

**Main Ideas, Key Points,
Questions:**

After watching the video segment, write down key points, main ideas and big questions.

Objective(s):

- *To use the “electron hotel” model to explain energy levels, sub levels and orbitals in electron distribution in an atom.*
- *To use the Aufbau diagram, the Pauli Exclusion Principle and Hund’s Rule to predict the electron configuration of atoms.*
- *To write orbital diagrams based on electron configurations.*

Notes:

During the video segment, use words, phrases or drawings to take notes.

Summary:

*After watching the video segment, write at least three sentences explaining what you learned.
You can ask yourself: “If I was going to explain this to someone else, what would I say?”*

After watching the video and performing any associated labs and/or experiments, you should be able to answer the following:

- 1. What do these floors represent?**
- 2. The lobby level contains protons and neutrons, so what does the lobby represent?**
- 3. Each bed represents one orbital. Each orbital can hold how many electrons?**
- 4. How many sublevels exist on Level 1, Level 2 and Level 3?**
- 5. In 1926, Erwin Schrodinger developed a new model of the atom. What did he call this new model?**
- 6. Use the Aufbau diagram to write the electron configuration for Iron (Fe), which has 26 protons.**
- 7. What are the Pauli Exclusion Principle and Hund's Rule?**
- 8. Write the orbital diagram for Iron (Fe).**

Please complete the performance task in Unit 3G before continuing the video.