

STUDENT INVESTIGATION

Activity:

Exploring Elements in Fertilizers.



Purpose:

To examine how elements are used in fertilizers.

Background Info:

Fertilizers are commonly rated using 3 numbers; for example: 20,10,20. The first number gives the amount of Nitrogen (N) in the fertilizer. The second number gives the amount of Phosphorus (P), and the third number gives the amount of Potassium (K). These three elements are important nutrients for growing plants.

Materials:

DTE CD-ROM, computer with CD-ROM drive.

Procedure:

1. Find each of the elements **N**, **K** and **P** in the Discover the Elements program. In the **Overview** section for each element, find the appearance of the uncombined element, and record it in the table below.
2. For each element find and record the **Hazards** for each of these 3 elements. (Hint: Look for the Element's Hazards in the **Basic Info** section for each element)

Data:

Element	Nitrogen N	Phosphorous P	Potassium K
Appearance			
Hazards			

Data Analysis and Conclusion:

1. Based on the information from the table above, would it be possible to use these elements in fertilizers in their uncombined (free element) form? Explain why or why not.