For Teacher Use Only: Minutes _____ Approved _____

Lab: Candium Lab Credit Sheet

Answer the following questions with thoughtful, detailed answers in complete sentences. Cite specific examples from your observations and results of the lab activity.

1. Show your calculations for determining the weighted atomic mass of candium here:

The atomic mass of chlorine is 35.45 atomic mass units (amu) and there are two naturally occurring isotopes of chlorine: Cl-35 and Cl-37.

- 2. In terms of **relative abundance** of the two isotopes of Cl, explain why the atomic mass of Cl is 35.45 amu.
- 3. Draw a Bohr diagram for both chlorine-35 and chlorine-37.

$$^{35}_{17}Cl$$

$$_{17}^{37}Cl$$

4. In terms of their **atomic structures**, explain the difference between Cl-35 and Cl-37.