

# Autobody/Collision Repair Technology/Technician, Classification of Instructional Program (CIP) 47.0603 Units of Instruction and Task Grid Linked to Pennsylvania Core Standards

	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
100 101 102 103 104 105 106 107 108 109 110 111	SAFETY.  Follow general shop safety rules. Use of personal safety devices and clothing. Locate and identify fire extinguishers. Locate and operate emergency switches. Explain fire and tornado drill procedures. Demonstrate proper handling of hazardous materials. Follow proper chemical disposal techniques. Operate shop and spray area ventilation systems. Follow rules for care and safe use of hand tools. Demonstrate safe and proper use of power tools and equipment. Identify the proper methods and options for safely moving vehicles in the shop area. Identify information on Safety Data Sheets (SDS).	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D		Standard 2.1
		you wish to add more Pathways, for your	Standard CC.3.5.11-12.D		

local Occupational	Determine the meaning of
local Occupational Area.	symbols, key terms, and other
Aita.	domain specific words.
	Standard CC.3.5.9-10.E
	Standard CC.3.5.11-12.E
	Analyze the structure of the
	relationships among concepts in a
	text, etc.
	Standard CC.3.5.9-10.F
	Standard CC.3.5.11-12.F
	Analyze the author's purpose in
	providing an explanation,
	describing a procedure and
	Analyze the structure of the
	relationships among concepts in a
	text.
	INTEGRATE KNOWLEDGE &
	IDEAS CRADES 0 10
	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.3.5.11-12.J By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.

200	VEHICLE DESIGN AND CONSTRUCTION.			
200 201 202 203	VEHICLE DESIGN AND CONSTRUCTION.  Identify the differences between various vehicle construction types.  Identify and describe structural and nonstructural panels of a unibody vehicle.  Determine the various materials used in vehicle construction.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C	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
		Equipment Maintenance Career Pathway (Choose Standards) 1-2	Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.	to guide the solution of multistep problems.  Standard 2.1.HS.F.5  Choose a level of accuracy appropriate to limitations

Nome	CD A EM A CODILICATION	
NOTE:	CRAFT & STRUCTURE	on measurement when reporting quantities.
	he Common GRADES 9-10-11-12	
	Standard CC.3.5.9-10. D	Standard 2.1.HS.F.6
	o add more	Extend the knowledge of arithmetic operations and
Pathways,	for your Determine the meaning of	apply to complex
local Occu	symbols, key terms, and other domain specific words.	numbers.
Area.	Standard CC.3.5.9-10.E	
	Standard CC.3.5.11-12.E	
	Analyze the structure of the	
	relationships among concepts in a	
	text, etc.	
	Standard CC.3.5.9-10.F	
	Standard CC.3.5.11-12.F	
	Analyze the author's purpose in	
	providing an explanation,	
	describing a procedure and	
	Analyze the structure of the	
	relationships among concepts in a	
	text.	
	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.	
	INTERCE AND ANOTHER OF A	
	INTEGRATE KNOWLEDGE & IDEAS	
	GRADES 11-12	
	GRADES 11-12	

Gt 1 1000254440
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.3.5.11-12.J
By the end of grades 9- 10, AND
11-12, read and comprehend
technical texts independently and
proficiently.
Standard CC.3.5.11-12.J  By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and

300	PANEL REPLACEMENT AND ALIGNMENT.				
301 302 303 304 305	Identify the principles of full or partial panel replacement (bonded, bolted, or welded).  Remove, reinstall, and align bolt on panels.  Remove and reinstall wheel/tire assembly.  Aim headlights using mechanical aiming equipment.  RESERVED	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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 purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.9-10.E Standard CC.3.6.9-10.E Standard CC.3.6.9-10.E Standard CC.3.6.9-10.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.  GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

400	TRIM AND HARDWARE.				
401 402 403 404 405 406 407 408	RESERVED Determine types of fasteners. Remove and replace adhesive-held molding and trim. Remove and install seats. RESERVED Remove and install interior parts and hardware. Remove and install exterior parts and hardware. Remove and install exterior trim, moldings, and emblems.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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 writing, appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update	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.  GEOMETRY Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

500	METAL FINISHING.				
501 502 503 504	Select proper metal straightening tools. Evaluate stretched metal for repair. Demonstrate weld-on nail gun to repair sheet metal. Repair metal to meet industry standards.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.9-10 B Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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.  GEOMETRY Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

600	BODY FILLERS.			
601 602 603 604	Select correct body filler and tools. Prepare surface for body filler. Mix and apply body filler. Sand body fillers to correct contour.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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

	technical texts independently and	
	proficiently.	

700	GLASS AND HARDWARE.				
701 702 703	Remove and reinstall a door window regulator. Remove and reinstall moveable door glass. Describe the removal and replacement of stationary glass.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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 Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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.  GEOMETRY Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

800	STRUCTURAL COMPONENT REPAIR AND DAMAGE ANALYSIS.				
801 802 803 804 805 806	Classify the various types structural damage a vehicle can sustain.  Interpret body dimension specifications.  Use a tram gauge to diagnose vehicle length and width damage.  Diagnose vehicle height with datum line gauges.  Identify various measuring systems.  Identify repair methods for vehicle with diamond damage, twist, sag side swag or mash.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	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.3.5.11-12. 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 Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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,	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.  ALGEBRA Standard 2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.  GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3

INTEGRATE KNOWLEDGE & **IDEAS GRADES 9-10 Standard CC.3.5.9-10.G** Standard CC.3.5.9-10. H Assess the reasoning in a text to

Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).

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 formats...to solve a problem.

## Standard CC.3.5.11-12. H

Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

#### Standard CC.3.5.11-12. I

Synthesize information from a range of sources into a coherent understanding.

RANGE OF READING GRADES 9-10-11-12

Standard CC.3.5.9-10.J

Standard CC.3.5.11-12.J

By the end of grades 9- 10, AND 11-12, read and comprehend

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.3.6.11-12.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.3.5.11-12.I.

Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.

Verify and apply geometric theorems as they relate to geometric figures.

Standard 2.3.HS.A.13

Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

900	STRUCTURAL STRAIGHTENING.				
901 902 903	Mount and anchor vehicle to a pulling system. Prepare vehicle for measuring and analysis. Prepare vehicle for structural alignment.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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.3.6.9-10.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.  GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

1000	CORROSION PROTECTION.			
1003	Identify corrosion causes and OEM corrosion protection.  Apply repair methods for corrosion protection.  RESERVED  Demonstrate the application of seam sealers.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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 **IDEAS** individual or shared writing products. **GRADES 9-10 Standard CC.3.5.9-10.G** RESEARCH Translate quantitative or technical information expressed in a text into **GRADES 9-10-11-12** visual form (e.g. a table or chart). **Standard CC.3.6.9-10.F** Standard CC.3.5.9-10. H Standard CC.3.6.11-12.F Assess the reasoning in a text to Conduct short and more support the author's claim for sustained research to solving a technical problem. answer a question or solve Standard CC.3.5.9-10. I a problem. Compare and contrast findings Standard CC.3.6.9-10.G. presented in a text to those from Standard CC.3.6.11-12.G other sources, etc. Gather relevant information from multiple authoritative INTEGRATE KNOWLEDGE & print and digital sources, **IDEAS** following a standard format for citation. **GRADES 11-12** Standard CC.3.6.9-10.H. Standard CC.3.5.11-12. G Standard CC.3.6.11-12.H. Integrate and evaluate multiple sources of information presented in Draw evidence from diverse formats...to solve a informational texts to problem. support analysis, reflection, and research. Standard CC.3.5.11-12. H Evaluate the hypotheses, data, analysis, and conclusions in a RANGE OF WRITING technical text, verifying the data **GRADES 9-10-11-12** when possible. Standard CC.3.5.9-10.I & Standard CC.3.5.11-12. I Standard CC.3.5.11-12.I. Synthesize information from a Write routinely over range of sources into a coherent extended time frames and understanding. shorter time frames for a range of tasks, purposes RANGE OF READING and audiences...etc. **GRADES 9-10-11-12** Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND

11-12, read and comprehend

INTEGRATE KNOWLEDGE &

	technical texts independently and	
	proficiently.	

1100	WELDING.			
1102 1103 1104 1105 1106	Identify different methods of attaching components (MIG welding, squeeze type resistance spot welding (STRSW) riveting, structural adhesive, silicon bronze, etc.)  Demonstrate personal safety practices.  Set up and tune the MIG welder.  Complete a butt joint with backing in various welding positions.  Complete an overlap weld in various positions.  Complete a plug weld in various positions.  Define protection of adjacent panels, glass, vehicle interior, etc. from welding and cutting operations.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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

	technical texts independently and	
	proficiently.	

1200 CUTTING PROCESSES.				
1201 Identify cutting processes. 1202 Demonstrate sheet metal cutting processes.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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.  GEOMETRY Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

1300	SURFACE PREPARATION, REFINISHING, AND EQUIPMENT.				
1302 1303 1304	Explain various environmental regulations. Locate hazardous warning information. Select and inspect personal protection equipment (PPE). Demonstrate safe painting practices. Identify personal health and safety hazards.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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,	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.

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

1400 AUTOMOTIVE FINISHES.  1401 Describe the difference between paint systems.  1402 Describe paint defects - causes and cures.  1403 Identify various undercoats.  1404 Identify various topcoats (single stage, basecoat/clearcoat, tricoat, quadcoat).	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE:	technical texts independently and proficiently.  KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C	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.
	Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words.  Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc.  Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.  INTEGRATE KNOWLEDGE & IDEAS GRADES 9-10 Standard CC.3.5.9-10.G	Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update individual or shared writing products.  RESEARCH GRADES 9-10-11-12	Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.

		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.	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	
		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.	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.3.5.11-12.I.  Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiencesetc.	
1500. CUREACE BREDADATION		RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J By the end of grades 9- 10, AND 11- 12, read and comprehend technical texts independently and proficiently.		
1500 SURFACE PREPARATION.	CADEED CLUCTED.	KEY IDEAS/DETAILS	TEXT TYPES AND	NUMBERS AND
<ul><li>1501 Demonstrate proper steps to pre-wash entire vehicle.</li><li>1502 Use wax and grease remover.</li></ul>	<u>CAREER CLUSTER</u> : Transportation,	GRADES 9-10-11-12	PURPOSE	OPERATIONS
1503 Demonstrate proper use of sanding and featheredging	Distribution and Logistics	Standard CC.3.5.9-10. A	GRADES 9-10-11-12	Standard 2.1.HS.F.2
techniques.	(Choose Standards)	Standard CC.3.5.11-12 A	Standard CC.3.6.9-10.A	Apply properties of rational and irrational
<ul><li>1504 Wet sand and featheredge.</li><li>1505 Apply suitable metal treatments.</li></ul>	1-2-3-4-5-6	Cite specific textual evidence, etc.  Standard CC.3.5.9-10 B	Standard CC.3.6.11-12.A	numbers to solve real

Revised June 2018

Standard CC.3.5.11-12. B 1506 Obtain the vehicle paint code. **PATHWAYS** Write arguments focused world or mathematical INCLUDE on discipline specific problems. 1507 Apply undercoats. Determine the central ideas or content. **Facility and Mobile** conclusions of a text: etc. Standard 2.1.HS.F.4 1508 Prepare panels for blending. Equipment **Standard CC.3.6.9-10.B Standard CC.3.5.9-10.C** Use units as a way to 1509 RESERVED **Maintenance Career** Standard CC.3.6.11-12.B understand problems and Standard CC.3.5.11-12.C 1510 Identify masking materials. **Pathway** to guide the solution of Write informative or Follow precisely a complex Extend 1511 Perform masking. (Choose Standards) multistep problems. explanatory texts, including the knowledge of arithmetic 1512 Select the appropriate abrasive. 1-2 the narration of technical Standard 2.1.HS.F.5 operations and apply to complex numbers. procedure, etc. processes, etc. Choose a level of accuracy appropriate to limitations NOTE: on measurement when PRODUCTION & Refer to the Common **CRAFT & STRUCTURE** reporting quantities. DISTRIBUTION OF **Career Technical Core** GRADES 9-10-11-12 WRITING Standard 2.1.HS.F.6 Standards Booklet if Standard CC.3.5.9-10. D vou wish to add more GRADES 9-10-11-12 Extend the knowledge of Standard CC.3.5.11-12.D Pathways, for your arithmetic operations and **Standard CC.3.6.9-10.C** Determine the meaning of local Occupational apply to complex Standard CC.3.6.11-12 C symbols, key terms, and other Area. numbers. Produce clear and coherent domain specific words. writing, appropriate to task, **Standard CC.3.5.9-10.E** purpose, and audience. Standard CC.3.5.11-12.E Standard CC.3.6.9-10 D Analyze the structure of the Standard CC.3.6.11-12.D relationships among concepts in a Develop and strengthen text, etc. writing as needed by **Standard CC.3.5.9-10.F** planning, revising, editing, Standard CC.3.5.11-12.F rewriting, or trying a new Analyze the author's purpose in approach, focusing on providing an explanation, addressing what is most describing a procedure... and significant for a specific Analyze the structure of the purpose and audience. relationships among concepts in a Standard CC.3.6.9-10.E text. Standard CC.3.6.11-12.E. Use technology, including INTEGRATE KNOWLEDGE & the internet, to produce, **IDEAS** publish, and update **GRADES 9-10** individual or shared writing products. Standard CC.3.5.9-10.G Translate quantitative or technical

Revised June 2018 40

information expressed in a text into

visual form (e.g. a table or chart).

Standard CC.3.5.9-10. H

RESEARCH

**GRADES 9-10-11-12** 

Standard CC.3.6.9-10.F Standard CC.3.6.11-12.F

1602	Operate the spray booth.  Maintain the paint mixing area.  Set up, test, and adjust spray guns.	CAREER CLUSTER: Transportation, Distribution and Logistics	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
	REFINISHING EQUIPMENT AND PAINT AREA.	CARPED OF HOME	VIIV IDIAGODITA V.G.	
1600	DEFINISHING EQUIDMENT AND DAINT		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.	Conduct short and more sustained research to answer a question or solve a problem.  Standard CC.3.6.9-10.G.  Standard CC.3.6.11-12.G  Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.  Standard CC.3.6.9-10.H.  Standard CC.3.6.11-12.H.  Draw evidence from informational texts to support analysis, reflection, and research.  RANGE OF WRITING GRADES 9-10-11-12  Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I.  Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiencesetc.

1.60.1		[ (G)		G. 1 1 GG 2 C 4 4 4 2 1
1604	Inspect, clean, and determine conditions of spray guns	(Choose Standards)	Cite specific textual evidence, etc.	Standard CC.3.6.11-12.A
1.005	and equipment.	1-2-3-4-5-6	Standard CC.3.5.9-10 B	Write arguments focused
1605	Select and use the National Institution of Safety and		Standard CC.3.5.11-12. B	on discipline specific
	Health (NIOSH) approve personal painting/refinishing respirator systems.	PATHWAYS	Determine the central ideas or	content.
	respirator systems.	INCLUDE	conclusions of a text; etc.	Standard CC.3.6.9-10.B
		Facility and Mobile	Standard CC.3.5.9-10.C	Standard CC.3.6.11-12.B
		Equipment	Standard CC.3.5.11-12.C	Write informative or
		Maintenance Career	Follow precisely a complex Extend	explanatory texts, including
		Pathway	the knowledge of arithmetic	the narration of technical processes, etc.
		(Choose Standards)	operations and apply to complex	processes, etc.
		1-2	numbers. procedure, etc.	DD ODLIGHTON 6
				PRODUCTION &
		NOTE:	CRAFT & STRUCTURE	DISTRIBUTION OF WRITING
		Refer to the Common	GRADES 9-10-11-12	GRADES 9-10-11-12
		Career Technical Core	Standard CC.3.5.9-10. D	Standard CC.3.6.9-10.C
		Standards Booklet if	Standard CC.3.5.11-12.D	Standard CC.3.6.11-12 C
		you wish to add more Pathways, for your	Determine the meaning of	
		local Occupational	symbols, key terms, and other	Produce clear and coherent writing, appropriate to task,
		Area.	domain specific words.	purpose, and audience.
			Standard CC.3.5.9-10.E	Standard CC.3.6.9-10 D
			Standard CC.3.5.11-12.E	Standard CC.3.6.11-12.D
			Analyze the structure of the	Develop and strengthen
			relationships among concepts in a	writing as needed by
			text, etc.	planning, revising, editing,
			Standard CC.3.5.9-10.F	rewriting, or trying a new
			Standard CC.3.5.11-12.F	approach, focusing on
			Analyze the author's purpose in	addressing what is most
			providing an explanation,	significant for a specific
			describing a procedure and	purpose and audience.
			Analyze the structure of the	Standard CC.3.6.9-10.E
			relationships among concepts in a	Standard CC.3.6.11-12.E.
			text.	Use technology, including
				the internet, to produce,
			INTEGRATE KNOWLEDGE & IDEAS	publish, and update
				individual or shared writing products.
			GRADES 9-10	products.
			Standard CC.3.5.9-10.G	DECEA DOM
			Translate quantitative or technical	RESEARCH
			information expressed in a text into	GRADES 9-10-11-12
1			visual form (e.g. a table or chart).	Standard CC.3.6.9-10.F

Standard CC.3.5.9-10. H	Standard CC.3.6.11-12.F
Assess the reasoning in a text to	Conduct short and more
support the author's claim for	sustained research to
solving a technical problem.	answer a question or solve
Standard CC.3.5.9-10. I	a problem.
Compare and contrast findings	Standard CC.3.6.9-10.G.
presented in a text to those from	Standard CC.3.6.11-12.G
other sources, etc.	Gather relevant information
	from multiple authoritative
INTEGRATE KNOWLEDGE &	print and digital sources, following a standard format
IDEAS	for citation.
GRADES 11-12	Standard CC.3.6.9-10.H.
Standard CC.3.5.11-12. G	Standard CC.3.6.11-12.H.
Integrate and evaluate multiple	Draw evidence from
sources of information presented in diverse formatsto solve a	informational texts to
problem.	support analysis, reflection,
Standard CC.3.5.11-12. H	and research.
Evaluate the hypotheses, data,	
analysis, and conclusions in a	RANGE OF WRITING
technical text, verifying the data	GRADES 9-10-11-12
when possible.	Standard CC.3.5.9-10.1 &
Standard CC.3.5.11-12. I	Standard CC.3.5.11-12.I.
Synthesize information from a	Write routinely over
range of sources into a coherent	extended time frames and
understanding.	shorter time frames for a
	range of tasks, purposes
RANGE OF READING	and audiencesetc.
GRADES 9-10-11-12	
Standard CC.3.5.9-10.J	
Standard CC.3.5.11-12.J	
By the end of grades 9- 10, AND	
11-12, read and comprehend	
technical texts independently and	
proficiently.	

1700	REFINISHING OPERATIONS.			
1703 1704	tack). Apply primer-sealer.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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

	technical texts independently and	
	proficiently.	

1800 BLENDING OPERATIONS.				
1801 RESERVED 1802 Blend basecoat/clearcoat finish. 1803 Tint and blend color coat.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. 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.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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 writing, appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update	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.

	technical texts independently and	
	proficiently.	

1900 DETAILING.			
1902 Clean exterior of vehicle. 1903 Clean interior of vehicle. 1904 Apply decals and stripes. 1905 Demonstrate color sanding and polishing technique 1906 Clean body openings. 1907 Clean exterior and interior glass surfaces.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	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.3.5.11-12. 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 Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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

	technical texts independently and	
	proficiently.	

2000	ESTIMATING DAMAGE ANALYSIS.				
2003 2004 2005	number). Collect vehicle and customer data.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	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 writing, appropriate to task, purpose, and audience. Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E. Use technology, including the internet, to produce, publish, and update	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.  GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	

2100	PLASTIC REPAIR.				
2101 2102 2103	Identify plastic to make repair decisions.  Use plastic repair methods (adhesives and welding).  Repair plastics with two-part adhesives, with and without reinforcement.	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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.

	technical texts independently and	
	proficiently.	

2200	RESTRAINT SYSTEMS.				
2201 2202 2203	3 11	CAREER CLUSTER: Transportation, Distribution and Logistics (Choose Standards) 1-2-3-4-5-6  PATHWAYS INCLUDE Facility and Mobile Equipment Maintenance Career Pathway (Choose Standards) 1-2  NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex Extend the knowledge of arithmetic operations and apply to complex numbers. procedure, etc.  CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E Analyze the structure of the relationships among concepts in a text, etc. Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F Analyze the author's purpose in providing an explanation, describing a procedure and Analyze the structure of the relationships among concepts in a text.	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc.  PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C Produce clear and coherent writing, appropriate to task, purpose, and audience. 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.  GEOMETRY Standard 2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. Standard 2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. Standard 2.3.HS.A.13 Analyze relationships between two dimensional and three dimensional objects.

	technical texts independently and	
	proficiently.	