

The “Missing Cousin”

1234 Some Street Any Town, Georgia

Dear Cousin:

What’s happening? I’m writing because Grandmother has a favor to ask of you. She says you are the most artistic and the most organized member of the family. I think she always did like you best. Anyway, here’s the deal.

Grandmother has collected pictures of all the grandkids. She wants you to make a collage by arranging photos in rows from the smallest cousin to the largest cousin. She said also to tell you those kids who belong to the same family are dressed alike. Grandmother would like the members of each family arranged in their own vertical column. I hope you will understand what she means when you see the pictures.

By the way, I said she has a picture of everyone. Actually, she is missing a photograph of Cousin Al. Grandmother says with your talent you will be able to sketch what Al looks like because his features are so similar to the cousins who surround him.

I have to go now. In a way, I’m glad she does like you best! Good luck, and don’t disappoint her.

Best wishes,
Your Cousin

Purpose: to arrange “family” members by their properties.

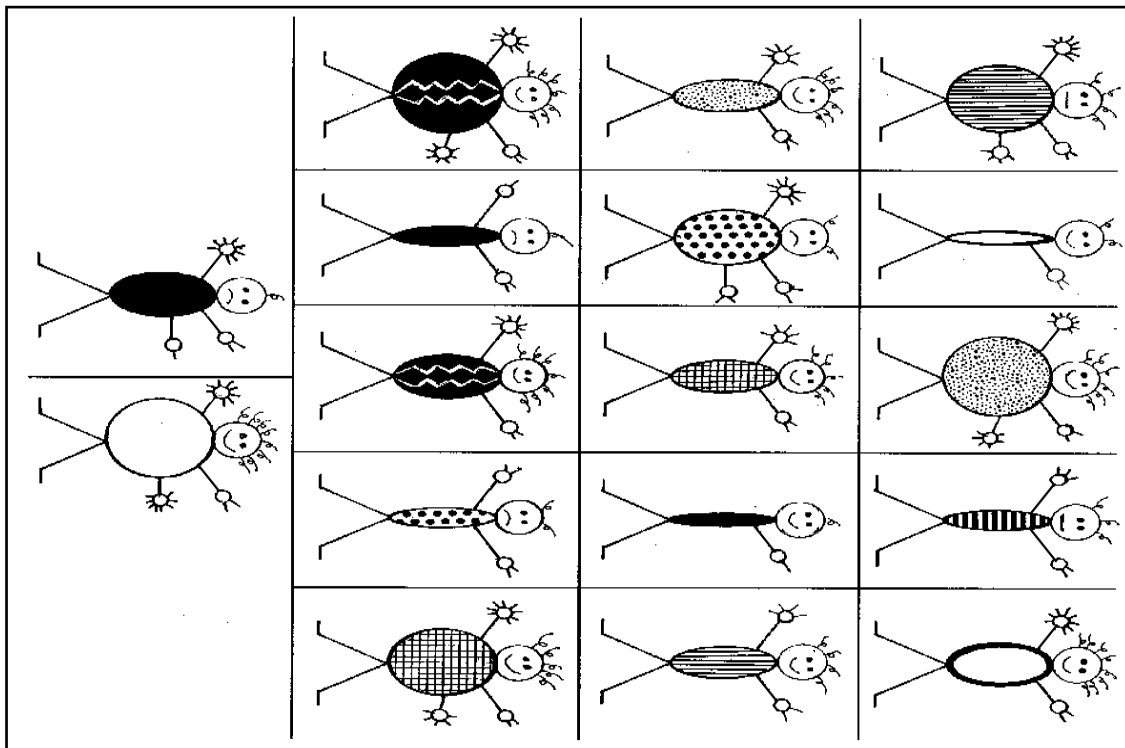
Materials: pictures of cousins, scissors, glue, colored paper

Procedure:

2. Prepare the colored paper – holding the paper lengthwise, fold it in half. Cut the paper in half along the crease. Turn each half hotdog style. On the top center one half, title it “My Family College,” on the top center of the other half title it “Conclusion.”
3. Cut out the “cousins” and arrange on the table in front of you. ^[L]_[SEP]
 - ❖ Arrange the pictures in rows and columns similar to the periodic table
 - ❖ Arrange the “cousins” from the smallest to the largest. ^[L]_[SEP]
 - ❖ Arrange the “cousins” by their physical features – such as number of hands, number ^[L]_[SEP] of curls, size of body, and etc.
4. Once all the “cousins” are arranged, glue them down on the paper titled “My Family College.”
5. **Determine the position of Cousin Al, and draw him in. Be sure to show all his identifying characteristics.** (Hint: you may need to look at the periodic table to determine Cousin Al’s facial expression.)
6. Answer the conclusion questions.
7. Glue the college and the conclusion questions into your composition notebook on the first clean page after your openings. Title these pages of your composition book “My Missing Cousin.” Add “My Missing Cousin” to your table of contents.

1. When compared to the Periodic Table, what does the number of arms on each cousin represent?
8. When compared to the Periodic Table, what does the number of fingers on each of the hands represent?
9. When compared to the Periodic Table, what does the size of the bodies represent?
10. When compared to the Periodic Table, what do the cousins with the same patterns represent?
11. When compared to the Periodic Table, what do the cousins with sad faces represent? Straight? Happy?
12. When compared to the periodic Table, what do the number of hairs on the cousins heads represent?
13. Write the symbol of EACH element represented by each "cousin" beneath his picture. Periodic Table groups 3-12 are not represented in the pictures of the cousins.
14. Which element does Cousin Al represent?
15. Properties of an element can be determined based on its placement on the Periodic Table. List 3 properties of the element Cousin Al represents based on its position on the Periodic Table.
16. Examine the Periodic Table. List 3 patterns you notice.

Conclusion:



Helpful Hints for Completing My Missing Cousin

Patterns and Arrangements of the Periodic Table

Atomic Number = elements are arranged by their atomic number. Atomic number increases as you move left to right and down the PT.

Periods = elements in the same period have the same number of electron clouds/shells.

Groups = elements in the same group have similar physical and chemical properties. Elements in the same group also have the same number of valence electrons.

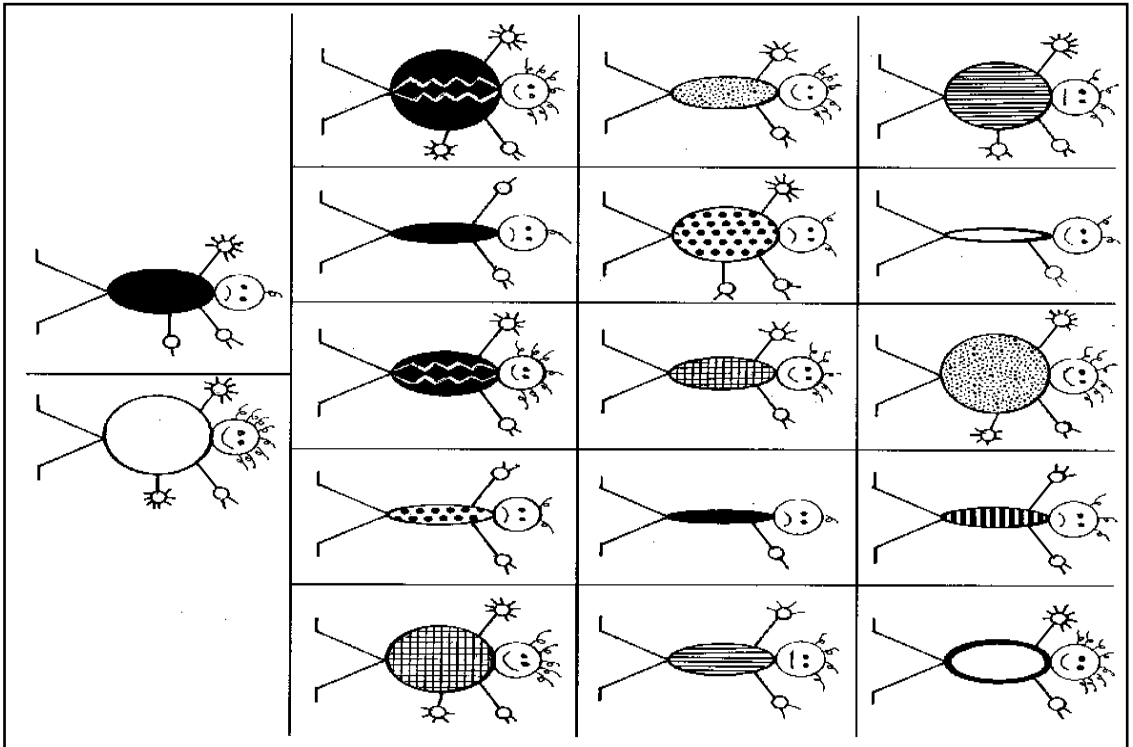
Metals = most are on the left.

Nonmetals = most are on the right.

Metalloids = located between metals and nonmetals.

Left to Right = with metals, moving left to right elements become less reactive. Nonmetals as you move from left to right elements become more reactive, with the exception of the Noble Gases.

Top to Bottom = elements in the same group go from smallest to largest as you move from the top to the bottom of the PT.



1. When compared to the Periodic Table, what does the number of arms on each cousin represent? **The number of electron clouds.**
2. When compared to the Periodic Table, what does the number of fingers on each of the hands represent? **The number of electrons the atomic number.**
3. When compared to the Periodic Table, what does the size of the bodies represent? **The size of the atom, increasing atomic number, or increasing atomic mass.**
4. When compared to the Periodic Table, what do the cousins with the same patterns represent? **Elements in the same group.**
5. When compared to the Periodic Table, what do all the cousins with sad faces represent? Straight? Happy? **Metals, Metalloids, Non-metals**
6. When compared to the periodic Table, what do the number of hairs on the cousins heads represent? **The number of valence electrons.**
7. Write the symbol of EACH element represented by each "cousin" beneath his picture.
8. Which element does Cousin Al represent? **Aluminum**
9. Properties of an element can be determined based on its placement on the Periodic Table. List 3 properties of the element Cousin Al represents based on its position on the Periodic Table. **It's a metal, it has 3 electron clouds, it has three valence electrons, it's bigger than Boron, and smaller than Gallium, shiny, malleable, ductile**
10. List 3 patterns present on the Periodic Table. **Moving right to left and down atomic number and mass increases. Elements in the same groups have similar properties. Elements in the same periods have the same number of electron clouds. Elements in the same groups have the same number of valence electrons. Metals are on the right, metalloids are in the middle, non-metals are on the left.**

