75 Make It Count Counting by Weighing

Name _____

Date _____ Period ___

ACTIVITY

Purpose

To count large numbers of small objects by weighing.

Procedure

- I. Obtain a sandwich bag from your teacher. Your bag may contain items such as rice, beans, or paper clips.
- 2. Your challenge is to determine the number of objects in your bag without opening it.
- **3.** Brainstorm how you will solve the challenge with the members of your group, along with what tools you might use.

Questions

- **I.** Describe the method you are going to use to determine the number of objects you have in your bag. Be specific.
- **2.** Find out what other substances are in the sandwich bags of the other groups. Make a list of all the substances.
- **3.** Which substance's count do you think will be easiest to determine? Explain your reasoning.
- **4. Making Sense** What do you think this activity has to do with keeping track of chemical compounds?
- **5. If You Finish Early** Are 100 molecules of snake venom equivalent in toxicity to 100 molecules of arsenic trioxide? Why or why not?