



**Electrical and Power Transmission Installers, Other, Classification of Instructional Program (CIP) 46.0399
Units of Instruction and Task Grid Linked to Pennsylvania Core Standards**

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
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100 BASIC SAFETY.				
<p>101 Demonstrate proper use of personal protective equipment.</p> <p>102 Identify causes of job site accidents.</p> <p>103 Identify job site hazards.</p> <p>104 Working safely with job hazards.</p> <p>105 Identify safe methods and equipment of aerial work.</p> <p>106 Demonstrate basic fire safety.</p> <p>107 Demonstrate basic electrical safety.</p> <p>108 Using Perform Lockout/Tag out.</p> <p>109 Demonstrate scaffold and ladder safety.</p>	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E.</p>	

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		<p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	

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200 HAND TOOLS.				
201 Recognize, identify and safely use hammers and screwdrivers. 202 Recognize, identify and safely use pliers and wire cutters. 203 Recognize, identify and safely use saws and chisels. 204 Identify and safely use hydraulic, hand tools.	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G</p>		

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		<p>Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</p> <p>Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author's claim for solving a technical problem.</p> <p>Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12</p> <p>Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.</p> <p>Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</p> <p>Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12</p> <p>Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>		
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300 POWER TOOLS.				
	CAREER CLUSTER Manufacturing Career	KEY IDEAS/DETAILS GRADES 9-10-11-12	TEXT TYPES AND PURPOSE	NUMBERS AND OPERATIONS

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301 Recognize, identify and safely use drill and saws. 302 Identify and safely use electric hammer drill. 303 Identify and safely use reciprocating saw. 304 Identify and safely use portable hand held band saw. 305 Identify and safely use circular saw. 306 Identify and safely use electric/cordless drill. 307 Identify the safely use of a portable jig saw. 308 Identify the safely use of a chain saw. 309 Identify the use of a portable power conduit threading machine.	<p>Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</p>	<p>GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12.C Produce clear and coherent writing...appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F</p>	<p>Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p>ALGEBRA Standard 2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p>GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures.</p> <p>Standard 2.3.HS.A.13 Analyze relationships</p>

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		<p>Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem.</p> <p>Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.</p> <p>Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</p> <p>Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>Conduct short and more sustained research to answer a question or solve a problem.</p> <p>Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.</p> <p>Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	<p>between two dimensional and three dimensional objects.</p>
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<p>400 BLUEPRINT READING.</p>				
<p>401 Identify types of blueprint plans.</p> <p>402 Identify blueprint symbols.</p>	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards)</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc.</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to</p>

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<p>403 Interpret blueprint plans.</p> <p>404 Plan branch circuits for blueprint development.</p> <p>405 Incorporate electrical details to residential blueprint.</p>	<p>1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving</p>	<p>Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F</p>	<p>solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p>ALGEBRA Standard 2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p>GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures.</p> <p>Standard 2.3.HS.A.13 Analyze relationships between two dimensional</p>

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		<p>a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	<p>and three dimensional objects.</p>
500 ANCHORS AND SUPPORTS.				
501 Identify, select and install various types of anchors and supports.	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p>

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		<p>presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	
600 RESIDENTIAL CABLING TECHNOLOGY.	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance,</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to</p>
<p>601 Install Non-Metallic (NM) Cable for connection to an electrical device.</p> <p>602 Install metal clad cable (MC).</p> <p>603 Demonstrate knowledge and skill in installing low voltage wires and cable for timers, computers,</p>				

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<p>telephones and security systems.</p> <p>604 Install and terminate a residential network.</p> <p>605 Demonstrate knowledge and skill in installing coaxial cable for television and telecommunications systems.</p> <p>606 Demonstrate knowledge and skill in finish wiring electrical outlets, switches, fixtures and other devices in a residence.</p> <p>607 Define residential networks.</p> <p>608 Identify a structured media system.</p> <p>609 Design and plan layout of low voltage circuits services.</p>	<p>Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p>	<p>the narration of technical processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F</p>	<p>guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p>ALGEBRA Standard 2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p>GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures.</p> <p>Standard 2.3.HS.A.13 Analyze relationships between two dimensional</p>

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		<p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	<p>and three dimensional objects.</p>
700 SWITCHES AND RECEPTACLES CIRCUITS.				
<p>701 Install a duplex receptacle.</p> <p>702 Install a single pole switch.</p> <p>703 Install a 3 way switch.</p> <p>704 Install a 4 way switch.</p>	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of</p>

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<p>705 Install a split wired duplex receptacle.</p> <p>706 Install a Ground Fault Circuit Interrupter (GFCI) Receptacle.</p> <p>707 Install an Arc Fault Circuit Interrupter (AFCI).</p> <p>708 Install a timer circuit.</p> <p>709 Install various special switches and receptacles.</p>	<p>(Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p>	<p>processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more</p>	<p>multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p>GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.</p>

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		<p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	
800 FIXTURES.				
801 Install surface mounted lighting fixture. 802 Install recessed lighting fixtures. 803 Install a ceiling fan. 804 Install low voltage lighting.	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p>		<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems.</p>

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	<p>(Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS</p>		<p>Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

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		<p>GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>		
900 RACEWAYS.				
901 Install Electrical Metallic Tubing (EMT). 902 Install Poly Vinyl Chloride conduit (PVC). 903 Identify surface metal and nonmetal raceways (Wiremold). 904 Identify flexible raceway. 905 Demonstrate the five bends (90, offset, 3 point saddle, 4 point saddle, kick) used for conduit raceways.	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE:</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting</p>

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<p>906 Demonstrate how to thread and install rigged/intermediate conduit.</p> <p>907 Demonstrate the application of construction math problems.</p>	<p>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words.</p> <p>Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc.</p> <p>Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and</p> <p>Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</p> <p>Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem.</p> <p>Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple</p>	<p>GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p>Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p> <p>Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more</p>	<p>quantities.</p> <p>Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p>ALGEBRA Standard 2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p>GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles.</p> <p>Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures.</p> <p>Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.</p>

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1000 WIRED DEVICES.				
<p>1001 Install a hard wired smoke detector.</p> <p>1002 Install door bell system.</p>	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems.</p>

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1100 TESTING EQUIPMENT.				
<p>1101 Identify and safely use a multimeter.</p> <p>1102 Identify and safely use a continuity tester.</p> <p>1103 Identify and safely use a plug in circuit tester.</p> <p>1104 Identify and safely use a clamp on ammeter.</p> <p>1105 Identify and safely use a megger insulation tester.</p>	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards)</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems.</p>

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1106 Identify and safely use a circuit tracer.	<p>1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS</p>	<p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H.</p>	<p>Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

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		<p>GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I. Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	
1200 ELECTRICAL SERVICE.				
1201 Install a 100 amp overhead service. 1202 Identify a 100 amp underground service. 1203 Install a 200 amp overhead service. 1204 Install a 200 amp underground service. 1205 Install a multiple meter service. 1206 Install a multiple meter service with over current	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE:</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12</p>		<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when</p>

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<p>protection.</p> <p>1207 Cut in a residential panel.</p> <p>1208 Perform a live service tie in.</p> <p>1209 Demonstrate knowledge of 3 phase safety disconnect switch.</p> <p>1210 Dress and tie in a service panel.</p>	<p>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local Area.</p>	<p>Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words.</p> <p>Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc.</p> <p>Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</p> <p>Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem.</p> <p>Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple</p>		<p>reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

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Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
		<p>sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding.</p> <p>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>		
1300 NATIONAL ELECTRICAL CODE.				
<p>1301 Identify the purpose of the National Electrical Code, its publisher and its source, and explain why the NEC is needed in this occupation.</p> <p>1302 Demonstrate how to use the National Electrical Code Book as a reference for finding answers to questions, solutions to problems, and up to date regulations during the installation of electrical service and power transmission.</p> <p>1303 Use the NEC as a reference to questions and competencies that students perform for all electrical installations.</p>	<p>CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7</p> <p>CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6</p> <p>NOTE: Refer to the Common Career Technical Core Standards Booklet if</p>	<p>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.</p> <p>CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols,</p>	<p>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p>PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C</p>	<p>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6</p>

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Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
	<p>you wish to add more Pathways to meet the needs of your local Area.</p>	<p>key terms, and other domain specific words.</p> <p>Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc.</p> <p>Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</p> <p>Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem.</p> <p>Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H</p>	<p>Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p>Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p> <p>Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem.</p> <p>Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.</p> <p>Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p>	<p>Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

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1400 GREEN TECHNOLOGY.				
1401 Describe and explain the uses of wind power and solar power. 1402 Demonstrate knowledge of installation procedures for a wind turbine system. 1403 Demonstrate knowledge of installation procedures for photovoltaic systems. 1404 Demonstrate knowledge of installation procedures for a solar energy source. 1405 Demonstrate knowledge of installation procedures for installing a wind energy source. 1406 Demonstrate knowledge of the operation of solar	CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7 CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6 NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways to meet the needs of your local	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc. CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc. PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing...appropriate to task, purpose, and audience.	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.

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cells.	Area.	<p>Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc.</p> <p>Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author’s claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc.</p> <p>INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</p>	<p>Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p>RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research.</p> <p>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I &</p>	<p>ALGEBRA Standard 2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p>GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.</p>

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