



**High School Science Virtual Learning**

**Earth Science**

**Human Impact on Air Quality**

**May 21, 2020**



High School Earth Science  
Lesson: May 21, 2020

**Objective/Learning Target:**

Students will recognize human on air quality.

## Let's Get Started:

1. Do you think the air in your community is healthy or polluted?
2. What evidence or arguments can be made to support your opinion on your local air quality?





## Let's Get Started: **Answer Key**

1. Answers can vary from yes to no, and can include somewhat.
2. Can cite the smog around Kansas City on hot mornings, pollen, smoke from the Independence power plant, car exhaust from semi trucks, etc. Can also argue that it is relatively clean versus New York City or San Francisco.



# Lesson Activity:

## Directions:

1. Watch the video about air pollution.
2. After the video, answer the questions found on the following slides.

**Links:** [Air Pollution 101](#)



# Practice

*Complete the following questions using the information you learned during the lesson activity.*



## Questions:

1. What are three natural sources of air pollution?
2. What are two major human causes of air pollution?
3. How do air pollutants contribute to global warming?
4. What is smog?
5. How can we limit the creation of air pollutants?



Once you have completed the practice questions check with the **answer** key.

1. Volcanic eruption, wildfires, allergens.
2. Energy use and agriculture
3. Burning fossil fuels release greenhouse gases into the atmosphere, trapping more heat and causing smog.
4. Smog reduces visibility and has hazardous side effects such as eye irritation, harm to plants, and respiratory distress.
5. Decreasing the use of fossil fuels





## More Practice:

After watching the video and contemplating what are natural and human causes of pollution answer the following:

1. Describe the air pollution/climate change cycle.
2. Explain at least 3 ways that fossil fuels are used which result in air pollution.
3. Why would increased air pollution lead to respiratory problems in humans?
4. After watching the video, how do you think air pollution can be slowed or reversed?
5. Knowing what you do now, revisit the starter question- do you still feel the same way about your local air quality?



Once you have completed the practice questions check with the **answer** key.

1. Greenhouse gasses are released into the environment causing air pollution, this causes climate change and global warming, which then intensifies the effects of air pollution making the pollution worse.
2. Burning of fossil fuels in factories, creating energy (electricity), and in vehicles such as cars/boats/airplanes/etc all cause air pollution.
3. Increased pollution allows for the lungs to be coated in toxic materials, inhibiting their ability to function fully.
4. Students should come up with ideas for how to reduce pollution such as energy conservation, clean energy (from renewable sources), electric cars, etc.
5. Students should answer yes or no and site facts from the video to support their opinion.



## Additional Practice:

If you need additional review over the concepts here are some other video resources:

[How can air pollution change your life?](#)

[Air pollution can close places down](#)