

Clarion County Career Center Crosswalk To PA Core Standards

## Computer Systems Networking and Telecommunications, Classification of Instructional Program (CIP) 11.0901 Units of Instruction and Task Grid Linked to Pennsylvania Core Standards

with Unit and Task Numbers:Technical Core StandardsReading for Technical Subjects Standard 3.5Standards for Writing for Technical SubjectsStandards for Mathematics			•			
Standard 3.5		<b>Technical Core</b>	<b>Reading for Technical Subjects</b>	Standards for Writing for	Pennsylvania Core Standards for Mathematics	
		Stanuarus	Standard 3.5	Standard 3.6	Standard 2.0	

100	DEMONSTRATE KNOWLEDGE OF			
100	PERSONAL AND ENVIRONMENTAL SAFETY.			
		CAREER CLUSTER 1:	KEY IDEAS/DETAILS	
101	List common causes of accidents and injuries in a	Arts, AV Technology and	GRADES 9-10-11-12	
101	u u u u u u u u u u u u u u u u u u u	<b>Communications Career</b>	Standard CC.3.5.9-10. A	
	computer facility.	Cluster	Standard CC.3.5.11-12 A	
102	Wear personal protective equipment.	(Choose Standards)	Cite specific textual evidence, etc.	
103	List and identify safety hazard symbols.	1-2-3-4-5-6	Standard CC.3.5.9-10 B	
		PATHWAYS	Standard CC.3.5.11-12. B	
104	Review Material Safety Data Sheets (MSDS) and	INCLUDE:	Determine the central ideas or	
	explain their requirements in handling hazardous	A. Telecommunications	conclusions of a text; etc.	
	materials.	Career Pathway	Standard CC.3.5.9-10.C	
105		(Choose Standards) 1-2-3	Standard CC.3.5.11-12.C	
105	Describe types of fire extinguishers and explain which	1-2-3	Follow precisely a complex multistep procedure, etc.	
	types to use for extinguishing various fires.	CAREER CLUSTER 2:	procedure, etc.	
106	Demonstrate safe procedures to follow when lifting	Information Technology	CRAFT & STRUCTURE	
	and carrying heavy objects.	(Choose Standards)		
107		1-2-3-4-5-6-7-8-9-10	GRADES 9-10-11-12	
107	Describe the importance of safety as it relates to	PATHWAYS	Standard CC.3.5.9-10. D	
	environmental issues.	INCLUDE:	Standard CC.3.5.11-12.D	
108	Identify potential hazards when working with power	Information Support and	Determine the meaning of symbols,	
	supplies.	Services Career Pathway	key terms, and other domain specific	
100	**	(Choose Standards)	words.	
109	Identify proper disposal procedures for batteries and	1-2-3-4-5-6-7-8-9-10	Standard CC.3.5.9-10.E	
	display devices.	Network Systems Career Pathway	Standard CC.3.5.11-12.E	
110	Identify proper disposal procedures for chemical	(Choose Standards)	Analyze the structure of the	
	solvents and pressurized cans.	1-2-3-4-5	relationships among concepts in a text, etc.	
	-	Programming and	Standard CC.3.5.9-10.F	
111	Identify and prevent electro static discharge	Software Development	Standard CC.3.5.11-12.F	
	conditions.	Career Pathway	Analyze the author's purpose in	
112	Describe the meaning and importance of the Energy	(Choose Standards)	providing an explanation, describing	
_	Star Rating System.	1-2-3-4-5-6-7-8-9-10	a procedureand	
			Analyze the structure of the	
113	Configure a computer's power management settings to		relationships among concepts in a	

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
maximize energy efficiency. 114 Maintain a safe work area to avoid common accidents and injuries.	Web and Digital Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.	text. INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author's claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc. INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formatsto solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding. RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.11-12.J By the end of grades 9-10, AND 11- 12, read and comprehend technical		

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
		-		
		texts independently and proficiently.		

200	DEMONSTRATE KNOWLEDGE OF COMPUTER HARDWARE.			
201 202 203 204 205 206 207 208 209 210 211 212 213 214		CAREER CLUSTER 1: Arts, AV Technology and Communications Career Cluster (Choose Standards) 1-2-3-4-5-6 PATHWAYS INCLUDE: A. Telecommunications Career Pathway (Choose Standards) 1-2-3 CAREER CLUSTER 2: Information Technology (Choose Standards) 1-2-3-4-5-6-7-8-9-10 PATHWAYS INCLUDE: Information Support and Services Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 Network Systems Career Pathway (Choose Standards) 1-2-3-4-5 Programming and Software Development Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10	KEY IDEAS/DETAILS GRADES 9-10-11-12Standard CC.3.5.9-10. AStandard CC.3.5.9-10. ACite specific textual evidence, etc.Standard CC.3.5.9-10 BStandard CC.3.5.9-10 BStandard CC.3.5.9-10. BDetermine the central ideas or conclusions of a text; etc.Standard CC.3.5.9-10.CStandard CC.3.5.9-10.CStandard CC.3.5.11-12.CFollow precisely a complex multistep procedure, etc.CRAFT & STRUCTURE GRADES 9-10-11-12Standard CC.3.5.9-10. DStandard CC.3.5.9-10. DStandard CC.3.5.9-10. DStandard CC.3.5.9-10. DStandard CC.3.5.9-10. EStandard CC.3.5.9-10.EStandard CC.3.5.9-10.EStandard CC.3.5.9-10.FStandard CC.3.5.9-1	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.
		Web and Digital Communications Career	relationships among concepts in a text.	

Secondary Competency Task List	Common Career	Pennsylvania Core Standards for	Pennsylvania Core	Pennsylvania Core
with Unit and Task Numbers:	<b>Technical Core</b>	<b>Reading for Technical Subjects</b>	Standards for Writing for	Standards for
	Standards	Standard 3.5	Technical Subjects Standard 3.6	Mathematics Standard 2.0
				Standar d 2.0
	Pathway			
	(Choose Standards) 1-2-3-4-5-6-7-8-9-10	INTEGRATE KNOWLEDGE & IDEAS		
	NOTE:	GRADES 9-10		
	Refer to the Common	Standard CC.3.5.9-10.G		
	Career Technical Core	Translate quantitative or technical information expressed in a text into		
	Standards Booklet if you wish to add more	visual form (e.g. a table or chart).		
	Pathways, for your local	Standard CC.3.5.9-10. H		
	area.	Assess the reasoning in a text to support the author's claim for solving a technical problem.		
		Standard CC.3.5.9-10. I		
		Compare and contrast findings		
		presented in a text to those from other sources, etc.		
		INTEGRATE KNOWLEDGE &		
		IDEAS GRADES 11-12		
		Standard CC.3.5.11-12. G		
		Integrate and evaluate multiple		
		sources of information presented in diverse formatsto solve a problem.		
		Standard CC.3.5.11-12. H		
		Evaluate the hypotheses, data,		
		analysis, and conclusions in a technical text, verifying the data		
		when possible.		
		Standard CC.3.5.11-12. I		
		Synthesize information from a range of sources into a coherent		
		understanding.		
		RANGE OF READING		
		GRADES 9-10-11-12 Standard CC 2.5.0.10 J		
		Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J		
		By the end of grades 9-10, AND 11-		
		12, read and comprehend technical		
		texts independently and proficiently.		

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
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300	DEMONSTRATE KNOWLEDGE OF			
	TROUBLESHOOTING, REPAIR AND			
	MAINTENANCE.			
301 302	Describe and explain the troubleshooting theory. Describe, explain and interpret common hardware and	CAREER CLUSTER 1: Arts, AV Technology and Communications Career Cluster	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational
303	operating system symptoms and their causes. Describe and determine the troubleshooting methods and tools for printers.	(Choose Standards) 1-2-3-4-5-6 PATHWAYS INCLUDE: A. Telecommunications	Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc.	and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4
304	determine the appropriate basic troubleshooting method.	A. Telecommunications Career Pathway (Choose Standards) 1-2-3	Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc.	Use units as a way to understand problems and to guide the solution of
305	Given a scenario, integrate common preventative maintenance techniques.	CAREER CLUSTER 2: Information Technology	CRAFT & STRUCTURE	multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy
306	Compare and contrast network troubleshooting with hardware/software troubleshooting.	(Choose Standards) 1-2-3-4-5-6-7-8-9-10 <b>PATHWAYS</b> <b>INCLUDE:</b> <b>Information Support and</b> <b>Services Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8-9-10 <b>Network Systems Career</b> <b>Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8-9-10 <b>Network Systems Career</b> <b>Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8-9-10	GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a	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.
		1-2-3-4-5 <b>Programming and</b> <b>Software Development</b> <b>Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8-9-10	text, etc. <b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedureand Analyze the structure of the	

with Unit and Task Numbers: Technical Core Reading for Technical Subjects Stand	us	
Web and Digital Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10text.NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10Standard CC.3.5.9-10.GTranslate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).Standard CC.3.5.9-10. HStandard CC.3.5.9-10. HStandard CC.3.5.9-10. HStandard CC.3.5.9-10. HCompare and contrast findings presented in a text to those from other	Pennsylvania Core ndards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
Web and Digital Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10text.NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10Standard CC.3.5.9-10.GTranslate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).Standard CC.3.5.9-10. HStandard CC.3.5.9-10. HStandard CC.3.5.9-10. HStandard CC.3.5.9-10. HCompare and contrast findings presented in a text to those from other		
Sources, etc.         INTEGRATE KNOWLEDGE & IDEAS         GRADES 11-12         Standard CC.3.5.11-12. G         Integrate and evaluate multiple         sources of information presented in         diverse formatsto solve a problem.         Standard CC.3.5.11-12. H         Evaluate the hypotheses, data,         analysis, and conclusions in a         technical text, verifying the data         when possible.         Standard CC.3.5.11-12. I         Synthesize information from a range         of sources into a coherent         understanding.         RANGE OF READING         GRADES 9-10-11-12         Standard CC.3.5.9-10.J         Standard CC.3.5.9-10.J         By the end of grades 9-10, AND 11-		

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
		12, read and comprehend technical texts independently and proficiently.		

400	DEMONSTRATE KNOWLEDGE OF				
	OPERATING SYSTEMS AND SOFTWARE.				
401 402 403 404 405 406 407 408 409 410	Compare and contrast the different operating systems and their features. Given a scenario, demonstrate proper use of user interfaces. Explain the process and steps to install and configure an operating system. Explain the basics of boot sequences, methods and startup utilities. Select the appropriate commands and options to troubleshoot and resolve problems. Differentiate between various operating system directory structures. Identify and use system utilities/tools and evaluate the results. Evaluate and resolve common operating system and software issues. Explain the administration of local users, groups and institute local security policy.	CAREER CLUSTER 1: Arts, AV Technology and Communications Career Cluster (Choose Standards) 1-2-3-4-5-6 PATHWAYS INCLUDE: A. Telecommunications Career Pathway (Choose Standards) 1-2-3 CAREER CLUSTER 2: Information Technology (Choose Standards) 1-2-3-4-5-6-7-8-9-10 PATHWAYS INCLUDE: Information Support and Services Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 Network Systems Career Pathway (Choose Standards) 1-2-3-4-5 Programming and Software Development Career Pathway (Choose Standards) 1-2-3-4-5	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.9-10. A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.9-10 B Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc. CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.9-10. D Standard CC.3.5.9-10. D Standard CC.3.5.9-10.E Standard CC.3.5.9-10.E Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedureand	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.9-10.A Standard CC.3.6.9-10.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.9-10.B Write informative or explanatory texts, including the narration of technical processes, etc. PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.9-10.C Standard CC.3.6.9-10 D Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.

	Linked to Pennsylvania Core Sta	anuarus		
Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
	Web and Digital Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10           NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.	Analyze the structure of the relationships among concepts in a text. INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author's claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc. INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formatsto solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding. RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J	Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products. RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research. RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3	
		Standard CC.3.5.11-12.J		

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
	-			
		By the end of grades 9-10, AND 11- 12, read and comprehend technical		
		texts independently and proficiently.		

<ul> <li>501 Explain the function of common networking protocols, such as FTP, TCP/IP suite, DHCP, DNS, etc.</li> <li>502 Identify commonly used TCP and UDP default ports, including TCP ports: FTP - 20, 21, SSH - 22, TELNET - 23, HTTP - 80, etc.</li> <li>503 Identify the following address formats, including IPv6, IPv4, MAC addressing.</li> <li>504 Given a scenario, evaluate the proper use of addressing technologies and addressing schemes, including including rotocols, including Ink state, distance vector, and hybrid protocols.</li> <li>505 Identify common IPv4 and IPv6 routing protocols, including IIR state, distance vector, and hybrid protocols.</li> <li>506 Explain the purpose and properties of routing, including IGP vs. ECP, static vs. dynamic, next hop, including IGP vs. ECP, static vs. d</li></ul>	500	DEMONSTRATE KNOWLEDGE OF				
<ul> <li>501 Explain the function of common networking protocols, such as FTP, TCP/IP suite, DHCP, DNS, etc.</li> <li>502 Identify commonly used TCP and UDP default ports, including TCP ports: FTP - 20, 21, SSH - 22, TELNET - 23, HTTP - 80, etc.</li> <li>503 Identify the following address formats, including IPv6, IPv4, MAC addressing.</li> <li>504 Given a scenario, evaluate the proper use of addressing technologies and addressing schemes, including link state, distance vector, and hybrid protocols.</li> <li>505 Identify common IPv4 and IPv6 routing protocols, including IGP vs. EGP, static vs. dynamic, next hop, including IGP ws. EGP, static</li></ul>		NETWORK TECHNOLOGIES.				
<ul> <li>So's Identify the following address formats, including IPv6, IPv4, MAC addressing.</li> <li>Given a scenario, evaluate the proper use of addressing technologies and addressing schemes, including: subnetting: classful vs. classless, NAT, PAT, SNAT, public vs. private, DHCP, addressing schemes: unicast, multicast, broadcast, etc.</li> <li>Genetify common IPv4 and IPv6 routing protocols, including link state, distance vector, and hybrid protocols.</li> <li>Genetify common IPv4 and IPv6 routing protocols, including IGP vs. EGP, static vs. dynamic, next hop, including IGP vs. EGP, static</li></ul>		protocols, such as FTP, TCP/IP suite, DHCP, DNS, etc. Identify commonly used TCP and UDP default ports, including TCP ports: FTP – 20, 21, SSH – 22,	Arts, AV Technology and Communications Career Cluster (Choose Standards) 1-2-3-4-5-6 PATHWAYS INCLUDE: A. Telecommunications	GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc.	PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B	Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4
<ul> <li>addressing technologies and addressing schemes, including: subnetting: classful vs. classless, NAT, PAT, SNAT, public vs. private, DHCP, addressing schemes: unicast, multicast, broadcast, etc.</li> <li>505 Identify common IPv4 and IPv6 routing protocols, including link state, distance vector, and hybrid protocols.</li> <li>506 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>506 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>507 Identify common IPv4 and IPv6 routing protocols.</li> <li>508 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>509 Identify the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li> <li>500 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop,</li></ul>	503		(Choose Standards)	Standard CC.3.5.11-12.C	explanatory texts, including	Use units as a way to understand problems and to guide the solution of
protocols. 506 Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop, including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop, (Choose Standards) including LGP vs. EGP, static vs. dynamic, next hop,		addressing technologies and addressing schemes, including: subnetting: classful vs. classless, NAT, PAT, SNAT, public vs. private, DHCP, addressing schemes: unicast, multicast, broadcast, etc. Identify common IPv4 and IPv6 routing protocols,	Information Technology (Choose Standards) 1-2-3-4-5-6-7-8-9-10 PATHWAYS INCLUDE: Information Support and	CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols,	PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C	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
selection, and explain convergence (steady state).Programming and Software Development Career PathwayStandard CC.3.5.9-10.Fplanning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific507Compare the characteristics of wireless communication standards, including 802.11 standards:Programming and Software Development Career Pathway 1-2-3-4-5-6-7-8-9-10Standard CC.3.5.9-10.F Standard CC.3.5.11-12.Fplanning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific		protocols. Explain the purpose and properties of routing, including IGP vs. EGP, static vs. dynamic, next hop, interpret routing tables and how they pertain to path selection, and explain convergence (steady state). Compare the characteristics of wireless	(Choose Standards) 1-2-3-4-5-6-7-8-9-10 Network Systems Career Pathway (Choose Standards) 1-2-3-4-5 Programming and Software Development Career Pathway (Choose Standards)	words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing	writingappropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most	arithmetic operations and apply to complex numbers.

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
speeds, distance, channels, frequency, authentication and encryption.	Web and Digital Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.	relationships among concepts in a text. INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author's claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc. INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formatsto solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding. RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.11-12.J By the end of grades 9-10, AND 11-	Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products. RESEARCH GRADES 9-10-11-12 Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F Conduct short and more sustained research to answer a question or solve a problem. Standard CC.3.6.9-10.G. Standard CC.3.6.9-10.G. Standard CC.3.6.11-12.G Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. Standard CC.3.6.9-10.H. Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H. Draw evidence from informational texts to support analysis, reflection, and research. RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I & Standard CC.3.	

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
		12, read and comprehend technical texts independently and proficiently.		

601Categorize standard cable types and their properties including: UTP, STP, coaxial, fiber; plenum vs. non- plenum properties: transmission speeds, distance, duplex, noise immunity, and frequency.Arts, AV Technology and Communications Career ClusterGRADES 9-10-11-12 Standard CC.3.5.9-10. APURPOSE GRADES 9-10-11-12OPERAT602Identify common connector types, including UTP, STP, coaxial, and fiber.Arts, AV Technology and Communications Career (Choose Standards)GRADES 9-10-11-12 Standard CC.3.5.9-10. AGRADES 9-10-11-12 GRADES 9-10-11-12 AStandard CC.3.6.9-10.AStandard CC.3.6.9-10.A603Identify common physical network topologies.Arts, AV Technology and Conset standards)GRADES 9-10-11-12 Standard CC.3.5.9-10.BWrite arguments focused on discipline specific content.Apply pro- and irration solve real mathematical603Identify common physical network topologies.Artelecommunications Career Pathway (Choose Standards)Standard CC.3.5.9-10.C Standard CC.3.5.11-12.CWrite informative or explanatory texts, includingUse units understar	
<ul> <li>601 Categorize standard cable types and their properties including: UTP, STP, coaxial, fiber; plenum vs. non-plenum properties: transmission speeds, distance, duplex, noise immunity, and frequency.</li> <li>602 Identify common connector types, including UTP, STP, coaxial, and fiber.</li> <li>603 Identify common physical network topologies.</li> </ul> <ul> <li>Arts, AV Technology and Communications Career Cluster</li> <li>Choose Standards)</li> <li>Choose Stan</li></ul>	
<ul> <li>appropriate wiring standards, including 568A, 568B, and loopback.</li> <li>Caregorize common WAN technology types and properties.</li> <li>Categorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and Ethernet properties: CSMA/CD, broadcast, collision, bonding, speed, and distance.</li> <li>Caregorize common LAN technology types and technology types and tethernet propertites tresto</li></ul>	BERS AND RATIONS lard 2.1.HS.F.2 properties of rational rational numbers to real world or matical problems. lard 2.1.HS.F.4 nits as a way to stand problems and to the solution of step problems. lard 2.1.HS.F.5 se a level of accuracy priate to limitations on trement when ing quantities. lard 2.1.HS.F.6 d the knowledge of netic operations and to complex numbers.

Units of IA	struction and Task Grid	Linked to Pennsylvania Core Sta	andards	
Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
	Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.	<ul> <li>INTEGRATE KNOWLEDGE &amp; IDEAS</li> <li>GRADES 9-10</li> <li>Standard CC.3.5.9-10.G</li> <li>Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</li> <li>Standard CC.3.5.9-10. H</li> <li>Assess the reasoning in a text to support the author's claim for solving a technical problem.</li> <li>Standard CC.3.5.9-10. I</li> <li>Compare and contrast findings presented in a text to those from other sources, etc.</li> <li>INTEGRATE KNOWLEDGE &amp; IDEAS</li> <li>GRADES 11-12</li> <li>Standard CC.3.5.11-12. G</li> <li>Integrate and evaluate multiple sources of information presented in diverse formatsto solve a problem.</li> <li>Standard CC.3.5.11-12. H</li> <li>Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</li> <li>Standard CC.3.5.11-12. I</li> <li>Synthesize information from a range of sources into a coherent understanding.</li> <li>RANGE OF READING GRADES 9-10-11-12</li> <li>Standard CC.3.5.11-12.J</li> <li>By the end of grades 9-10, AND 11- 12, read and comprehend technical texts independently and proficiently.</li> </ul>	Use technology, including the internet, to produce, publish, and update individual or shared writing products. <b>RESEARCH</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.F</b> <b>Standard CC.3.6.11-12.F</b> <b>Conduct short and more</b> <b>sustained research to</b> <b>answer a question or solve</b> <b>a problem.</b> <b>Standard CC.3.6.9-10.G</b> . <b>Standard CC.3.6.9-10.G</b> . <b>Standard CC.3.6.11-12.G</b> Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. <b>Standard CC.3.6.9-10.H.</b> <b>Standard CC.3.6.9-10.H.</b> <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts to support analysis, reflection, and research. <b>RANGE OF WRITING</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.I &amp;</b> <b>Standard CC.3.5.11-12.I.</b> Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiencesetc.	

Computer Systems Networking and Telecommunications, Classification of Instructional Program (CIP) 11.0901 Units of Instruction and Task Grid Linked to Pennsylvania Core Standards

Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
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700	DEMONSTRATE KNOWLEDGE OF				
	NETWORK DEVICES.				
702 703 704	Install, configure and differentiate between common network connectivity devices. Identify the functions of specialized network devices such as, multilayer switch, content switch, IDS/IPS, load balancer, multifunction network devices, DNS server, bandwidth shaper, proxy server, and CSU/DSU. Explain the advanced features of a switch such as, PoE, spanning tree, VLAN, trunking, port mirroring, port authentication, etc. Implement a basic wireless network, including client configuration, access point placement and installation. Configure appropriate encryption, configure channels and frequencies, set ESSID and beacon, and verify installation.	CAREER CLUSTER 1: Arts, AV Technology and Communications Career Cluster (Choose Standards) 1-2-3-4-5-6 PATHWAYS INCLUDE: A. Telecommunications Career Pathway (Choose Standards) 1-2-3 CAREER CLUSTER 2: Information Technology (Choose Standards) 1-2-3-4-5-6-7-8-9-10 PATHWAYS INCLUDE: Information Support and Services Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 Network Systems Career Pathway (Choose Standards) 1-2-3-4-5 Programming and Software Development Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10 Web and Digital Communications Career Pathway (Choose Standards)	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.9-10. A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.9-10 B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc. CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.9-10. D Standard CC.3.5.9-10. D Standard CC.3.5.9-10.E Standard CC.3.5.9-10.E Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedureand Analyze the structure of the relationships among concepts in a text. INTEGRATE KNOWLEDGE & IDEAS	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.9-10.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc. PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writingappropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.

	istruction and Task Oric	Linked to Pennsylvania Core Sta	inuarus	
Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
800 DEMONSTRATE KNOWLEDGE OF	1-2-3-4-5-6-7-8-9-10 NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.	GRADES 9-10Standard CC.3.5.9-10.GTranslate quantitative or technicalinformation expressed in a text intovisual form (e.g. a table or chart).Standard CC.3.5.9-10. HAssess the reasoning in a text tosupport the author's claim for solvinga technical problem.Standard CC.3.5.9-10. ICompare and contrast findingspresented in a text to those fromother sources, etc.INTEGRATE KNOWLEDGE &IDEASGRADES 11-12Standard CC.3.5.11-12. GIntegrate and evaluate multiplesources of information presented indiverse formatsto solve a problem.Standard CC.3.5.11-12. HEvaluate the hypotheses, data,analysis, and conclusions in atechnical text, verifying the datawhen possible.Standard CC.3.5.11-12. ISynthesize information from a rangeof sources into a coherentunderstanding.RANGE OF READINGGRADES 9-10-11-12Standard CC.3.5.11-12.JBy the end of grades 9-10, AND 11-12, read and comprehend technicaltexts independently and proficiently.	individual or shared writing products. <b>RESEARCH</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.F</b> <b>Standard CC.3.6.9-10.F</b> <b>Standard CC.3.6.11-12.F</b> <b>Conduct short and more</b> <b>sustained research to</b> <b>answer a question or solve</b> <b>a problem.</b> <b>Standard CC.3.6.9-10.G.</b> <b>Standard CC.3.6.9-10.G.</b> <b>Standard CC.3.6.11-12.G</b> Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation. <b>Standard CC.3.6.9-10.H.</b> <b>Standard CC.3.6.9-10.H.</b> <b>Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts to support analysis, reflection, and research. <b>RANGE OF WRITING</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.I &amp;</b> <b>Standard CC.3.5.9-10.I &amp;</b> <b>Standard CC.3.5.11-12.I.</b> Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiencesetc.	
NETWORK MANAGEMENT.				

Computer Systems Networking and Telecommunications, Classification of Instructional Program (CIP) 11.090	01
Units of Instruction and Task Grid Linked to Pennsylvania Core Standards	

	listi uction and Task Grid	Linked to Pennsylvania Core Sta		
Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0
<ul> <li>801 Explain, compare and contrast the layers of the TCP/IP and OSI models.</li> <li>802 Identify target of configuration management.</li> </ul>	CAREER CLUSTER 1: Arts, AV Technology and Communications Career Cluster	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational
802 Identify types of configuration management documentation such as, wiring schematics, physical and logical network diagrams, baselines, policies, procedures and configurations, and regulations.	(Choose Standards) 1-2-3-4-5-6 PATHWAYS INCLUDE: A. Telecommunications	Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc.	Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B	and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4
<ul> <li>803 Given a scenario, evaluate the network based on configuration management documentation such as, comparisons of wiring schematics, physical and logical network diagrams, baselines, policies and procedures and configurations to network devices and</li> </ul>	Career Pathway (Choose Standards) 1-2-3 CAREER CLUSTER 2: Information Technology	Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc. CRAFT & STRUCTURE GRADES 9-10-11-12	Write informative or explanatory texts, including the narration of technical processes, etc. PRODUCTION & DISTRIBUTION OF WRITING	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
<ul> <li>infrastructure, update wiring schematics, physical and logical network diagrams, configurations and job logs as needed.</li> <li>804 Conduct network monitoring to identify performance and connectivity issues such as, packet sniffers,</li> </ul>	PATHWAYS INCLUDE: Information Support and Services Career Pathway (Choose Standards)	Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words.	GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writingappropriate to task,	measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and
<ul> <li>connectivity issues such as, packet siniters,</li> <li>connectivity software, load testing, throughput testers,</li> <li>system logs, history logs, and event logs.</li> <li>805 Explain different methods and rationales for network</li> </ul>	1-2-3-4-5-6-7-8-9-10 Network Systems Career Pathway (Choose Standards) 1-2-3-4-5	Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a	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	apply to complex numbers.
performance optimization.	Programming and Software Development Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10	text, etc. <b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedureand Analyze the structure of the relationships among concepts in a	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>	
	Web and Digital Communications Career Pathway (Choose Standards) 1-2-3-4-5-6-7-8-9-10	text. INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10	<b>Standard CC.3.6.11-12.E</b> . Use technology, including the internet, to produce, publish, and update individual or shared writing products.	
	<b>NOTE:</b> Refer to the Common Career Technical Core	<b>Standard CC.3.5.9-10.G</b> Translate quantitative or technical information expressed in a text into	RESEARCH	

Units of Instruction and Task Grid Linked to Pennsylvania Core Standards					
Secondary Competency Task List with Unit and Task Numbers:	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.0	
	Standards Booklet if you wish to add more Pathways, for your local area.	visual form (e.g. a table or chart). Standard CC.3.5.9-10. H Assess the reasoning in a text to support the author's claim for solving a technical problem. Standard CC.3.5.9-10. I Compare and contrast findings presented in a text to those from other sources, etc. INTEGRATE KNOWLEDGE & IDEAS GRADES 11-12 Standard CC.3.5.11-12. G Integrate and evaluate multiple sources of information presented in diverse formatsto solve a problem. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. Standard CC.3.5.11-12. I Synthesize information from a range of sources into a coherent understanding. RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.11-12.J			
		By the end of grades 9-10, AND 11- 12, read and comprehend technical texts independently and proficiently.			