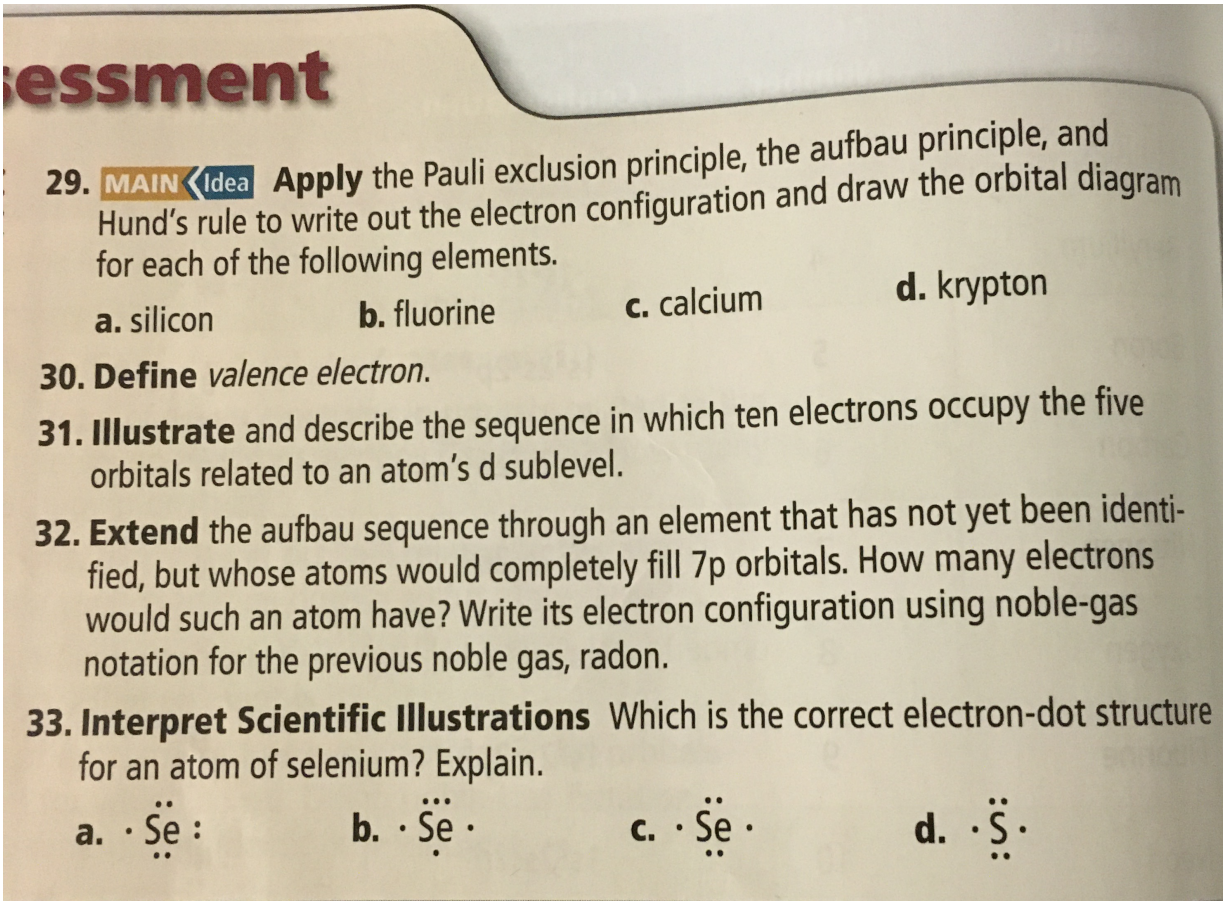
Electron Configuration

Question 3



sessment

29. MAIN Idea **Apply** the Pauli exclusion principle, the aufbau principle, and Hund's rule to write out the electron configuration and draw the orbital diagram for each of the following elements.

a. silicon **b.** fluorine **c.** calcium **d.** krypton

30. Define *valence electron*.

31. Illustrate and describe the sequence in which ten electrons occupy the five orbitals related to an atom's d sublevel.

32. Extend the aufbau sequence through an element that has not yet been identified, but whose atoms would completely fill 7p orbitals. How many electrons would such an atom have? Write its electron configuration using noble-gas notation for the previous noble gas, radon.

33. Interpret Scientific Illustrations Which is the correct electron-dot structure for an atom of selenium? Explain.

a. · Se : **b.** · Se · **c.** · Se · **d.** · S ·