APES- Smog City

www.smogcity.com

Name: _______________________________________________________

Directions: After opening the page, click on the link- “run smog city”. Be patient, it may take time to load. There are six variables you can manipulate in the simulation. You will be manipulating the variables to discover the answers to the following questions.

Variables: (Pick One for Each)

• Air Speed (little windmill)
• Inversion Level- height of air mass that traps pollution (black stripe)
• Temperature (thermometer)
• Cloud Cover (clouds)
• Population (plain meter)
• Emissions (dials at the bottom)

1) What is AQI? What levels are there for air quality?

2) What is Ozone and why are children most at risk?

3) How does air speed and wind affect the level of smog in the city? Explain.

4) How does temperature affect the level of smog in the city? Explain.

5) Which type of emission has the greatest affect on air quality? Identify and explain why.

6) Would you expect there to be more smog on a cloudy day or a clear day? Explain.

RESET the simulator and try to create the WORST conditions for smog in your city- you should be able to get the air quality index up to unhealthy levels- What are the readings for each of your variables to produce the nastiest city air? Discuss.