

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

Date: \_\_\_\_\_

**Bad Ozone: Activity 1**  
**Identifying the Causes of Ground-Level Ozone**

While ozone in the stratosphere is a powerful protector of our planet, ozone at ground level can impact people’s health. You’ve identified that both Los Angeles and Atlanta have smog, but what do smog and ozone have to do with each other and how do scientists use satellite data to measure ozone on Earth’s surface?

Watch the video, [Breathable – A Story about Air Quality](https://www.youtube.com/watch?v=2yd2s5vdQeQ&feature=youtu.be) (<https://www.youtube.com/watch?v=2yd2s5vdQeQ&feature=youtu.be>), from the beginning through 4:25. Then answer the following questions:

1. What NASA satellite monitors ozone? \_\_\_\_\_

2. Identify a source of pollutants that cause smog, according to the clip.  
\_\_\_\_\_

3. In what year did smog descend on Los Angeles, according to the video?  
\_\_\_\_\_

4. What did Dr. AJ Haagen-Smit discover was the primary component of smog that damaged plants? \_\_\_\_\_

5. Complete the following equation (hint: pay attention at 4:00 into the video).  
\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = ozone

6. Based on what you observed in the images of the cities, do you expect that ozone concentrations in Los Angeles and Atlanta would be high or low, why?  
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7. If Nitrogen dioxide ( $\text{NO}_2$ ) increases will concentrations of smog and ozone increase, decrease, or stay the same? Why?

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