

Name: \_\_\_\_\_ Hour: \_\_\_\_\_

## The Facts about Ozone

### Introduction

1. Ozone is made of \_\_\_\_\_ oxygen atoms.
2. Ozone is less stable than diatomic oxygen, so it tries to give up \_\_\_\_\_.
3. We see ozone as a \_\_\_\_\_ gas.
4. Ozone is described as Dr. Jekyll (stratospheric ozone) or Mr. Hyde (tropospheric ozone). Please note two characteristics of each type of ozone:

Ozone in the stratosphere:

Ozone in the troposphere:

### Electromagnetic Spectrum

5. As a review, please write the names of the electromagnetic spectrum from longest to shortest wavelengths:
6. Ultraviolet radiation splits apart oxygen molecules (remember, 2 oxygens), setting the stage for ozone to be created. \_\_\_\_\_ collide with \_\_\_\_\_ to form an ozone molecule.

### Ozone in the Stratosphere

7. Only ozone blocks the most energetic ultraviolet light, which are \_\_\_\_\_ and \_\_\_\_\_.
8. What would likely not exist today if ozone was not in the upper atmosphere?
9. Most ozone lies in the stratosphere, which is between \_\_\_\_ and \_\_\_\_ miles above the Earth's surface.
10. Ozone would keep up a dynamic equilibrium which "shields" life on Earth, if not for \_\_\_\_\_ contributing to the chemical processes.

### Ozone in the Troposphere

11. Ozone is found in small amounts in the troposphere, the layer found from the Earth's surface to \_\_\_\_\_ miles up. In this region of the atmosphere it is considered a \_\_\_\_\_ gas. As this type of gas, it has a \_\_\_\_\_ effect.
12. Ozone is also a key ingredient in \_\_\_\_\_. Yuck!

### Concluding Thoughts

13. What simple saying sums up a lot about ozone in different regions of the atmosphere?