

Electron Configuration Activity

Determine what elements are denoted by the following electron configurations. Fill in their chemical symbol. If you see that the electron configuration is not valid, put an **X** on the line.

1. $1s^2 2s^1$ _____
2. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^1$ _____
3. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4d^{10} 4p^5$ _____
4. $[Rn] 7s^2 5f^3$ _____ **U** _____
5. $1s^2 2s^2 2p^6 3s^2 3p^6$ _____
6. $[Rb] 5s^2 4d^9$ _____
7. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^2$ _____
8. $[Xe]$ _____
9. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^8$ _____
10. $1s^2 2s^2 2p^6 3s^2 3d^5$ _____
11. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$ _____
12. $1s^2 2s^2 2p^4$ _____
13. $[Ne] 3s^2 3p^4$ _____

Once you have completed the activity above, then transfer the chemical symbols to the corresponding number from the exercise. This will spell out words or phrases.

1. 11. =

2. 12. 4. 5. 7. 9. 4. 13. =

6. 10. 3. 8. =