## **AIR POLLUTION SIMULATOR**

This activity consists of simulating several conditions to understand how the different pollution sources, weather conditions, population index, etc affect to the air quality.

Work in groups (if possible) and follow these steps:

Open this Internet page: <a href="http://www.smogcity2.org/">http://www.smogcity2.org/</a>

Choose the third option: Create Your Own Smog City 2 Experience

Try these experiments and write down your observations.

- a) Move the emissions and population controls to the maximum settings. Change the wind speed to calm. What happens to ground-level ozone and particle levels? What time(s) of day would particle pollution levels be the highest? Without altering the weather conditions, how can you reduce particle pollution?
- b) Set temperature to 95°F (35°C). What happens to the ground-level ozone and particle pollution? Without altering the weather conditions, how can you reduce ground-level ozone?
- c) Check the Random Events box (lower left). As you use the weather, emissions, and population controls watch the cityscape and the news crawler for wildfires and dust storms. How do wildfires and dust storms affect air quality?

Share your findings with the other groups and compare if you got similar results.