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 F G H I J

**K L M N O**

**P Q R S T U V W X Y**

**Z AA BB CC DD**

**EE FF GG HH II JJ KK LL MM NN**

1. **Y** is the most electronegative element.
2. **GG** is the most reactive metal and the least electronegative element.
3. If **K** lost 4 electrons, 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.

Period 3

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

Period 4

Period 5

Period 6

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