

## 9.5 Air Quality

- Poor air quality leads to early death.
- KW has some of the poorest air quality in Ontario.

### Nitrogen Cycle

- Nitrogen needed for plants and animals to grow (DNA).
- Review figure 1 on page 450

### Ground Level Ozone

- $O_{3(g)}$  at high in the atmosphere protect you from UV radiation. At low altitude (ground level) it damages lung tissue.
- See  $NO_x$  equations on page 451 but smog can be best explained below
  - $2NO_{2(g)} \text{ (reddish-brown)} \leftrightarrow N_2O_{4(g)} \text{ (colourless)}$
- VOC = volatile organic compounds
  - Unburned fuels react with NO and  $O_2$  to form  $HNO_3$  and  $O_3$

### Homework

- Practice Q's: 1-6
- Section Q's: 1-6