

Quiz 1

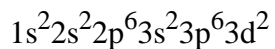
1. Sketch the $2p_x$ and $2p_y$ orbitals (around the same nucleus, please).

2.

a. Write the electron configuration of carbon.

b. Are the p electrons in the same orbital? Why or why not?

3. What element is represented by the following ground state electron configuration?



4. Answer the following questions about NH_3 (ammonia):

a. What type of bond is formed between nitrogen and hydrogen?

b. Draw a Lewis structure for ammonia.

c. What shape is the smallest unit of ammonia? (Name the shape and draw a structure.)