Name:	Date:	Block:
Air Q	uality WebQuest	
Use the Internet to	respond to the following questions.	
Go to the following site: <u>http://ww</u>	<u>ww.epa.gov/epahome/learn.htm</u>	
Click on Air, then air poll	utants	
A. What is the definition f	or air pollution?	
B. What are six common ai	r pollutants?	

- 1.
 4.

 2.
 5.
- 3. 6.

Go to the following site: <u>http://www.epa.gov/air/</u>

<u>Asbestos:</u>

- a) Where does asbestos originate from?
- b) What are the human health impacts associated with asbestos exposure?

<u>Ground-Level Ozone:</u>

- a) How does ground-level ozone form?
- b) What is the difference between good ozone and bad ozone?
- c) What are three negative health effects of ground-level ozone?
 - * Click on the Ozone button below the six common air pollutants paragraph on the first website*
 - 1.
 - 2.
 - 3.
- d) What are the environmental impacts that occur due to increased ground-level ozone?

Particulate Matter:

- a) Identify four sources of particulate matter:
- b) What two categories are used in classifying particulate matter?
- c) Why is the size of particulate matter important to human health?

Acid Deposition: Go to: <u>http://www.epa.gov/acidrain/</u>

- 1) What two gases are the primary causes of acid deposition? Is one gas more responsible than the other? Which one?
- 2) What technological controls were implemented to reduce both of these gases in the US?
- 3) Identify and describe 3 environmental impacts associated with acid deposition?

Visit the following site: <u>http://www.airnow.gov/</u>

- A. What does AQI stand for and what is it?
- B. What two pollutants pose the greatest threat to human health?
- C. What are the five major air pollutants regulate by the EPA according to the Clean Air Act:
 - 1. 4.
 - 2. 5.
 - 3.

C. Click on Massachusetts. Record AQI for the following: Boston, MA_____ New York, New York?_____

Los Angeles, CA?

D. Click on the range that Boston falls into under the national map. What is the health concern for people in this range?

Go back to <u>http://www.airnow.gov/</u> and scroll down to find answers

E. What do the different colors represent when monitoring the ozone? (under AQ Index) Green -

Yellow -

Orange -

Red -

Purple -

Maroon -



- Go to the following site: <u>http://www.kean.edu/~fosborne/resources/ex12j.htm</u> A. What is the definition of <u>point source</u> pollution?
 - B. Give two examples of point source air pollution (just look at Air).1.
 - 2.
 - D. What is the definition of <u>non-point source</u> pollution?
 - D. Give two examples of non-point source air pollution (just look at *Air*).
 1.



2.

- 4. Visit the following site: <u>http://www.scorecard.org</u>
 - A. What does this website do?
 - B. Find the top three polluters in Essex County? (enter your zip code: 01902)
 - 1. 2.
 - ۲.
 - 3.
 - C. Find the top three pollutants *released* in Essex County.
 - 1. 2. 3.

Go to: <u>http://www.greenfacts.org/glossary/pgrs/primary-pollutant-secondary-pollutant.htm</u>

Primary & Secondary Pollutants

• What is the difference between primary and secondary pollutants?

<u>Clean Air Act</u>: Go to: <u>http://www.epa.gov/air/caa/</u>

• What is the Clean Air Act of 1970?

• Outline the main components the Clean Air Act. Provide a description of how the main components improve air quality.

• What changes were made in 1990 to the Clean Air Act?

• Identify 10 key elements to the Clean Air Act.

• Identify 3 ways we know if the Clean Air Act is working.

<u>Days of Toxic Darkness</u>: http://www.portfolio.mvm.ed.ac.uk/studentwebs/session4/27/greatsmog52.htm</u>

Explain what happened in the London Smog Disaster of 1952. How many people died?

a. What does the term "smog" mean?

b. What caused the government to notice the high death rate, which was attributed to the air pollution?

c. What did the London Smog Disaster of 1952 prompt the government to do?