Name
Date

Period

Lab 22
MOLES

PreLab Questions

None

NAME _____   PERIOD _____

DATE _____   LAB PARTNERS

EXPERIMENT 22
MOLES

Sample Number	Formula	Formula Mass	Mass of Sample & Bag	Mass of Bag	Mass of Sample	Number of Moles	Number of Particles
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Conclusion Questions (question. may be answered directly on this page)

1. Write group number, names, period, and name of substance to be enclosed (zinc or dextrose) on two separate index cards. Enclose each card in a different plastic bag. Mass each bag separately. These will be used to complete the following two activities.

2. Mass 0.200 moles of zinc in one of the plastic bag prepared in step one. To do this you will need to complete some calculations.

    Mass of zinc In 0.200 mole =   g.

    Mass of plastic bag (1)   =   g.

    Total mass zinc + bag   =   g.

    Turn this bag in with your lab.

3. Mass 6.02×10^{22} molecules of dextrose in a plastic bag. prepared in step four. To do this you will need to complete some calculations.

    Mass of 6.02×10^{23} molecules of dextrose =   g.

    Mass of plastic bag (1)   =   g.

    Total mass dextrose + bag   =   g.

    Turn this bag in with your lab.

4. Obtain one of the sample A, B, C, D, E, or F. This sample contains a marked number of moles of an unidentified element. You are to determine the identity of the element by (1) massing the sample, (2) subtracting the mass of the bag, (3) solving the equation:

    Atomic mass = (number of grams)/(number of moles)

    and (4) locating the element with the same atomic mass on the Periodic Table.

    Unknown letter

    Moles of unknown

    Mass of unknown + bag   g.

    Mass of unknown   g.

    Atomic mass

    Name of unknown element

Discussion

Conclusion