the planet.

Thanks to this teamwork, the ozone layer is healing. The hole is slowly shrinking, and fewer harmful UV rays are reaching Earth. Scientists believe that if we keep following the plan, the ozone layer could fully recover within a few decades.

The story of the ozone layer shows what people can do when they work together. It proves that science, cooperation, and action can make a real difference. By listening to experts, making smart laws, and caring about our world, we helped solve a big problem.

Today, the ozone layer is still being watched carefully. The Montreal Protocol continues to guide countries around the world. This global teamwork saved the ozone—and set an example for how we can protect Earth in the future.