*Chemicool People*

**Introduction**:

Overnight, scientists have discovered a new type of people that are living on atoms! These people are so tiny that they have never been seen before; however, the scientists were able to determine what they might look like. I have in these packets pictures of the Chemicool People. Chemicool people are very shy individuals and tend to live solitary lives on different atoms. They tend to share characteristics with the atom that they are living on with each aspect of the atom reflected in a characteristic of the people. For example, the number of arms they possess might mean something. Your job is to determine what person is missing in your packet. Remember that all of these people are unique, but they have families and many characteristics that are similar. Also, because of their close relations with atoms, the Periodic Table can help you determine the similarities of these people and organize them.

**Purpose:**

To learn about the organization of the periodic table by using models.

**Materials:**

* Packets of Chemicool People – fifteen packets with seventeen people – one per group
* Chemicool People Worksheet – one per group
* Periodic Table of Elements – one per student

**Procedure:**

1. Remove the Chemicool people from the bag and organize them into columns and rows on your desktop. One “person” is missing from your bag.
2. Once you have completed what you think is the best way to organize the Chemicool people, have your teacher check your work.
3. Obtain a worksheet from your teacher and record your set number on the worksheet.
4. Complete #1.
5. Once you have finished #1, ask your teacher to check your answer. If you are correct, finish the remainder of the worksheet and turn it in to your teacher. If you are incorrect, complete #1 again and have it checked before continuing.
6. Once you have finished the exercise, return all of the Chemicool people to the bag.

Set Number\_\_\_\_\_\_\_\_\_\_\_\_ Name(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chemicool People Questions**

After you have completed the task of assembling your Chemicool People, answer the following questions. Use complete sentences.

1. Draw what your Chemicool person would look like. Make your drawing detailed.

2. What is your Chemicool person’s atomic number?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. How many of the following atomic particles does your Chemicool person have?

a. Protons: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. Electrons: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Valence electrons: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. What is your Chemicool person’s oxidation number (charge)?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. What part of your Chemicool person represents the chemical period?

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6. What expression does your Chemicool person have on his/her face and why?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. What is your Chemicool person’s family name?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Is your Chemicool person skinny, medium, or chunky?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How do you know this?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. Draw a picture of what Chemicool person #20 would look like. Be detailed and make the drawing large enough to see all parts.