

# Construction Trades

## Classification of Instructional Program (CIP) 46.9999

*Units of Instruction and Task Grid Linked to Pennsylvania Core Standards*

### 100 Demonstrate Safety Rules for the Construction Trades

Secondary Competency Task Grid 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 2.1
<p><b>101</b> Demonstrate knowledge of OSHA and its mission of safety in the work place.</p> <p><b>102</b> Demonstrate knowledge of hazard communications.</p> <p><b>103</b> Demonstrate knowledge of working safely with hazardous materials.</p> <p><b>104</b> Describe and demonstrate the use of personal protective equipment.</p> <p><b>105</b> Follow rules and regulations for fire protection.</p> <p><b>106</b> Safely handle and store construction materials.</p> <p><b>107</b> Perform safe operations with hand and power tools.</p> <p><b>108</b> Perform safe operations with welding and cutting equipment.</p> <p><b>109</b> Demonstrate knowledge and skill to ensure electrical safety.</p> <p><b>110</b> Demonstrate knowledge of, stuck by, and, caught in between, hazards.</p> <p><b>111</b> Demonstrate and follow procedures that protect workers from falling from elevated structures.</p> <p><b>112</b> Describe and demonstrate safety procedures to follow when working around excavations.</p> <p><b>113</b> Explain safety rules to follow when working around excavations.</p> <p><b>114</b> Describe and follow safety rules for working with concrete and masonry construction.</p> <p><b>115</b> Demonstrate safe use of ladders and</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc.</p> <p><b>Standard CC.3.5.9-10.F</b></p>	<p><b>TEXT TYPES AND PURPOSE GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION</b></p>	<p><b>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

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<p>116 scaffolding. Explain and follow safety procedures for working in confined spaces.</p> <p>117 Explain safety procedures to follow when using explosive or powder actuated tools.</p>		<p>Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING</b> <b>GRADES 9-10 and 11-12</b> <b>Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b></p>	<p><b>OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p> <p><b>RESEARCH</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	

Secondary Competency Task Grid 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 2.1
		By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.		

## 200 Demonstrate Proper Use of Hand Tools

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<p><b>201</b> Identify and follow all basic safety rules for using hand tools.</p> <p><b>202</b> Identify and demonstrate the proper use of layout tools.</p> <p><b>203</b> Identify and demonstrate the proper use of cutting tools.</p> <p><b>204</b> Identify and demonstrate the proper use of shaping tools.</p> <p><b>205</b> Identify and demonstrate the proper use of fastening tools.</p> <p><b>206</b> Identify and demonstrate the proper use of dismantling tools.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc. <b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p> <p><b>RESEARCH</b></p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

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

## 300 Operate Portable Power Tools and Equipment

Secondary Competency Task Grid 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 2.1
<p>301 Operate a circular saw safely and accurately.</p> <p>302 Operate battery and electric drills safely and accurately.</p> <p>303 Operate belt and hand sanders safely and accurately.</p> <p>304 Operate reciprocating saws safely and accurately.</p> <p>305 Operate routers safely and accurately.</p> <p>306 Operate a pneumatic nailer safely and accurately.</p> <p>307 Operate a power miter box safely and accurately.</p> <p>308 Operate a table saw safely and accurately.</p> <p>309 Operate an electric planer safely and accurately.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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## 400 Read Plans and Blueprints

Secondary Competency Task Grid 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 2.1
<p><b>401</b> Demonstrate the ability to reference building codes as needed.</p> <p><b>402</b> Demonstrate a need to know zoning regulations.</p> <p><b>403</b> Read and interpret plans, sketches and blueprints.</p> <p><b>404</b> Recognize and identify basic blueprint terms, components, abbreviations, and symbols.</p> <p><b>405</b> Interpret architectural specifications.</p> <p><b>406</b> Use an architect scale.</p> <p><b>407</b> Identify structural components.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc.</p> <p><b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text.</p> <p><b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b> <b>Standard. 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard. 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard. 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard. 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent</p>



Secondary Competency Task Grid 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 2.1
		<p>an explanation, describing a procedure...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12 Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12 Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>RESEARCH GRADES 9-10 Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12 Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	<p>transformations in the plane. <b>Standard CC.2.3.HS.A.2</b> Apply rigid transformations to determine and explain congruence. <b>Standard C.2.3.HS.A.3</b> Verify and apply geometric theorems as they relate to geometric figures. <b>Standard CC.2.3.HS.A.4</b> Apply the concept of congruence to create geometric constructions. <b>Standard CC.2.3.HS.A.5</b> Create justifications based on transformations to establish similarity of plane figures. <b>Standard CC.2.3.HS.A.6</b> Verify and apply theorems involving similarity as they relate to plane figures. <b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard CC.2.3.HS.A.8</b> Apply geometric theorems to verify properties of circles. <b>Standard CC.2.3.HS.A.9</b> Extend the concept of similarity to determine arc lengths and areas of sectors of circles. <b>Standard CC.2.3.HS.A.10</b> Translate between the geometric description and the equation for a conic section. <b>Standard CC.2.3.HS.A.11</b> Apply coordinate geometry to prove simple geometric theorems algebraically. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p>

Secondary Competency Task Grid 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 2.1
				<b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.

## 500 Perform Site and Building Layout

Secondary Competency Task Grid 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 2.1
<p><b>501</b> Use a builder's level, transit and/or laser level to determine site and building elevations.</p> <p><b>502</b> Square a building using the 3-4-5 rule or by measuring diagonals.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.2</b> Apply rigid transformations to determine and explain congruence. <b>Standard C.2.3.HS.A.3</b> Verify and apply geometric theorems as they relate to geometric figures. <b>Standard CC.2.3.HS.A.4</b> Apply the concept of congruence to create geometric constructions. <b>Standard CC.2.3.HS.A.5</b> Create justifications based on transformations to establish similarity of plane figures. <b>Standard CC.2.3.HS.A.6</b> Verify and apply theorems involving similarity as they relate to plane figures.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10</b> <b>Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12</b> <b>Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12</b> <b>Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>RESEARCH GRADES 9-10</b> <b>Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12</b> <b>Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	<p><b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles.</p> <p><b>Standard CC.2.3.HS.A.8</b> Apply geometric theorems to verify properties of circles.</p> <p><b>Standard CC.2.3.HS.A.9</b> Extend the concept of similarity to determine arc lengths and areas of sectors of circles.</p> <p><b>Standard CC.2.3.HS.A.10</b> Translate between the geometric description and the equation for a conic section.</p> <p><b>Standard CC.2.3.HS.A.11</b> Apply coordinate geometry to prove simple geometric theorems algebraically.</p> <p><b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems.</p> <p><b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p> <p><b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

## 600 Demonstrate Skill in Placing Concrete

Secondary Competency Task Grid 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 2.1
<p><b>601</b> Describe modern concrete materials and renewal methods.</p> <p><b>602</b> Associate trade terms with the appropriate concrete finishing processes and equipment.</p> <p><b>603</b> Estimate the amount of concrete needed for footers and slabs.</p> <p><b>604</b> Lay out and build concrete forms.</p> <p><b>605</b> Demonstrate the use of equipment and tools for placing concrete.</p> <p><b>606</b> Demonstrate the process of depositing, spreading, consolidating, and striking off concrete.</p> <p><b>607</b> Demonstrate the basic concrete finishing processes.</p> <p><b>608</b> Demonstrate the tools used to edge, groove, and cut concrete.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc.</p> <p><b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text.</p> <p><b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane.</p> <p><b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems.</p> <p><b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p> <p><b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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

## 700 Lay Block and Brick Masonry Units

Secondary Competency Task Grid 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 2.1
<p><b>701</b> Describe the most common types of masonry units.</p> <p><b>702</b> Identify concrete block by size and type.</p> <p><b>703</b> Estimate masonry units needed for block construction.</p> <p><b>704</b> Demonstrate masonry cutting techniques.</p> <p><b>705</b> Lay out and construct a block laying project to specifications.</p> <p><b>706</b> Describe various masonry positions and bonds.</p> <p><b>707</b> Lay block to a line.</p> <p><b>708</b> Describe the function of wall ties.</p> <p><b>709</b> Describe installation of anchor bolts.</p> <p><b>710</b> Mix mortar to proper proportions and consistency.</p> <p><b>711</b> Describe different mortar types and applications.</p> <p><b>712</b> Demonstrate proper brick and block laying techniques.</p> <p><b>713</b> Demonstrate the installation of lintels in block or brick walls.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.2</b> Apply rigid transformations to determine and explain congruence. <b>Standard CC.2.3.HS.A.4</b> Apply the concept of congruence to create geometric constructions. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12 Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12 Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>RESEARCH GRADES 9-10 Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12 Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	



## 800 Demonstrate Skill in Framing Floors

Secondary Competency Task Grid 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 2.1
<p><b>801</b> Identify different types of framing materials and systems.</p> <p><b>802</b> Demonstrate how to install girders and sills.</p> <p><b>803</b> Demonstrate and perform layout of floor joists and openings.</p> <p><b>804</b> Demonstrate how to install various floor joists and band joists.</p> <p><b>805</b> Demonstrate how to install various types of bridging.</p> <p><b>806</b> Demonstrate how to install various types of columns and supports.</p> <p><b>807</b> Demonstrate how to install various types of subfloor materials.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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## 900 Demonstrate Skill in Wall Framing

Secondary Competency Task Grid 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 2.1
<p><b>901</b> Describe and demonstrate how to install various components of interior and exterior walls.</p> <p><b>902</b> Describe and demonstrate how to install various ceiling joists.</p> <p><b>903</b> Describe and demonstrate how to install various steel framing components.</p>	<p><b>CLUSTER:</b> <b>Architecture and Construction</b> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <b>Construction Careers</b> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><b>Maintenance Operations</b> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> 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. <b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach,</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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# 1000 Demonstrate Skill in Roof Framing

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<p><b>1001</b> Describe how to identify various roof types.</p> <p><b>1002</b> Demonstrate how to install various roof components for gable roofs.</p> <p><b>1003</b> Demonstrate how to install various types of roof trusses.</p> <p><b>1004</b> Demonstrate how to install various types of roof sheathing materials.</p> <p><b>1005</b> Estimate various roof component materials.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc.</p> <p><b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text.</p> <p><b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.9-10.E</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane.</p> <p><b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems.</p> <p><b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p> <p><b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12 Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12 Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>RESEARCH GRADES 9-10 Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12 Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	

# 1100 Install Roof Coverings

Secondary Competency Task Grid 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 2.1
<p><b>1101</b> Demonstrate how to install various types of asphalt shingles.</p> <p><b>1102</b> Describe and demonstrate how to install various types of underlayment materials.</p> <p><b>1103</b> Describe and demonstrate how to install various types of flashing.</p> <p><b>1104</b> Estimate various roof covering materials.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p> <p><b>RESEARCH</b> <b>GRADES 9-10</b></p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10</b> <b>Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12</b> <b>Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12</b> <b>Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12</b> <b>Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	



## 1200 Install Insulation Materials

Secondary Competency Task Grid 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 2.1
<p><b>1201</b> Describe and demonstrate how to install various types of insulation and ventilation.</p> <p><b>1202</b> Estimate quantities of insulation and ventilation materials.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p> <p><b>RESEARCH</b> <b>GRADES 9-10</b></p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G.</b>            Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10.H.</b>            Assess the reasoning in a text to support the author's claim for solving a technical problem.  <b>Standard CC.3.5.9-10.I.</b>            Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12</b>  <b>Standard CC.3.5.11-12.G.</b>            Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  <b>Standard CC.3.5.11-12.H.</b>            Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.  <b>Standard CC.3.5.11-12.I.</b>            Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12</b>  <b>Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b>            By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research.  <b>Standard CC.3.6.9-10.G.</b>            Gather relevant information.  <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12</b>  <b>Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research.  <b>Standard CC.3.6.11-12.G.</b>            Gather relevant information.  <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b>            Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	

# 1300 Apply Exterior Finishes

Secondary Competency Task Grid 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 2.1
<p><b>1301</b> Demonstrate how to install various types of horizontal sidings.</p> <p><b>1302</b> Demonstrate how to install various types of vertical sidings.</p> <p><b>1303</b> Demonstrate how to install various types of cornices.</p> <p><b>1304</b> Estimate various exterior finish materials.</p> <p><b>1305</b> Identify how to install various types of windows.</p> <p><b>1306</b> Identify how to install various types of exterior doors.</p> <p><b>1307</b> Describe and demonstrate how to install various types of soffit and fascia/windows and doors.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p> <p><b>RESEARCH</b> <b>GRADES 9-10</b></p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10</b> <b>Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12</b> <b>Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12</b> <b>Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12</b> <b>Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	

# 1400 Install Basic Plumbing

Secondary Competency Task Grid 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 2.1
<p><b>1401</b> Describe and demonstrate plumbing hand tools and basic safe use.</p> <p><b>1402</b> Identify and demonstrate plumbing power tools and basic safe use.</p> <p><b>1403</b> Identify various types of pipe</p> <p><b>1404</b> Identify various types of fittings.</p> <p><b>1405</b> Describe/demonstrate how to install various types of valves and devices.</p> <p><b>1406</b> Describe/demonstrate how to install faucets and drain assemblies.</p> <p><b>1407</b> Describe how to install various appliances.</p> <p><b>1408</b> Describe how to interpret blueprints and specifications.</p> <p><b>1409</b> Describe how to install water distribution systems.</p> <p><b>1410</b> Describe/demonstrate how to correctly size drain, waste, and vent systems.</p> <p><b>1411</b> Describe how to install fixtures and equipment.</p> <p><b>1412</b> Describe/demonstrate how to troubleshoot and repair various common plumbing problems.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc.</p> <p><b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text.</p> <p><b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane.</p> <p><b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles.</p> <p><b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p> <p><b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12 Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12 Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>RESEARCH GRADES 9-10 Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12 Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	

# 1500 Install Residential Electric Circuits and Components

Secondary Competency Task Grid 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 2.1
<p><b>1501</b> Identify electrical hazards and practice electrical safety.</p> <p><b>1502</b> Apply the National Electric Code (NEC) to common residential installations.</p> <p><b>1503</b> Read and interpret electrical drawings.</p> <p><b>1504</b> Understand and apply electrical theory.</p> <p><b>1505</b> Describe basic electrical circuits.</p> <p><b>1506</b> Describe and identify various wire types and sizes.</p> <p><b>1507</b> Identify and use electrical tools.</p> <p><b>1508</b> Identify and install ground fault circuit interrupters.</p> <p><b>1509</b> Identify and install arc fault circuit interrupters.</p> <p><b>1510</b> Identify and install over current protection devices.</p> <p><b>1511</b> Install a junction box.</p> <p><b>1512</b> Rough in a ceiling fan box.</p> <p><b>1513</b> Install light fixtures.</p> <p><b>1514</b> Install various receptacle circuits.</p> <p><b>1515</b> Install various switch circuits.</p> <p><b>1516</b> Install a 220 volt circuit.</p> <p><b>1517</b> Install a recessed light.</p> <p><b>1518</b> Trim out and finish electrical circuits.</p> <p><b>1519</b> Describe service entrance installation.</p> <p><b>1520</b> Describe low voltage electrical circuits.</p> <p><b>1521</b> Describe panel installation.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc....</p> <p><b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc...</p> <p><b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc.</p> <p><b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words...</p> <p><b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text.</p> <p><b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience.</p> <p><b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed.</p> <p><b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b> <b>Standard. 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard. 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard. 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard. 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>Standard CC.2.4.HS.B.5</b> Make inferences and justify conclusions based on sample surveys, experiments, and observational studies.</p> <p><b>StandardCC.2.2.HS.D.3</b></p>

Secondary Competency Task Grid 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 2.1
		<p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard CC.3.5.9-10.G.</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10.H.</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10.I.</b> Compare and contrast findings presented in a text to those from other sources, etc...</p> <p><b>INTEGRATE KNOWLEDGE/ IDEAS GRADES 11-12 Standard CC.3.5.11-12.G.</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12.H.</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12.I.</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10 and 11-12 Standard CC.3.5.9-10.J AND Standard CC.3.5.11-12.J.</b> By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>RESEARCH GRADES 9-10 Standard CC.3.6.9-10.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.9-10.G.</b> Gather relevant information. <b>Standard CC.3.6.9-10.H.</b> Draw evidence from informational texts.</p> <p><b>RESEARCH GRADES 11-12 Standard CC.3.6.11-12.F.</b> Conduct short and more sustained research. <b>Standard CC.3.6.11-12.G.</b> Gather relevant information. <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts for research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I and Standard CC.3.5.11-12.I.</b> Write over extended and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	<p>Extend the knowledge of arithmetic operations and apply to polynomials. <b>Standard CC.2.2.HS.D.8</b> Apply inverse operations to solve equations or formulas for a given variable. <b>Standard CC.2.2.HS.D.9</b> Use reasoning to solve equations and justify the solution method. <b>Standard CC.2.1.HS.F.3</b> Apply quantitative reasoning to choose and Interpret units and scales in formulas, graphs and data displays</p> <p><b>GEOMETRY Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>



## 1600 Demonstrate Knowledge and Skill in Wall Interior Finishes

Secondary Competency Task Grid 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 2.1
<p><b>1601</b> Demonstrate how to install various wall surfaces (including drywall).</p> <p><b>1602</b> Describe and demonstrate how to install various interior moldings.</p> <p><b>1603</b> Estimate various materials for wall surfaces.</p> <p><b>1604</b> Estimate various types of interior moldings.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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

# 1700 Demonstrate Knowledge of Interior Finishes

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<p><b>1701</b> Demonstrate how to apply different types of paints and their uses.</p> <p><b>1702</b> Demonstrate how to apply different paints and stains to different surfaces.</p> <p><b>1703</b> Clean painting tools.</p> <p><b>1705</b> Describe and apply various types of caulking.</p> <p><b>1706</b> Describe and demonstrate how to install ceramic tile.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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# 1800 Install Stairways

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<p><b>1801</b> Describe various types of stairways and components.</p> <p><b>1802</b> Calculate, lay out and cut stair stringers.</p>	<p><b>CLUSTER:</b> <i>Architecture and Construction</i> Choose Cluster Standards from: 1-2-3-4-5-6-7</p> <p><b>2 PATHWAYS:</b> <i>Construction Careers</i> Choose Standards from: 1-2-3-4-5-6-7-8-9</p> <p><i>Maintenance Operations</i> Choose standards from 1-2-3-4-5-6</p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.A.</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.9-10B &amp;</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.9-10.C</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>KEY IDEAS/DETAILS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12A</b> Cite specific textual evidence, etc.... <b>Standard CC.3.5.11-12.B.</b> Determine the central ideas or conclusions of a text; etc... <b>Standard CC.3.5.11-12.C.</b> Follow precisely a complex multistep procedure, etc...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.9-10.E</b> Analyze the structure of the relationships among concepts in a text. etc. <b>Standard CC.3.5.9-10.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12.D.</b> Determine the meaning of symbols, key terms, and other domain specific words... <b>Standard CC.3.5.11-12.E.</b> Analyze the structure of the relationships among concepts in a text. <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 11-12</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10</b> <b>Standard CC.3.6.9-10.C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.9-10.E</b> Use technology, including the Internet, to share writing products.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 11-12</b> <b>Standard CC.3.6...11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.D.</b> Develop and strengthen writing as needed. <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to... share writing products.</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard CC.2.3.HS.A.1</b> Use geometric figures and their properties to represent transformations in the plane. <b>Standard CC.2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard CC.2.3.HS.A.12</b> Explain volume formulas and use them to solve problems. <b>Standard CC.2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects. <b>Standard CC.2.3.HS.A.14</b> Apply geometric concepts to model and solve real world problems.</p>

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