

### Level 3: Atomic Theory

### Honors Chemistry

Welcome to level 3, which is an asynchronous mandatory level on Atomic Theory. Each clickable link will take you to the assignment. Please note this level requires mandatory quizzes and a summative exam with a minimum score of 70% mastery to complete the level. You may warp in and out of this mandatory level at your own discretion but understand this level will lock after February 12, 2021. If necessary, it is permissible to view asynchronous content in class and, as always, mandatory steps must be completed in the order specified prior to attempting optional steps. There are at least 30 coins on this mandatory level.

1. Edpuzzle (mandatory; 25 points): View and take notes on [AT 1: History of the Atom](#).
  2. Edpuzzle (mandatory; 25 points): View and take notes on [AT 2: Atomic Structure and Isotopes](#).
  3. Pedersen Science (mandatory; 100 points): [Honors Chemistry Lab 6: Cadium Isotopes](#)
  4. Atomic Theory Quiz 1 (mandatory; 100 points): Complete this quiz in class with at least 70% mastery.
  5. Pedersen Science (mandatory; 50 points) [Atomic Theory 2 Problem Set](#)
  6. Edpuzzle (mandatory; 25 points): View and take notes on [AT 3: Quantum Theory and the Bohr Model](#).
  7. Edpuzzle (mandatory; 25 points): View and take notes on [AT 4: Quantum Mechanical Model](#).
  8. Edpuzzle (mandatory; 0 points): View the [Orbital Animation](#).
  9. Edpuzzle (optional; 5 coins): View and take notes on [AT 5: Quantum Numbers](#).
  10. Edpuzzle (mandatory; 25 points): View and take notes on [AT 6: Electron Configurations \(Part 1\)](#).
  11. Edpuzzle (mandatory; 25 points): View and take notes on [AT 6: Electron Configurations \(Part 2\)](#).
  12. Atomic Theory Quiz 2 (mandatory; 100 points): Complete this quiz in class with at least 70% mastery.
  13. Pedersen Science (mandatory; 100 points) Complete this [problem set](#) as you work through steps 14-16.
  14. Edpuzzle (mandatory; 25 points): View and take notes on [AT 7: Periodic Trends in Atomic Radius](#).
  15. Edpuzzle (mandatory; 25 points): View and take notes on [AT 8: Periodic Trends in Electronegativity](#).
  16. Edpuzzle (mandatory; 25 points): View and take notes on [AT 9: Periodic Trends in Ionization Energy](#).
  17. Edpuzzle (mandatory; 50 points): View and take notes on [AT 10: Exceptions in Periodic Trends](#).
  18. Pedersen Science (optional; 10 coins): [Honors Chemistry Lab 17: Transition Metals , Alloys, and Magnetism](#).
  20. Edpuzzle (mandatory; 25 points): View and take notes on [AT 11: Light and the Photoelectric Effect](#).
- Note: The next two steps cover content you will need to know prior to completing steps 23-24. Because this level is asynchronous, it is possible we have already covered the content in steps 21-22 synchronously as a class.*
21. Edpuzzle (optional; 5 coins): View and take notes on [Mole 1: Significant Figures and Uncertainty](#).
  22. Edpuzzle (mandatory; 25 points): View and take notes on [Mole 3: Dimensional Analysis Overview](#).
  23. Pedersen Science (mandatory; 100 points) Complete this [problem set](#) as you work through step 24.
  24. Edpuzzle (mandatory; 25 points): View and take notes on [AT 12: Light and Planck's Equation](#).
  25. Pedersen Science (optional; 10 coins): [Honors Chemistry Lab 7/8: Flame Tests and Light Inquiry](#).
  25. Atomic Theory Exam (mandatory summative; 100 points): This exam is administered in class and you must earn 70% mastery to complete level 3.