AOSC 433/633 & CHEM 433/633 Atmospheric Chemistry and Climate

Admission Ticket, Lecture 12: 14 points
Due: Tuesday, 12 March 2013 (at start of class)
Your name: ________________________

1. The formation of tropospheric ozone is linked to sunlight.
   Specifically:
   a) (2 points) what photolytic reaction is involved?

   b) (2 points) following this reaction, how is ozone formed?

   c) (2 points) for what season and weather condition are high levels of tropospheric ozone more likely to occur?

2. (4 points) What are the two functions of catalytic converters in vehicles?

3. (4 points) During the time period 1990 to 2005, how has the average concentration of atmospheric carbon monoxide (CO) responded to the rise in vehicular traffic and briefly why has CO responded in this manner?