

Indoor and Outdoor Urban Air Quality

Name _____ Date _____

Station 1 : Air Quality Fortune Teller

Play the Clean Air Fortune Teller game with a partner. Write TWO facts you learned about New York's Air Quality:

Fact #1:

Fact #2:

Station 2 : Apartment Analysis

Use the microscopes to view particulate matter collected over the weekend INSIDE and OUTSIDE of Suzie or Annesia's apartment.

Draw what you see :

Inside:

Do you see any differences between indoor and outdoor air quality? Describe :

Outside:

Station 3: A Closer Look at Indoor Air Quality

Use the microscopes to view slides of particulate items typically found inside city buildings

Draw sketches of TWO items you see:

Item description: _____

Item description: _____

What particulates do you think are most common in your home?

What particulates do you think are most common at AUP?

Station 4: Air Quality and Asthma Rates

Use the graphs and maps provided to answer the following questions

Why is it so easy for PM 2.5 to get into our lungs? _____

Where are PM 2.5 levels Highest in NYC? Where are Asthma Levels Highest? Can you see a relationship between the two?

Based on the maps, what are the levels of PM 2.5 and Asthma around AUP? Do you think these levels are OK? _____

Station 5: Indoor Air Quality at AUP

Prediction:

On the LARGE GRAPH provided, place an "X" over the ONE room in AUP that you think will have the MOST particulate Matter.

Record your choice here (circle one):

Girls Bathroom

Boys Bathroom

Ms. Ceraldi's Room

Room 608

WHY did you choose this site? _____

Prepare your particle board and place it in the room you are assigned to:

Record your placement here (Circle one):

Girls Bathroom

Boys Bathroom

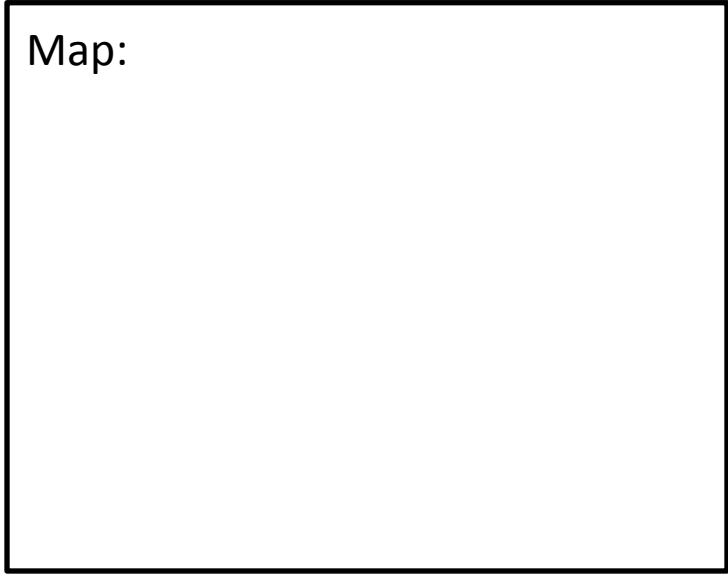
Ms. Ceraldi's Room

Room 608

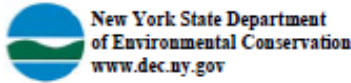
Draw a map and/or make a note about WHERE in the room you put your slide so you can find it next week when we analyze our results.

Notes: _____

Map:



Information for Station 1:








The Clean Air Fortune Teller Game

Folding Instructions:

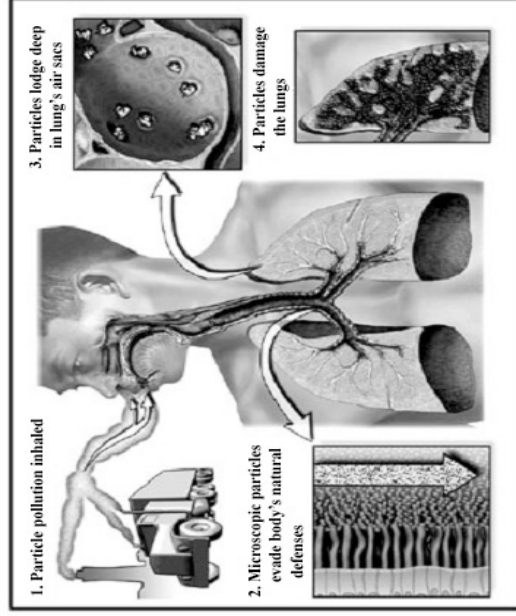
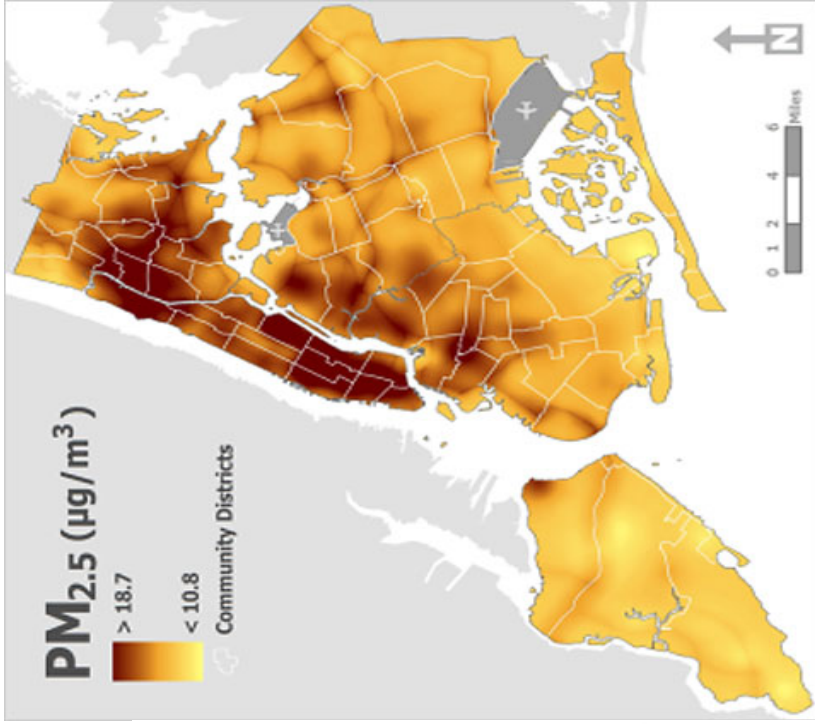
1. Cut out the game along the outer dotted lines.
2. With the printed side down, fold each of the 4 corners up to the center point so the pictures show (crease on solid lines).
3. Turn the folded paper over. Then, once again, fold each of the 4 corners to the center so the text shows.
4. With the text facing up, fold the square in half from left to right making a rectangle; crease and open. Then fold the square in half again from top to bottom.
5. Using two hands, place thumbs and index fingers under the 4 picture flaps.

Game Instructions:

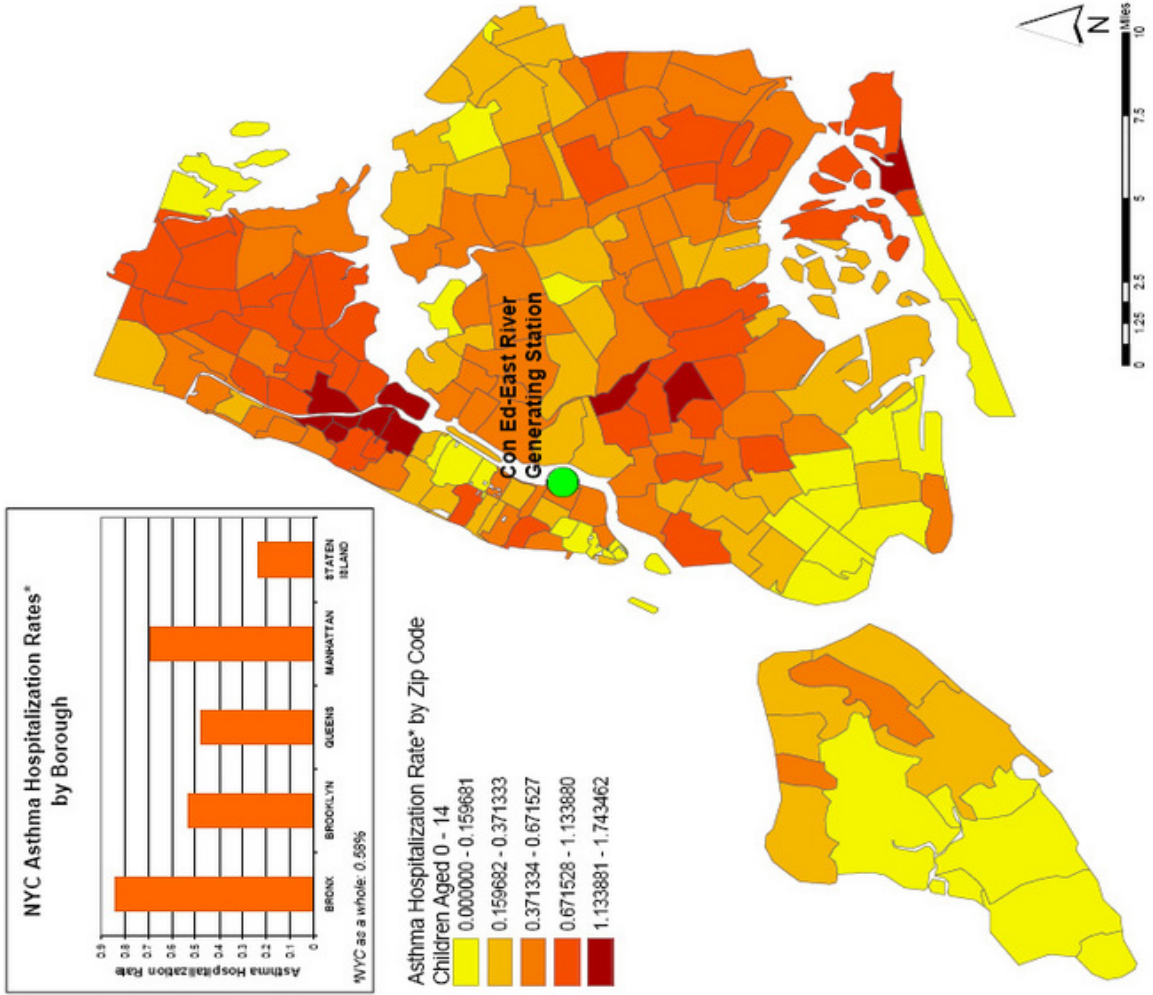
- With the game on your fingers, either you or a friend should pick a number (from 1 to 5) and a picture. For example, the number 2 and the picture "Be Cool-Carpool."
- Open and close the game in alternating directions while counting to the number you chose. Then read the question that is next to the selected picture, and guess the answer.
- Lift the inside flap to read the correct answer. If playing with a friend, don't forget to take turns reading and guessing.
- Try to answer all the questions... Everyone wins by learning about Air!

	<p>Q: What percentage of electricity does the typical incandescent light bulb waste?</p> <p>A: 90% Only 10% is turned into light. Compact fluorescent lamps (CFLs) save energy and money.</p>	<p>Q: How many gallons of fuel does a Boeing 707 jet use in its take-off climb?</p> <p>A: 4,000 gallons Burning fossil fuels creates air pollution.</p>	
<p>Q: How many degrees has New York State warmed since 1970?</p> <p>A: 2°F Reducing greenhouse gas emissions helps to keep the Earth healthy.</p>	<p>Q: What percentage of U.S. morning traffic consists of students being driven to school?</p> <p>A: 20%</p>	<p>Q: Which creates more air pollution -- the average car or the average home?</p> <p>A: The average home Save energy and keep the air cleaner by turning off your computer and the lights when you leave a room.</p>	<p>Q: What percentage of the world's oil supply does the U.S. consume each year?</p> <p>A: 25% However, electrical use has been dropping in the U.S. by about 1% per year as Americans conserve energy.</p>
<p>Q: Combining the words "smoke" and "fog" creates what air pollution term?</p> <p>A: Smog Smog is formed when sunlight and air pollution interact.</p>	<p>Q: Did you know that you always close your eyes when you sneeze?</p> <p>A: 99 mph</p>	<p>Q: How fast was the fastest sneeze ever recorded?</p>	
	<p>Q: Which creates more air pollution -- the average car or the average home?</p> <p>A: The average home Save energy and keep the air cleaner by turning off your computer and the lights when you leave a room.</p>	<p>Q: How many gallons of fuel does a Boeing 707 jet use in its take-off climb?</p> <p>A: 4,000 gallons Burning fossil fuels creates air pollution.</p>	

Particulate Matter in NYC



Asthma-Related Hospitalizations in NYC



Information for Station 4:

Indoor Air Quality

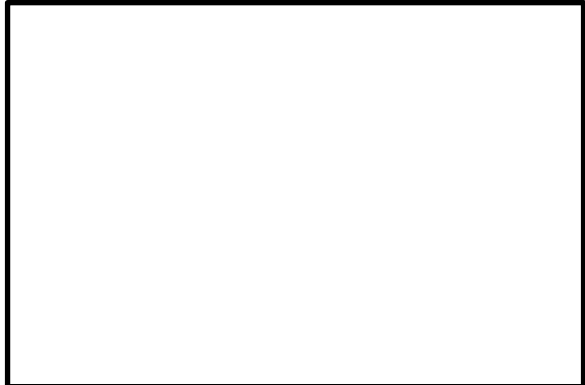
Name _____ Date _____

Station 1 : AUP Indoor Air Quality

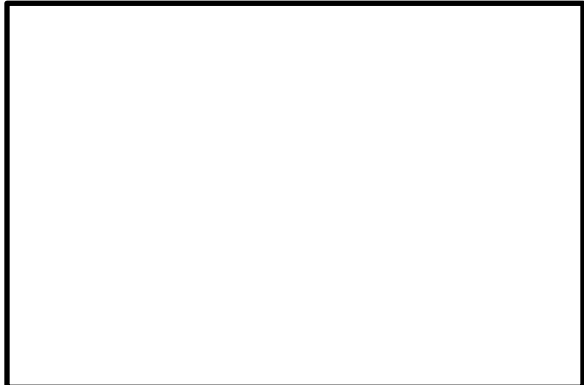
Look at a microscope slide from each of the 4 rooms studied.

Draw what you see.

Ms. Ceraldi's room:



Room 608:



Girls Bathroom:



Boy's Bathroom:



Can you identify any of the particulates collected in any of the rooms? _____

Based on your results, which room do you think has the WORST indoor air quality? (circle one)

Girls Bathroom

Boys Bathroom

Ms. Ceraldi's Room

Room 608

Station 2 : Air quality videos

Watch the three air quality videos on echo

Write TWO facts you learned from each video.

Video 1: Air quality and Your heart:

Fact 1: _____

Fact 2: _____

Video 2: Indoor air quality and Schools

Fact 1: _____

Fact 2: _____

Video 3: Purifying Air Quality with Plants

Fact 1: _____

Fact 2: _____