**ICES Worksheet**

**Chapter 12: Air and Air Pollution**

* READ each section summary
* Answer these questions
  1. Describe/define the layers of the atmosphere.
  2. How are primary and secondary pollutants related?
  3. Compare/contrast photochemical smog and industrial smog.
  4. Compare the two types of temperature inversions.
  5. List some harmful effects of acid deposition.
  6. What is described as the “best” solution for prevention of acid deposition?
  7. What are the effects of prolonged exposure to asbestos?
  8. Describe the effects of air pollution on living organisms and materials.
  9. Summarize the solutions to preventing and reducing air pollution.

Animation #1: Formation of photochemical smog

* 1. Describe the steps in the formation of photochemical smog.
  2. What is a PAN?

Animation # 2: Thermal inversion and smog interaction

* 1. Describe what happens during a thermal inversion.
  2. Name two cities that experience frequent thermal inversions.

Animation # 3: Acid deposition

* 1. What are the primary sources of acid deposition?
  2. Name the secondary pollutants that form.
  3. When does dry acid deposition occur?
  4. When does wet acid deposition occur?
  5. What is the function of limestone?

Animation # 4: Effects of air pollution in forests

* 1. Draw, label, and color the completed diagram that depicts the effects of air pollution in forests.