



Jefferson City Public Schools

Revised:02/18/2019
Board Approved:

JCPS Electricity Yearly Standards

| Overarching Standards | | |
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| 9-12.ET. LO.01 Recall and follow safety rules in the basic operations of electricity/electronics. | | |
| Units | Priority Standards | Supporting Standards |
| Unit 1: Basic Electrical Knowledge | 9-12.ET.LO.02 Identify and describe careers related to electricity/electronics 9-12.ET.LO.03 Describe where electricity comes from and how it is produced 9-12.ET.LO.04 Identify and describe basic tools used in electricity/electronics 9-12.ET.LO.05 Demonstrate knowledge of atoms and electrons and their uses in electricity/electronics | 9-12.ET.LO.06 Discuss why planning for your future is important 9-12.ET.LO.07 Know and use basic electricity terms (ie: atom, electrons, protons, ect) 9-12.ET.LO.08 Explain the process of generating electricity in various types of electrical power plants |
| Unit 2: Resistors | 9-12.ET.LO.09 Build circuits using resistors | 9-12.ET.LO.10 Explain the resistor color code and show how it is used 9-12.ET.LO.11 Demonstrate how to take measurements with the multimeter 9-12.ET.LO.12 Use electrical tools and demonstrate correct care of the tools |

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| | | <p>9-12.ET.LO.13 Demonstrate and identify parallel and series circuits along with simple math computations of series/parallel circuits</p> <p>9-12.ET.LO.14 Utilize and identify the symbols used in electricity/electronics</p> |
| <p>Unit 3:</p> <p>Solid State Components</p> | <p>9-12.ET.LO.15 Build circuits using solid state components</p> | <p>9-12.ET.LO.11 Demonstrate how to take measurements with the multimeter</p> <p>9-12.ET.LO.12 Use electrical tools and demonstrate correct care of the tools</p> <p>9-12.ET.LO.13 Demonstrate and identify parallel and series circuits along with simple math computations of series/parallel circuits</p> <p>9-12.ET.LO.14 Utilize and identify the symbols used in electricity/electronics</p> <p>9-12.ET.LO.16 Identify and explain solid state components</p> |
| <p>Unit 4:</p> <p>Capacitors</p> | <p>9-12.ET.LO.17 Build circuits using capacitors</p> | <p>9-12.ET.LO.11 Demonstrate how to take measurements with the multimeter</p> <p>9-12.ET.LO.12 Use electrical tools and demonstrate correct care of the tools</p> <p>9-12.ET.LO.13 Demonstrate and identify parallel and series circuits along with simple math computations of series/parallel circuits</p> <p>9-12.ET.LO.14 Utilize and identify the symbols used in electricity/electronics</p> |

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| | | 9-12.ET.LO.18 Identify and explain capacitors |
| Unit 5: Programming | 9-12.ET.LO.19 Build circuits and program them to do an array of things | 9-12.ET.LO.12 Use electrical tools and demonstrate correct care of the tools 9-12.ET.LO.14 Utilize and identify the symbols used in electricity/electronics |
| Unit 6: Residential Wiring | 9-12.ET.LO.20 Build a variety of home electrical circuits | 9-12.ET.LO.11 Demonstrate how to take measurements with the multimeter 9-12.ET.LO.12 Use electrical tools and demonstrate correct care of the tools 9-12.ET.LO.13 Demonstrate and identify parallel and series circuits along with simple math computations of series/parallel circuits. 9-12.ET.LO.14 Utilize and identify the symbols used in electricity/electronics 9-12.ET.LO.21 Solve common issues in residential wiring |