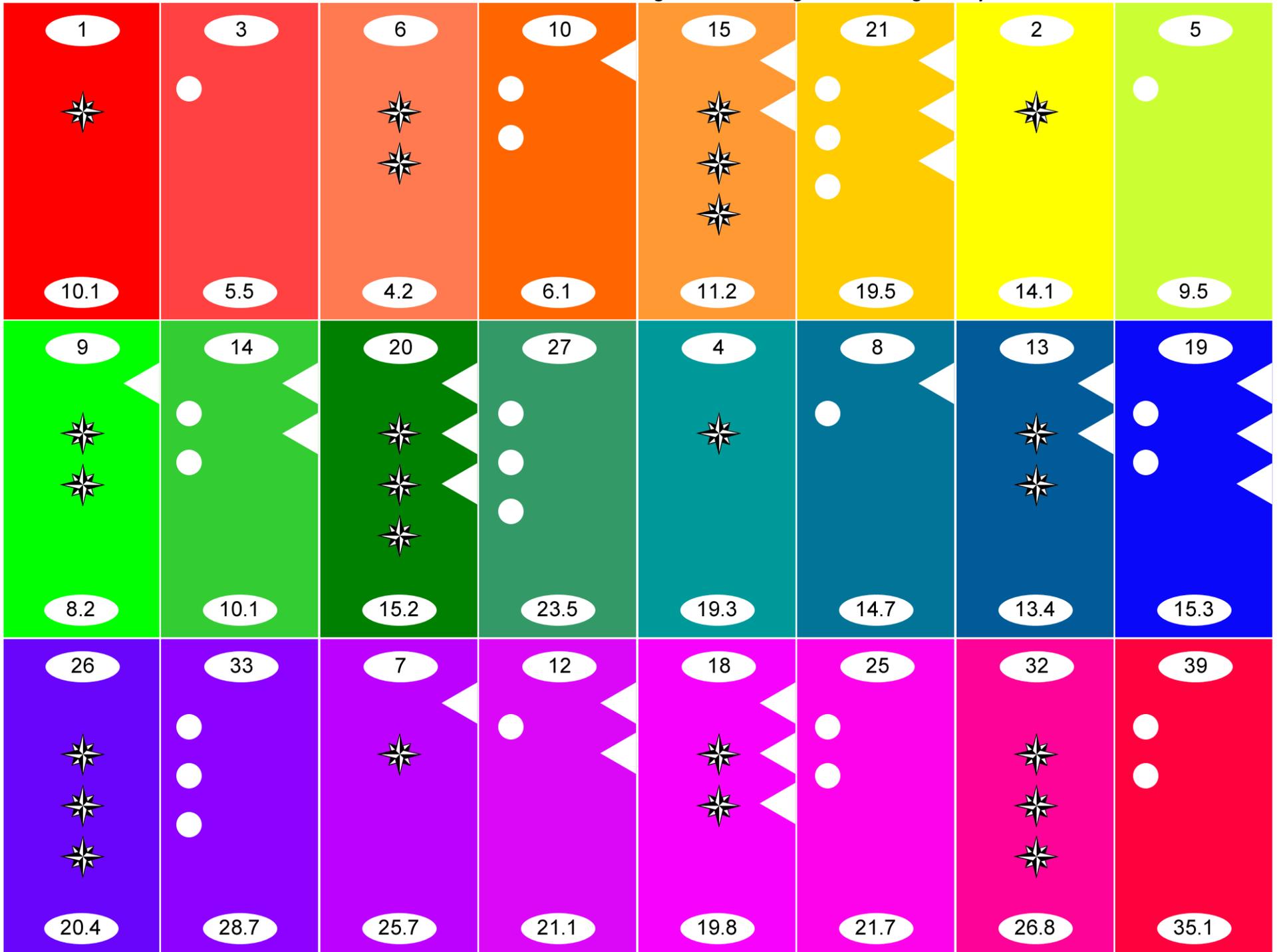


Periodic Patterns Puzzle: Cut out the following cards and arrange them in a logical way



## 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

1									
2	3								
4	5	6							
7	8	9	10						
	12	13	14	15					
		18	19	20	21				
			25	26	27				
				32	33				
						39			
						?			



