

## KRYPTON PERIODIC TABLE

**Objective:** Several years ago, scientists on Earth discovered debris from the destruction of the planet Krypton. Among the wreckage, they isolated 15 unique elements which they have since studied the physical properties of. Despite their intense labor, however, the scientists have yet to be able to organize the elements into a periodic table like ours on Earth. Previous attempts have not been successful in creating a periodic table that shows clear patterns for all of the different physical properties that have been described. Additionally, they have hypothesized that there is a missing form of Kryptonite that is yet to be discovered and characterized. Your job, as a newly hired lab analyst for Wayne Enterprises, is to work on organizing the elements of Krypton into a periodic table and, using the trends that you discover in your table, predict the physical properties of the mysterious Kryptonite-X.

**Results:** After sorting your cards, predict the properties of the missing form of Kryptonite. In the space below, draw the element key (complete with all of the information listed on the card including the properties that are missing on the back).

## **Conclusions:**

- 1. What was the main way that you chose to sort the cards?
- 2. What trends did you notice in the elements across rows?
- 3. What trends did you notice in the elements down columns?
- 4. Are there any exceptions to any of the trends that you listed in #3 or #4?
- 5. Attempt to sort your cards using a different pattern. What advantages or disadvantages does the new way have over your first one?

