CLASSIFICATION OF MATTER

INTRODUCTION

Grocery stores avoid chaos by placing related types of food in aisles so that shoppers can easily find the items they need. Chemists do the same thing by placing matter into groups that have similar characteristics. In this activity you will organize a large number of substances into smaller, more manageable groups, based on certain similarities.

PROCEDURE

1. Construct a data table with the following headings: Name of Material, Chemical Formula, Description.

2. Various materials have been placed at the lab stations. Examine each one and fill in your data table.

3. Examine your results. Determine a way in which all of the materials you observed can be classified into groups with similar characteristics. (Solid, liquid, and gas are ruled out as a choice of characteristics.)

4. Once you have formed the groupings, write a description of the materials in each group, i.e., Why did you group them together?

5. Is there another way that you could have grouped the materials? What criteria would you have used?