Introduction

Although ozone high up in the stratosphere (stratospheric ozone) provides a shield to protect life on Earth, direct contact with ozone is harmful to organisms including plants and animals. This also includes humans. Tropospheric, also referred to as ground-level ozone, forms when nitrogen oxide gases from vehicle and industrial emissions react with volatile organic compounds (carbon-containing chemicals that evaporate easily into the air, such as paint thinners). In the troposphere near the Earth's surface, the natural concentration of ozone is about 10 parts per billion (0.000001 percent). According to the Environmental Protection Agency, exposure to ozone levels of greater than 70 parts per billion for 8 hours or longer is unhealthy. Such concentrations occur in or near cities during periods where the atmosphere is warm and stable. The harmful effects can include throat and lung irritation or aggravation of asthma or emphysema.

Task

Answer the questions below.

- 1. What is ground-level ozone, and why is it there?
- 2. What are 3 negative effects of ground-level ozone on the environment?
 - 1.

 - 2.
 - 3.
- 3. What are 3 negative effects of ground-level ozone on people?
 - 1.
 - 2.

 - 3.
- 4. Thoroughly explain why ground-level ozone is mostly found in urban areas?
- 5. What does ozone smell like?
- 6. What time of the day is the ozone the worst?
- 7. How is ozone being used as a disinfectant in the medical field?