

Level 8: Electrostatics and Electricity

AP Physics 1

You will need to work through this level in the order specified below. Each clickable link will take you to the assignment. The point values are only estimations and may increase as needed.

1. Edpuzzle (mandatory; 2 points): View and take notes on [Electric Charge, Law of Charges, and Quantization of Charge](#)
2. Edpuzzle (mandatory; 2 points): View and take notes on [Introduction to Coulomb's Law or the Electric Force](#)
3. Pedersen Science (optional; 10 points): Attempt questions 1-11 and read facts on the [problem set](#). After attempting these problems, [view the solutions video](#) on Edpuzzle to check all answers. This must be done through Edpuzzle.
4. Edpuzzle (mandatory; 1 points): View and take notes on [Conservation of Charge Example Problems](#).
5. Electroscope Lab (optional; 5 points) Complete the lab in class and submit write-up in your lab book.
6. Edpuzzle (mandatory; 2 points): View and take notes on [Introduction to Conventional Current and Direct Current](#).
7. Edpuzzle (mandatory; 2 points): View and take notes on [Defining Resistance](#).
8. Edpuzzle (mandatory; 2 points): View and take notes on [Resistivity](#).
9. Pedersen Science (optional; 10 points): Attempt questions 12-14, 19-22. and read facts on the [problem set](#). After attempting these problems, [view the solutions video](#) on Edpuzzle to check all answers. This must be done through Edpuzzle.
10. Electrostatics Quiz (mandatory; 10 points): This quiz will be administered in class and you must earn an 80% mastery to advance to the next step.
11. Edpuzzle (mandatory; 2 points): View and take notes on [Electric Potential Difference and Circuit Basics](#)
12. Edpuzzle (mandatory; 2 points): View and take notes on [Kirchhoff's Rules of Electrical Circuits](#)
13. Edpuzzle (mandatory; 2 points): View and take notes on: [Resistors in Series and Parallel](#)
14. Edpuzzle (mandatory; 2 points): View and take notes on: [Basic Series and Parallel Resistor Circuit \(part 1\)](#)
15. Edpuzzle (mandatory; 2 points): View and take notes on: [Basic Series and Parallel Resistor Circuit \(part 2\)](#)
16. Pedersen Science (optional; 10 points): Attempt questions 24-35 and read facts on the [problem set](#). After attempting these problems, [view the solutions video](#) on Edpuzzle to check all answers. This must be done through Edpuzzle.
17. Edpuzzle (optional; 4 points): View and take notes on: [Resistor Circuit Example](#)
18. Edpuzzle (optional; 4 points): View and take notes on: [Intermediate Resistor Circuit Example](#)
19. AP Lab 15: Exploring Electrical Resistance (optional; 15 points): Conduct the entire investigation in class and complete your lab write-up ([click here for lab](#)).
20. Electrical Circuits Quiz (mandatory; 10 points): This quiz will be administered in class and you must earn an 80% mastery to advance to the next step.
21. Pedersen Science (optional; 15 points): Attempt questions 36-45 and read facts on the [problem set](#). After attempting these problems, [view the solutions video](#) on Edpuzzle to check all answers. This must be done through Edpuzzle.
22. Electrostatics and Electricity Exam (mandatory; 50 points): This summative exam will be administered in class and you must earn a 75% mastery to advance to finish this level.