

7. Atmospheric Pollution

Starter Quiz · 课前小测

AP Environmental Science

Name: _____ Score: _____

1. Air pollution is...

- ☐ harmful substances added to the air
- ☐ clean air with no chemicals
- ☐ water in rivers
- ☐ soil erosion

2. Photochemical smog needs which one to form?

- ☐ sunlight
- ☐ darkness
- ☐ snow
- ☐ deep water

3. In a **thermal inversion**, the unusual thing is that...

- ☐ warm air sits above cooler air
- ☐ the ground is colder than space
- ☐ there is no air at all
- ☐ it always rains

4. The main problem with rising atmospheric CO₂ is that it...

- ☐ traps heat and warms the planet
- ☐ blocks all sunlight
- ☐ is poisonous to breathe
- ☐ makes water acidic to drink

5. **Carbon monoxide** is especially dangerous indoors because it...

- ☐ is invisible and odourless but deadly
- ☐ smells very strong
- ☐ is bright red
- ☐ is harmless to breathe

6. A _____ pollutant forms in the air when primary pollutants react, like ozone in smog.

7. The main harmful gas in photochemical smog is ground-level _____.

8. The warm air layer acts like a _____ that traps pollution below it.

9. The tiny solid and liquid bits floating in polluted air are called _____ matter.

10. Good _____ (fresh air flow) is the simplest way to lower indoor pollution.

AP Environmental Science

1. **harmful substances added to the air**

Air **pollution** is any harmful substance added to the air — gases, particles, or droplets.

2. **sunlight**

“Photochemical” means light-driven — strong **sunlight** powers the reactions that make smog.

3. **warm air sits above cooler air**

Normally air cools with height. In an **inversion**, a warm layer sits on top of cooler air — upside down.

4. **traps heat and warms the planet**

CO2 is the main greenhouse gas — it traps heat and drives global warming.

5. **is invisible and odourless but deadly**

Carbon monoxide cannot be seen or smelled, so it can build up and kill without warning.

6. **secondary**

A **secondary** pollutant is not emitted directly — it forms in the atmosphere, like ground-level ozone.

7. **ozone**

Ground-level **ozone** is the key ingredient of smog and irritates the lungs.

8. **lid**

The warm layer is a **lid** — cooler polluted air cannot rise through it and escape.

9. **particulate**

Particulate matter (PM) is the mix of tiny particles — soot, dust, droplets — in the air.

10. **ventilation**

Good **ventilation** flushes pollutants out and brings fresh air in.