



Basic Electricity – Unit Five: Ohm’s Law

Study Guide

In order to successfully complete this unit, complete the following tasks:

1. Review the course structure.
2. Read the definition of Ohm’s Law found at:
<http://www.thefreedictionary.com/Ohm's+law>
3. Watch: <https://www.youtube.com/watch?v=VnnpLaKsqGU>
Title: Explaining an Electrical Circuit
Author: Region 10 ESC
4. Watch: <https://www.youtube.com/watch?v=FIIFcoPAwdM>
Title: Electronics - Ohm's Law
Author: ScienceOnline
5. Watch: <https://www.youtube.com/watch?v=FwEz9ygPHiM>
Title: Ohm's Law Part 2: Ohm's Law Applied to Simple Circuits
Author: electroninstructor
6. Watch: <https://www.youtube.com/watch?v=qJZCHExi4Pk>
Title: Ohm's Law Calculations for Simple Circuits
Author: electroninstructor
7. Read “What is ohm's law? - Fluke” found at:
<http://en-us.fluke.com/training/training-library/measurements/electricity/what-is-ohms-law.html>
8. Watch: <https://www.youtube.com/watch?v=SEAxrcOaHW8>
Title: Current in Series Circuits
Author: Pete Gravell
9. Watch: <https://www.youtube.com/watch?v=jTENL5OnwFQ>
Title: Potential difference (voltage) in series circuits
Author: Pete Gravell





Basic Electricity – Unit Five: Ohm’s Law

Study Guide

10. Read “Simple Series Circuits” found at:
<http://www.allaboutcircuits.com/textbook/direct-current/chpt-5/simple-series-circuits>
11. Watch: <https://www.youtube.com/watch?v=8UP4TLsfU9Q>
Title: Current parallel circuits
Author: Pete Gravell
12. Watch: <https://www.youtube.com/watch?v=KWkQ6vEIWvo>
Title: Potential difference (voltage) in parallel circuits
Author: Pete Gravell
13. Read “Simple Parallel Circuits” found at:
<http://www.allaboutcircuits.com/textbook/direct-current/chpt-5/simple-parallel-circuits>
14. Watch: <https://www.youtube.com/watch?v=OIEciqodYnw>
Title: How to find the voltage and resistance of a parallel circuit
Author: martin93003
15. Watch: <https://www.youtube.com/watch?v=fOJn1C125JI>
Title: Finding Equivalent Resistance
Author: ENGR TUTOR
16. Watch: <https://www.youtube.com/watch?v=ln3NF8f-mzg>
Title: Combination Circuit Simplification
Author: FECJATC
17. Watch: <https://www.youtube.com/watch?v=CZggGTxL9cA>
Title: Parallel and Series Resistor Circuit Analysis Worked Example using Ohm's Law Reduction | Doc Physics
Author: Doc Schuster
18. Watch: <https://www.youtube.com/watch?v=0MKcxCHkT1c>
Title: solving series parallel circuits
Author: mrcallr





Basic Electricity – Unit Five: Ohm’s Law

Study Guide

19. Watch: <https://www.youtube.com/watch?v=jekwBZnFdZk>
Title: Series - Parallel Circuits: How to Find Voltages of Resistors and Currents of Resistors
Author: VAM! Physics

20. Read “Analysis Technique” found at:
<http://www.allaboutcircuits.com/textbook/direct-current/chpt-7/analysis-technique>

21. Watch: <https://www.youtube.com/watch?v=7lwZkl0yBqA>
Title: How to Use a Multimeter: Measuring Current
Author: Alom Shaha

22. Watch: <https://www.youtube.com/watch?v=hrSRQubfqHk>
Title: Fluke Digital Multimeter Overview - 170 Series
Author: GalcoTV

23. Read “Ammeter Usage” found at:
<http://www.allaboutcircuits.com/textbook/experiments/chpt-2/ammeter-usage>

24. Watch: <https://www.youtube.com/watch?v=G2j8KUTEuls>
Title: How to Read a Multimeter - How to Use an Analog Multimeter
Author: FIX IT Home Improvement Channel

25. Read “Using an Analogue Multimeter” found at:
http://www.radioelectronics.com/info/t_and_m/analogue-multimeter-voa-vom/how-to-use-using-analog-meter.php

26. Watch: <https://www.youtube.com/watch?v=oiqNaSPTI7w>
Title: Introduction to Breadboard (Protoboards), Part 1 of 2
Author: electroninstructor

27. Watch: <https://www.youtube.com/watch?v=zCX3Hr4ZsDg>
Title: Breadboard Tutorial
Author: quicknuclearscience





Basic Electricity – Unit Five: Ohm’s Law

Study Guide

28. Watch: <https://www.youtube.com/watch?v=DS-JIWxXA5g>

Title: How to Use a Solderless Breadboard

Author: Cold Redd

29. Watch: <https://www.youtube.com/watch?v=vhZQbFeEfPM>

Title: Circuit Ground or Common

Author: Ken Floyd

30. Watch: <https://www.youtube.com/watch?v=d01B4jyx3lw>

Title: Series Circuit Troubleshooting

Author: jfalbo

31. Watch: <https://www.youtube.com/watch?v=dyhfBQmZTGU>

Title: Series Resistive Circuits – Troubleshooting

Author: PublicResourceOrg

32. Watch: <https://www.youtube.com/watch?v=ITysrlvKWRQ>

Title: Parallel Circuit Troubleshooting

Author: johnnyhvac





Basic Electricity – Unit Five: Ohm’s Law

Study Guide

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