Periodic Patterns Puzzle
How would you organize objects with several different groups of patterns?

Objectives:

- Recognize periodic patterns
- Reinforce logical thinking
- Develop a deeper understanding of the periodic table of elements

Instructions:

- Cut out the 24 cards
- Recognize several patterns and trends
- Arrange the 24 cards in a logical way (there is more than one correct way)

Questions:

1) Which card has a mistake?
2) What change(s) would fix the card with the mistake?
3) Predict and draw a new valid card, and place it in the correct location for your solution.
4) Explain why the periodic table of elements is organized the way it is.
5) Consider other ways to organize the periodic table of elements.

The original puzzle is available from:

American Educational Understanding Periodic Table Game Puzzle
http://www.amazon.com/dp/B006582WVG

Description: Understanding the periodic table game puzzle. Students build their own periodic table in this game. Puzzle effectively reinforces the difficult conceptual information necessary for a thorough understanding of the periodic table. Kit includes enough material for 4 students or small groups to work simultaneously. Complete instructions and guides included. For grades 4 to 12 and ages 9 to 18 years.
Teacher notes:

- One common good solution is provided (see table and image) but there are other valid ways to group the cards
- The card with the mistake is the last card "39" as it only has 2 circles, but it should have 3
- Based on the age and level of the students, you can provide different information about the mistaken card, or no info at all