1. What is wrong with the following notation? 

![3f](image)

2. How many sublevels would you expect in the 8th energy level?

3. What is the maximum number of electrons that can fit in the 3d sublevel?

4. How many electrons can fit in a 2p orbital?

5. In the 5th energy level, there is a fifth sublevel called the “g sublevel”. Considering the trend in number of orbitals and electrons in the s, p, d, and f sublevels, predict how many orbitals and how many electrons can fit in a g sublevel.

6. Considering your answer to question 5, how many electrons can fit in the entire 5th energy level?

7. Write the notation for an electron spinning clockwise in a p sublevel in the 4th energy level.