

Environmental Science

Lesson: April 7, 2020

Learning Target:

Students will recognize causes and impacts of air pollution.

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?



Jump start 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..
 - a. Or can argue that it is relatively clean versus New York City or San Francisco.

Lesson Activity:

Directions:

Watch the video about air pollution. While watching the video answer the following questions on your own page:

1. What are three natural sources of air pollution?
2. What are two major human causes of air pollution?

Watch Video Here: [Air Pollution 101](#)

Answer key:

1. Volcanic eruption, wildfires, allergens.
2. Energy use and agriculture

Application/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?

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. Answers will vary.
5. Answers will vary.

Additional Practice

If you need to review over the concepts again of how air pollution affects humans and the environment here are other video resources:

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

[Air pollution can close places down](#)