



Ozone Pollution

Good Up High, Bad Nearby

Ozone is a **gas** that can be found both in the **Earth's** upper atmosphere and at ground level. Depending on its location in the atmosphere, ozone can be “**good**” or “**bad**” for us.

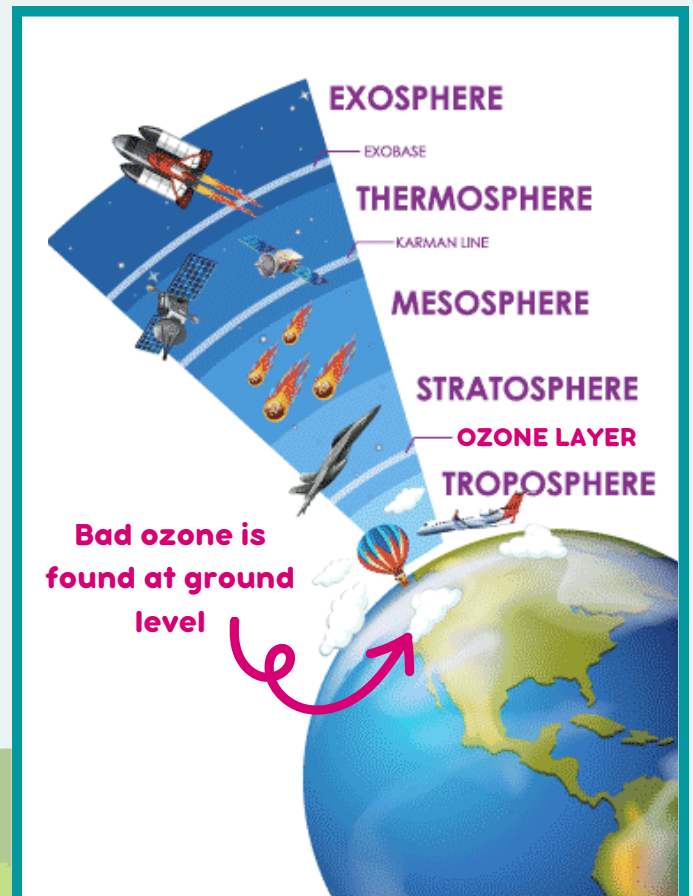
The 'Good' Ozone

‘**Good**’ ozone is found high above the **Earth** and can help us from the sun's harmful **ultraviolet** radiation. You can think of the ozone layer like a layer of **sunscreen** for the Earth. Some **chemicals** that were released into the air in the 1970s and 80s have damaged the ozone layer, allowing some UV radiation to reach Earth's surface. This is why it is important to always wear sunscreen.

The 'Bad' Ozone

‘**Bad**’ ozone, also known as ground-level ozone, is formed near the **Earth's** surface, where we live and breathe. It is formed photochemically when pollutants react in the presence of sunlight. It makes the air dirty and hard to breathe, not only for people but also for **plants** and **animals**. It is common in cities with lots of traffic and industry.

Breathing ground-level ozone can cause chest pain, coughing, throat irritation, and congestion. People with asthma or other respiratory conditions are more **sensitive** to ground-level ozone.



In Spokane, ozone is measured from May to October.

Ground-level ozone is a summer air pollutant.

Summer days are ideal for ground-level ozone to form. Emissions from industry, automobiles, gasoline-powered engines, and chemicals “bake” in the summer sun to form ground-level ozone. This is referred to as a photochemical reaction.

Using this information, why do you think that ozone is only measured during the summer?

What can contribute to ‘bad’ ozone?



Driving, refueling, and idling vehicles

Industrial processes



Household chemicals



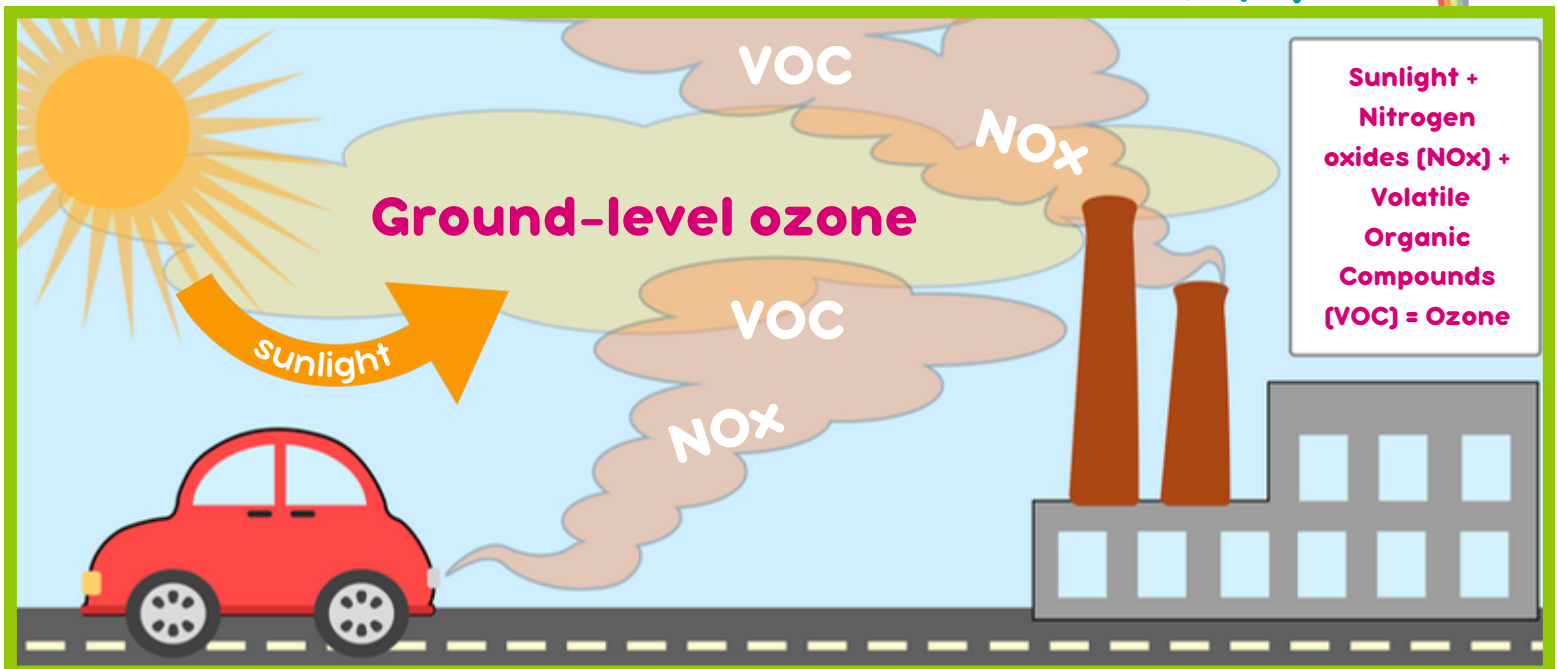
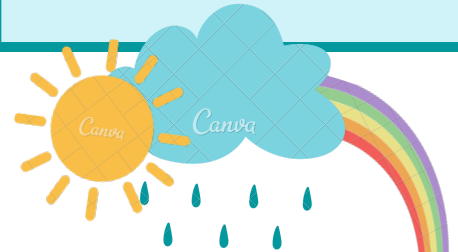
Gas-powered equipment



Brainstorm!



What can you do **at home** to help our air?
What about **at school**? Share your ideas with three people to spread awareness about ground-level ozone in our air!



**Enviro
KIDS!**

EnviroKids is a collaborative effort among multiple local environmentally focused agencies in the Spokane Region. We work together to provide locally relevant educational resources to teachers and families.