

Empirical Formula Worksheet

Data Table for Unknown # _____

Empirical Formula Unknown Data	
Mass of crucible (g)	
Mass of Unknown DxEy before heating (g)	
Mass of your crucible and leftover D after 1st heating (g)	
Mass of your crucible and leftover D after 2nd heating (g)	
Mass of leftover D (g)	

Observations:

Post-Lab Questions and Calculations *(Use a separate sheet of paper to answer the following questions.)*

1. What is the mass of D and E in your unknown sample?
2. What are the moles of D and E in your unknown sample?
3. Using the moles of D and E, determine the empirical formula of your unknown.
4. What is the empirical formula of a compound that is 39.95% carbon, 13.44% hydrogen and 46.1% nitrogen?
5. *Optional:* If your instructor gives you the identity of your unknown compound, calculate the percent error from your lab, using predicted final masses.