**USE PENCIL!**

**Period**

**2**

**Period**

**3**

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**Period**

**4**

**Period**

**5**

**Period**

**6**

**Clues:**

1. The “elements” are grouped in the following Families:

|  |  |  |
| --- | --- | --- |
| **A B C D E** | **P Q R S T**  | **EE FF GG HH II** |
| **F G H I J** | **U V W X Y**  |  **JJ KK LL MM NN** |
| **K L M N O** | **Z AA BB CC DD** |  |

1. **Y** is the most electronegative element.
2. **GG** is the most reactive metal and the least electronegative element.
3. If **K** lost 4 e-, it would look like **E**, the smallest Noble Gas.
4. If **I** gained 2 electrons, it would look like **A**, and if it had 2 less protons, it would be **K**.
5. **BB** is the biggest element in its family.
6. **AA** is smaller than **K** but bigger than **I**.
7. **CC** is the only element in its group that is diatomic**\***.
8. If **NN** lost 1 electron, its electrons would fill ONLY the s sublevel.
9. **JJ** Is the second biggest element in its family.
10. **S** is in the same period as **JJ**.
11. **Z** and **L** are not in the same period.
12. **B** is the largest noble gas.
13. If **II** were a real element, it would only have 3 electrons.
14. **FF** is in the same period with **U** but not **O**.
15. **H** is to **JJ** as **I** is to **KK**.
16. **U** has a larger ionization energy than **I**.
17. **M**’s valence electrons are in the 4th energy level.
18. The shielding effect for **EE** is greater than for **HH**.
19. **F** is the smallest element in the group that would form charges of -2.
20. **G** gains 2 electrons to look like **B**.
21. **P**’s atomic number is 1 more than **GG**.
22. **T** is not in the same period with **Z**.
23. **L** is not in the same period as **GG**, but is in the same period with C.
24. When **W** gains 1 electron, it’s a 4p6.
25. **R** has 1 less energy level than **M**.
26. The valence electrons for **X** and **LL** are not in the same energy level.
27. **MM** and **Z** are in the same period.
28. **N** is in the same period as **LL** but not **CC**