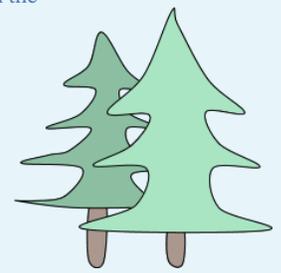


OUR PLANET, OUR FUTURE



AN ENVIRONMENTAL NEWSLETTER

Issue No. 1 - March 2020



What do factories and forest fires have in common? They both contribute to **air pollution**: the release of harmful substances (such as gases and other types of matter) into the environment. Recently, rising numbers of natural disasters and new factories have made this issue very **severe**, creating problems for both humans and the environment.



THINK...Imagine that you are a factory owner learning about the effects of air pollution. What steps would you take to make sure that your business is more environmentally friendly? What would you do to help teach your workers about air pollution?

What Are Some Different Types Of Air Pollution?

Factory Air Pollution:

People who live in urban (city) areas might be affected by air **toxins** released in factory smoke. These substances, one of which is called **carbon monoxide**, can worsen health disorders such as **asthma**. Factory air pollution is also linked to global warming, a process in which certain gases are released into the atmosphere, causing our planet to become "overheated".

Motor Vehicle Air Pollution:

Motor vehicles (such as cars and buses) are known to give off fumes that **pollute** city air and cause health problems like asthma. Engineers are currently working to solve this problem by creating **energy-efficient** cars that have lower **emissions**. [See page 3 for more info.](#)

Air Pollution from Natural Disasters:

Environmental disasters such as wildfires and volcanic eruptions release large amounts of **toxins** into the environment at one time. This can disrupt nearby ecosystems, sometimes even threatening the lives of humans and animals.

DID YOU KNOW?

The World Health Organization reports that approximately 7 million people die each year from air pollution-related illnesses!

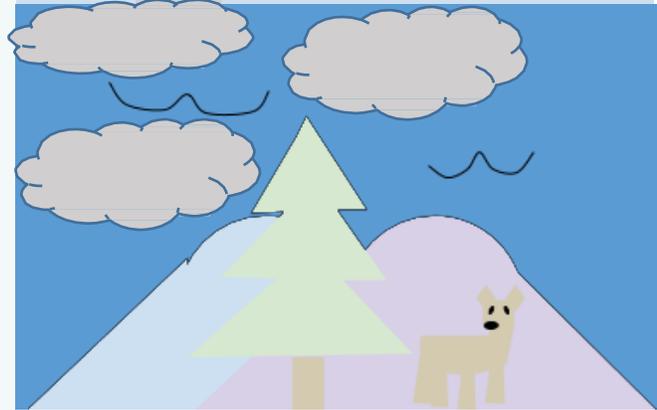


THINK!

- Using one of the words you learned in the glossary (other than 'air pollution'), write a short summary about what air pollution is and how it can have negative effects on an ecosystem.

Air Pollution word search

M M S F G S I N G M T D A D Y
 B T L I F L B P J N O F I L T
 E R I F D L I W E C W S X A X
 Z I S O M X U M Y K A Z N R H
 E A P X L W N J Q S O Y F U D
 K T T Y S O A S T H M A X T P
 L Y O M R H R E G E J B K A O
 R Y F I O O R Q F A B X F N L
 P Y V D E S T R U C T I V E L
 Y N H M N E P C B B Z J X M U
 E D Y I A F V H A I O Y B N T
 T S X G X T X F E F Y L C V I
 F O S X H O T X X R V M I Q O
 T R D E A G E E S U E D T A N
 Y A T P C B N Z R B W B Y S L



So... what makes air pollution so bad?

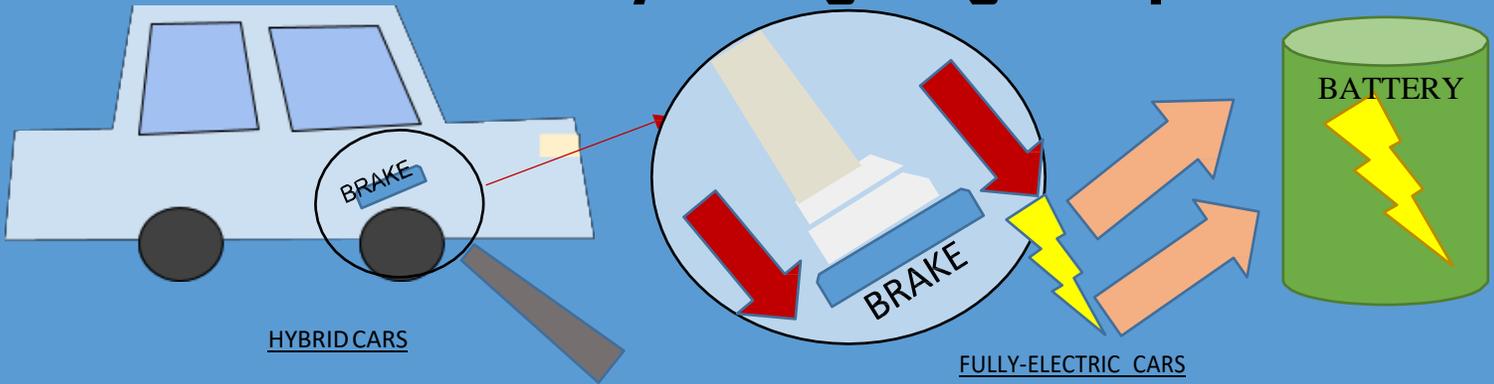
Air pollution is a serious problem that affects almost every human, animal, and ecosystem in the world. When people are exposed to dangerous toxins in their environment (like in Southeast Asia, where it was reported that 2.6 million people died as a result of outdoor air pollution in 2012), they become more likely to develop breathing or heart problems, or even cancer. This is bad for society, too, as people affected by air pollution need medical attention that the public has to help pay for. Air pollution is also harmful to the animals that live in affected environments. Plus, the substances that contribute to air pollution aren't very pretty to look at when they're clouding up the sky.

ASTHMA
 ATMOSPHERE
 CITY
 DESTRUCTIVE
 DISASTER
 ENVIRONMENT
 FACTORY
 MATTER
 NATURAL
 POLLUTION
 TOXINS
 WILDFIRE



THINK...Based on what you've learned, what impact do you think air pollution will have on future life on Earth? What have you seen in the world around you that helps you to draw this conclusion?

How the car industry is fighting air pollution:



HYBRID CARS

FULLY-ELECTRIC CARS

- Powered by a gas-fueled engine and an electric motor (which gets its energy from batteries).
- Hybrid batteries are not charged at a separate power source (like how you would charge an iPad). Instead, they use energy that is harnessed when the driver pushes his or her brakes and slows the car down. This unique braking system helps drivers save gas and reduce their car emissions! Check out a model of the braking system in the space above.

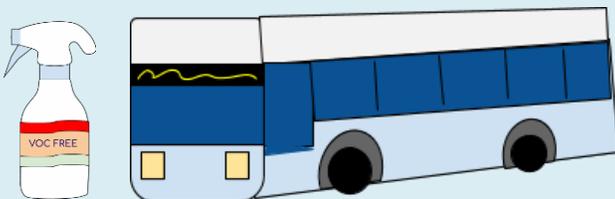
- Even more eco-friendly than hybrid cars because they produce zero exhaust or emissions.
- Electric cars use a battery pack that is charged at an electric power source (but it also gets some energy from the brake system outlined above).

--- Hybrid and electric cars are both great options for eco-friendly transportation. However, they are often pricier than other types of cars. Luckily, this cost somewhat balances out because of the amount of gas drivers save with the power-storing brake system.

GLOSSARY

- Air Pollution: The release of harmful substances (such as gases and other types of matter) into the environment
- Severe: Very bad
- Toxins: Harmful substances
- Carbon Monoxide: A colorless, odorless, poisonous gas
- Asthma: A medical condition that can cause coughing and make it hard to breathe
- Pollute: To release harmful substances into an area
- Energy-Efficient: Using energy or fuel in a smarter way that's better for the environment
- Emissions: Gases such as carbon monoxide that are released from car tailpipes
- VOC's: Chemicals found in cleaners and other products that are harmful for the environment

You can reduce your air pollution impact by:



- Using eco-friendly modes of transportation (like **carpool**, **biking**, **walking**, and **public transportation**) instead of taking regular car rides **AND**
- Switching to environmentally friendly **household cleaners** that do not contain VOC's.



Learn more about how to reduce your air pollution impact at <https://www.des.nh.gov/organization/divisions/air/tsb/ams/aqmdp/share.htm>

Name: _____ Date: _____

Air Pollution Questions

Answer on your own or share with your family!

1. Do you think that air pollution can always be seen? Why or why not? Have you ever seen air pollution occurring in real life? If so, describe what it looked like.

2. How do you think air pollution affects your area? How could the community work to help resolve this issue?

3. How do you think air pollution affects animals living in an environment? What can we do to help protect these animals?

4. What is more important for society: making lots of money from factories that pollute the environment, or maintaining healthy air quality?

5. Do you think that air or water conservation is more important? Are they equally important? Explain.

6. DRAW! Design your own non-air polluting car! Think about...
 - The energy source that your car will run on
 - How big your car will be and what it will look like on the outside
 - Use a separate sheet of paper to draw your car. Send a picture of your drawing to environ.newsletter@gmail.com for a chance to be featured in the next newsletter issue!

Got any more questions about air pollution? Contact our email:

environ.newsletter@gmail.com

Hey families! If you're interested, here are some more air pollution resources:

This article on the Climate Kids (NASA) website:

<https://climatekids.nasa.gov/air-pollution/>

This air pollution video by the "National Geographic" Youtube channel
(Too advanced for kids, but a good rundown on air pollution for adults!)

<https://www.youtube.com/watch?v=e6rglsLy1Ys>