Name _____

What's the Difference Between "Good" Ozone and "Bad" Ozone?

You may have heard the word "ozone" before—maybe when learning about the environment or hearing about air pollution. But did you know there are actually two kinds of ozone? Scientists call them "good" ozone and "bad" ozone depending on where they are in the atmosphere and what they do.

Let's start with good ozone. Good ozone is found high up in the atmosphere, in a layer called the stratosphere. This is where the ozone layer lives. The ozone in this layer protects life on Earth by blocking harmful ultraviolet (UV) rays from the sun. Without this shield, people could get more sunburns, skin cancer, and eye problems. Plants and animals could also be harmed. So even though we can't see it, good ozone is very important—it acts like Earth's invisible sunscreen!

Now let's talk about bad ozone. Bad ozone forms close to the ground, near where we live and breathe. It's not made directly—it forms when pollutants from cars, factories, and power plants mix with sunlight. This kind of ozone is a big part of smog, the dirty-looking air you sometimes see in cities.

Bad ozone can be dangerous. It can irritate your lungs, make it hard to breathe, and make asthma worse. It's especially harmful to kids, older people, and anyone with breathing problems. That's why bad ozone is considered air pollution, even though it's made of the same kind of molecule as good ozone.

So what's the difference? It's all about location and purpose. High up in the stratosphere, ozone is good because it protects us. But near the ground, ozone is bad because it pollutes the air and can hurt our health.

The good news is that people are working to reduce air pollution and protect the ozone layer at the same time. By using clean energy, driving less, and caring for our planet, we can help make sure ozone is in the right place—and doing the right job.