Teacher Sheet 1

MATH APPLICATION ACTIVITY: THE NUMBERS GAME

OBJECTIVE: Students will:

- Be able to understand the relationships between atoms in simple carbon compounds;
- Be able to compute the number and types of atoms in CFC and HCFC compounds using their code numbers;
- Be able to arrive at the chemical formulas for CFC and HCFC compounds using the Rule of 90;

IMPORTANT TERMS: Chemical compound, atom, molecule, covalent bond, code number, alkane, CFC, HCFC, hydrocarbon, Periodic Table of the Elements, halogen;

PROCEDURE:

1. Read over the **INTRODUCTION** with the class.
   - Check vocabulary comprehension.
   - Present some illustrations of simple carbon compounds to reinforce the ideas in the reading selection.
2. Pass out the explanation sheet on the **RULE OF 90**.
   - Remind students that it can be applied to all CFCs and HCFCs.
   - Go over each step carefully and give several examples of how the process works.
3. Organize students into pairs and have each pair work together to complete the **DATA TABLE** using the information from the reading and the steps in the Rule of 90.
4. Student should complete the **ANALYSIS** section when they have completed the **DATA TABLE**.