



## Let's Think

1. Do you know what ozone is?
2. Have you ever heard of ozone pollution?

You are Perry. You are reading an article about ozone.

## Ozone

Ozone is a form of oxygen, which is a gas that sustains almost all living creatures on earth. While the common oxygen that we breathe is beneficial to us in many ways, ozone can be dangerous and even explosive. However, before we jump to the conclusion that ozone is a complete threat to life on this planet, we should bear in mind that there is 'good' ozone and 'bad' ozone.

Whether it is good or bad simply depends on where it is found.

'Good' ozone exists naturally in the earth's upper atmosphere, which is around at least 10 kilometres above the ground. The ozone there forms a protective layer that serves to absorb the ultraviolet (UV) rays from the sun. If this layer disappeared, the sun's harmful rays could hit the earth's surface with full force. The unfiltered UV rays could cause direct damage to our cells and DNA, and lead to different kinds of cancers, like skin cancer.

If the ozone is found at ground level, it is considered 'bad' ozone. Ground-level ozone is not naturally emitted, but produced when major pollutants from man-made sources react with sunlight. Two of the primary sources of ground-level ozone are car exhaust and factory emissions. When it is inhaled, such ozone can trigger a broad range of health conditions, like throat irritation, headaches, asthma attacks, chest tightness and lung diseases. Being a basic component of smog, ground-level ozone is seen as a major air pollutant across the globe.

Ground-level ozone pollution is a key public health concern in many parts of the world, especially in developed and developing countries with heavy traffic and heightened industrial activities. To combat it, many countries have started promoting electric cars, which release no fumes and are much more eco-friendly than gas-powered vehicles...

(303 words)



## Part A

Answer the following questions using the information from the article. Choose the **BEST** answer and blacken **ONE** circle only.

1. Read paragraphs 1 and 2, which of the following is **NOT TRUE**?
  - A. Ozone is not entirely bad to humans and other creatures on earth.
  - B. Both ozone and oxygen are what living creatures rely on for survival.
  - C. There is ozone in the planet's upper atmosphere.
  - D. We are given better protection from the sun's rays due to the ozone layer.
2. Without the ozone layer, we would be exposed to \_\_\_\_\_ UV rays, which \_\_\_\_\_.
  - A. much weaker...cannot travel through the atmosphere
  - B. much more intense...can have an impact on our cells and DNA
  - C. much brighter...are not filtered by the atmosphere
  - D. much dimmer...are absorbed by the oxygen in the atmosphere
3. Which of the following may contribute to the production of ground-level ozone?
  - A. a manufacturer of plastic goods
  - B. a newly built university
  - C. a truck that runs on electricity
  - D. a private hospital
4. The word 'primary' in line 20 means \_\_\_\_\_.
  - A. valuable
  - B. main
  - C. a natural
  - D. risky
5. Which of the following is the best title for the article?
  - A. Ozone and Oxygen
  - B. The Most Dangerous Gas on Earth
  - C. The Mysterious Formation of Oxygen
  - D. Facts about Ozone

## Grammar Corner

We use **Type 0 conditional sentences** to talk about facts or things that are generally true.

**e.g.** *If the ozone is found at ground level, it is considered 'bad' ozone.*  
(Lines 17-18)

We use **Type 2 conditional sentences** to talk about the probable result of an imagined situation that is unlikely to happen.

**e.g.** *If this layer disappeared, the sun's harmful rays could hit the earth's surface with full force.*  
(Lines 14-15)

## Part B

Answer the following questions using the information from the article. Write your answers in the spaces provided.

1. Find a phrase which means 'to remember a piece of information that is important'.

\_\_\_\_\_



2. What makes ozone 'good' or 'bad'? Explain your answer.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Find words and phrases in the article that mean the following. Fill in each blank with no more than two words.

keeps alive	(a)	(v.)
sent out	(b)	(v.)
the waste gas released by vehicles	(c)	(n.)
to try to stop something harmful	(d)	(v.)

4. What may happen when one breathes in ozone?

\_\_\_\_\_  
\_\_\_\_\_

5. What is smog basically made up of?

\_\_\_\_\_

6. What prompts a number of countries to promote electric cars? Explain your answer.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Vocabulary Bank

The following are some of the man-made objects or substances which can cause damage to the ozone layer. Match them with the correct pictures. One of the words is not used.

aerosol spray      air-conditioner      cleaning agent  
 extinguisher      Styrofoam product      pesticide  
 refrigerator      food waste      industrial chemical



1.



2.



3.



4.



5.



6.



7.



8.



## Let's Discuss

1. Apart from controlling emissions from vehicles, what else can be done to ease ozone pollution?
2. If ozone pollution worsens, what severe consequences may it give rise to?