

CURRICULUM MAPPING TEMPLATE

Program: Auto Collision Repair CIP code: 47.0603 KR copy in process

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
1	Collision Orientation				
	<p>I. Academic Foundations A. Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities. 3. Locate, organize and reference written info from various sources to communicate with co-workers, clients/participants.</p>	<p>MAINTAINING WRITTEN WEEKLY JOURNALS, Periodicals Reference manuals</p>			
	<p>III. Problem-Solving and Critical Thinking B. Formulate ideas, proposals and solutions to transportation, distribution and/or logistics related problems in order to ensure effective and efficient delivery of products or services to targeted customers. 1. Clarify the problems or issues to be addressed. 2. Identify constraints and parameters related to the problem presented. 3. Formulate a set of objectives for the solution that address the key issues presented.</p>	<p>TIMELINES FOR CUSTOMER DELIVERY, ALIGNING MATERIALS ,PARTS AND SUPPLIES TO ENSURE TIMELINESS OF CUSTOMER SATISFACTION/FINAL DELIVERY</p>	<p>(B:2,4,5,6) Whole numbers (1) • Add • Subtract • Mult • Divide Decimals (1) • Add • Subtract • Mult • Divide Time (1)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1</p>

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	<p>4. Analyze available info and statistical data related to the problem or issue.</p> <p>5. Synthesize alternative ideas, proposals, and solutions that would solve the problem.</p> <p>6. Evaluate possible outcomes from implementation of alternative solutions.</p>				
	<p>IV. Information Technology Applications</p> <p>A. Use Personal Information Management (PIM) applications to increase workplace efficiency.</p> <ol style="list-style-type: none"> 1. Manage personal schedules and contact info. 2. Create memos and notes. <p>B. Employ technological tools to expedite workflow.</p> <ol style="list-style-type: none"> 2. Use email to share files and docs 3. Identify the functions and purpose of email systems. 4. Use email to communicate within and across organizations. 5. Access and navigate internet 20. Facilitate group work thru management if shared files and online info. 22. Manage computer operations. 23. Manage file storage. 24. Compress or alter files. 26. Use installation and operation manuals. 	<p>Using computers</p> <p>Using calendars</p> <p>SB2 safety training</p> <p>Internet searching, training websites</p>			

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	27. Troubleshoot computer driven equipment and machines.				
	<p>C . Demonstrate Digital Citizenship</p> <ol style="list-style-type: none"> 1. Identify legal and ethical issues related to the use of info and communication technologies. Citing resources. 2. Discuss possible long-range effects of unethical uses of technology Viruses, pirating, hacking. 3. Discuss and demonstrate proper netiquette I online communications. 4. Identify ways that individuals can protect their technology systems from unethical or unscrupulous users. 6. Discuss and adhere to fair use policies and copyright guidelines. <p>D. Demonstrate the effective use of computer based equipment to control electromechanical devices commonly used in conducting work within a TDL industry.</p> <ol style="list-style-type: none"> 1. Execute the steps involved in the operation or a computer driven machine to accomplish common work tasks. 	<p>Articles related to teamwork and productivity Maintaining quality Workplace ethics</p>			

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	<p>V. Systems</p> <p>A. Describe the nature and types of business organizations to build an understanding of the scope of organizations.</p> <ol style="list-style-type: none"> Describe the types and functions of business. Explain the functions and interactions of common depts. Within a business. <p>C. Analyze and summarize the various roles and major business functions involved in a TDL organization as a way to demonstrate understanding of the industry as a system.</p> <ol style="list-style-type: none"> Summarize the various major internal job functions and organizational structures found among TDL organizations <p>E. Demonstrate understanding of important trends influencing the TDL system by assessing and summarizing the impact of various economic, social, and technological changes on a TDL organization and its role in the TDL industry.</p> <ol style="list-style-type: none"> State how an economic change such as economic growth/decline, income growth, consumer confidence, interest rates, and fuel and matl. Costs may impact business decisions. 	<p>Function of a business is to make a profit—</p> <p>Cycle times (through the shop, beginning to end)</p> <p>Touch times (How long was that vehicle being worked on vs how long it was sitting waiting)</p> <p>Profit margins</p> <p>Labor cost</p> <p>LEAN manufacturing simulation (3)</p>	<p>A1, E 1-3, F2</p> <p>Whole numbers (2)</p> <p>Decimals (2)</p> <p>Percents (2)</p> <p>Inverse variation (3) (time in shop vs profit)</p> <p>Ratio and Proportion (2)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.2; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3</p>

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	<p>2. State how a social change as indicated by a measured of consumer attitudes, consumer preferences, demographics, and/or population shifts may impact a hypothetical business decision.</p> <p>3. Summarize how various technological changes in transportation and info tech, may impact business functioning today and in the future.</p> <p>F. Implement and evaluate risk mgt. strategies to prevent and reduce various risks and exposures within a TDL organization as a way to demonstrate understanding of risk mgt, as a tool for improving performance.</p> <p>2. State the potential impact various loss exposures such as property, liability, personnel and net income may have on business functioning should there be a loss.</p>				
	<p>VI. Safety, Health, and Environmental</p> <p>E. Employ knowledge of response techniques to create a disaster and/or emergency response plan.</p> <p>1. Complete an assessment of an emergency and/or disaster situation.</p>	<p>SP2.org Passis training Careersafe</p>			

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	<p>2. Create an emergency and/or disaster plan.</p> <p>VIII. Ethics and Legal Responsibilities.</p> <p>A. Know and understand the importance of ethics and legal responsibilities.</p> <p>3. Compare and contrast the differences between ethical and legal responsibilities for different roles and functions within an organization.</p> <p>5. Compare and contrast differences in how various workplaces apply personal and professional ethics.</p> <p>B. Evaluate and apply strategies for responding to unethical or illegal actions of individuals and organizations in the TDL industry in order to demonstrate how to respond to unethical situations.</p> <p>1. Compare and contrast the results achieved from implementing alternative strategies for responding to unethical or illegal actions.</p>				

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	<p>IX. Employability and Career Development D. Evaluate and apply written organizational policies and rules, if applied, may influence specific situations in the workplace.</p> <ol style="list-style-type: none"> 1. Locate appropriate info on organizational policies in handbooks and manuals. 2. Analyze how specific organizational policies and rules, if applied may influence specific situations in the workplace. <p>X. Technical Skills B. Employ planning and time mgt. skills and tools to enhance results and complete work tasks.</p> <ol style="list-style-type: none"> 1. Develop goals and objectives 2. Prioritize tasks to be completed. 3. Develop timelines using time mgt. knowledge and skills. 4. Use project-mgt. skills to improve workflow and minimize costs. 	<p>Classroom rules Sylabus Student handbook Employability grades Cleanup procedures Career cruising Resumes</p> <p>Time scheduling Planning Looking forward</p>	<p>B3 Time,</p>		
2	Career and Employability Skills				
	<p>I. Academic Foundations A. Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities.</p> <ol style="list-style-type: none"> 1. Select and employ appropriate reading and 				

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	<p>communication strategies to learn and use technical concepts and vocabulary in practice.</p> <p>4. Evaluate and use info resources to accomplish specific occupational tasks.</p> <p>6. Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.</p> <p>7. Interpret verbal and non verbal cues/behaviors to enhance communication with co-workers and clients/participants.</p> <p>B. Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career opportunities.</p> <p>7. Analyze data when interpreting operational documents.</p> <p>C. Demonstrate science knowledge and skills required to pursue the full range of post-secondary and career education opportunities.</p> <p>1. Evaluate scientific constructs including conclusions, conflicting data, inferences, limitations, questions, sources of errors, and variables.</p> <p>2. Apply scientific methods in qualitative and quantitative analysis, data gathering direct and indirect observations,</p>	<p>Estimating</p> <p>Paint calculations</p> <p>Reading charts and graphs</p> <p>Business calculations</p> <p>Timelines</p> <p>Hourly rates</p> <p>Commission vs hourly</p>	<p>Whole numbers (1)</p> <p>Fractions (1)</p> <p>Decimals (1)</p> <p>Percents (1)</p> <p>Ratio and proportion</p> <ul style="list-style-type: none"> • Ratio (1) • Proportion (1) • Direct and indirect variation (3) <p>Customary Measure</p> <ul style="list-style-type: none"> • Ruler (1) • Linear (1) • Area (2) • Volume (1) • Weight (1) • Capacity (1) • Temperature (1) • Time (1) <p>Metric Measurement</p>	<p>6.NS.1; 6.EE.2; 7.NS.1; 7.NS.2; 7.NS.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.EE.2; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3; G.MG.1</p>

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	<p>predictions, and problem identification.</p>		<ul style="list-style-type: none"> • Mass and weight (1) • Volume and capacity (1) • Temperature (2) • Conversions (1) <p>Algebra</p> <ul style="list-style-type: none"> • Solving linear equations (2) • Substituting data into formulas (1) • Graphing linear equations <p>Geometry</p> <ul style="list-style-type: none"> • Angles (1) <p>Statistics</p> <ul style="list-style-type: none"> • Charts and tables (1) • Mean measurements (2) 	<p>6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4; 6.EE.2; 7.G.5; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4; 6.SP.1; 6.SP.2</p>	<p>A.CED.1; A.CED.2; A.CED.3; A.CED.4; A.REI.3; A.REI.4; A.REI.10; F.LE.1; F.LE.2; F.LE.5; F.IF.5; A.SSE.1; F.BF.1; S.ID.6; G.CO.9; G.CO.12; G.CO.13; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1; S.ID.2</p>
	<p>II. Communications B. Apply active listening skills to obtain and clarify info. 1. Interpret a given verbal message/ info 2. Respond with restatement and clarification techniques to clarify info 3. Model behaviors that demonstrate active listening. C. Listen to and speak with diverse individuals to enhance communication skills. 1. Apply factors and strategies for communicating with a diverse</p>	<p>class presentations</p>			

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	<p>workforce.</p> <p>2. Demonstrate ability to communicate and resolve conflicts within a diverse workforce.</p> <p>D. Exhibit public relations skills to increase internal and external customer/client satisfaction.</p> <p>2. Use correct grammar to communicate verbally.</p> <p>3. Listen to a presentation and record important info. Report back identifying central themes and use key points to explain how the message applies to a similar situation.</p>				
	<p>III. Problem-Solving and Critical Thinking</p> <p>A. Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.</p> <p>2. Employ critical thinking and interpersonal skills to resolve conflicts with staff and/or customers.</p> <p>3. Identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability.</p>	<p>Daily basis— Upon receipt of customer car</p> <p>Teamwork activities</p>	<p>This is one of the 8 mathematical practices...</p>		

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	<p>IV. Information Technology Applications</p> <p>B. Employ technological tools to expedite workflow.</p> <ol style="list-style-type: none"> 1. Use info technology tools to manage and perform work responsibilities. 6. Search for info and resources. 7. Evaluate internet resources for reliability and validity. 8. Prepare simple documents and other business communications. 9. Prepare reports and other business communications by integrating graphics and other non-text elements. 10. Prepare complex multi-media publications. 11. Prepare presentations for training, sales and information sharing. 12. Deliver presentations with supporting materials. 21. Facilitate group work through instant messaging or 	<p>Student presentations</p> <p>Computer estimating software</p>			

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	<p>virtual meetings.</p> <p>28. Access support as needed to maintain operation of computer driven equipment and machines.</p> <p>C. Demonstrate Digital Citizenship</p> <p>5. Create appropriate citations for resources when presenting research findings.</p> <p>D. Demonstrate the effective use of computer based equipment (containing embedded computers, or processors) to control electromechanical devices commonly used in conducting work within the TDL industry.</p> <p>2. Interpret installation and operation manuals in order to install and operate a computer driven machine.</p> <p>3. Troubleshoot computer driven equipment and machines and access relevant support sources as needed.</p> <p>E. Utilize geographic information systems software common to the transportation, distribution and logistics industry to coordinate and facilitate business related tasks.</p> <p>1. Execute procedures involved in using Geographic Info System/Global Positions System (GIS/GPS) applications to</p>				

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	perform various work functions.				
	<p>V. Systems</p> <p>C. Analyze and summarize the various roles and major business functions involved in a TDL organization as a way to demonstrate understanding of the industry as a system.</p> <ol style="list-style-type: none"> 1. Summarize past and present trends related to the mission of the TDL organization. 2. Compare and contrast the various roles TDL organizations take on within the overarching industry. 3. Compare and contrast the various roles played by critical customers, suppliers, and stakeholders within a TDL org. 4. Summarize the major competitive challenges faced by TDL organizations in the industry today and in the future. <p>D. Monitor, analyze, and improve performance within a TDL organization using metrics common to the TDL community as a way to demonstrate understanding of how organizations manage and improve business functioning.</p>	<p>LEAN simulation Articles Current events</p> <p>D 1-3, business calculations, profit, etc.</p>	<p>D 1-3 Whole numbers (2) Decimals (2) Percents (2)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1</p>

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	<p>1. State how metrics for financial performance such as profitability, cost reduction and asset utilization may be utilized to identify areas for improvement in business functioning.</p> <p>2. State how metrics for market performance such as customer and sales service growth may be used to identify areas for improvement in business functioning.</p> <p>3. State how metrics for service and internal operations performance may be used to identify areas for improvement in business functioning (customer service, satisfaction, service quality, cycle time).</p> <p>F. Implement and evaluate risk management strategies to prevent and reduce various risks and exposures within a TDL organization as a way to demonstrate understanding of risk management as a tool for improving performance.</p> <p>3. Summarize various approaches for managing organizational risks.</p> <p>J. Develop plans for improving a TDL organizations performance in the areas of customer service and operations in order to achieve acceptable levels of</p>				

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	<p>customer satisfaction.</p> <ol style="list-style-type: none"> 1. Compare and contrast critical performance issues associated with customer service operations. 2. Summarize opportunities for improvement in areas of customer service and operations. 3. Execute the steps involved in a structured problem-solving process while developing a plan for improving customer service and operations performance. 				
	VII. Leadership Teamwork				
	<p>A. Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</p> <ol style="list-style-type: none"> 1. Employ leadership skills to accomplish organizational goals and objectives 2. Employ organizational and staff development skills to foster positive working relationships and accomplish organizational goals. 3. Employ teamwork skills to achieve collective goals and use team members talents effectively. 4. Establish and maintain effective working relationships with all levels of personnel and other departments in order to 				

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	<p>accomplish objectives and tasks.</p> <p>5. Conduct and participate in meetings to accomplish work tasks.</p> <p>6. Employ mentoring skills to inspire and teach others.</p>				
	<p>VIII. Ethics and Legal Responsibilities.</p> <p>A. Know and understand the importance of professional ethics and legal responsibilities.</p> <p>1. Apply ethical reasoning to a variety of workplace situations in order to make ethical decisions.</p> <p>2. Interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations.</p> <p>4. State the relationship between the employers expectations for demonstrating ethics and personal responsibility in the workplace and the various behaviors that express compliance with expectations.</p>				
	<p>IX. Employability and Career Development</p> <p>A. Know and understand the importance of employability skills.</p> <p>1. Identify and demonstrate</p>	<p>Calculations Budget Materials Ordering</p>	<p>A2- Whole numbers (1) Decimals (1) Percent (1)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1</p>

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	<p>positive work behaviors and personal qualities needed to be employable.</p> <p>2. Manage resources in relation to the position (Ie: budget, supplies, computer, etc).</p> <p>B. Explore, plan, and effectively manage careers.</p> <p>1. Develop a personal career plan to meet career goals and objectives.</p> <p>2. Identify and explore career opportunities in one or more career pathways to build an understanding of the opportunities available in the cluster.</p> <p>3. Recognize and act upon requirements for career advancement to plan for continuing education and training.</p> <p>6. Examine employment opportunities in entrepreneurship to consider entrepreneurship as an option for career planning.</p> <p>C. Demonstrate skills related to seeking and applying for employment to find and obtain a desired job.</p> <p>1. Use multiple resources to locate job opportunities.</p> <p>2. Prepare a resume</p> <p>3. Prepare a letter of application</p>				

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	<p>4. Complete an employment application</p> <p>5. Interview for employment</p> <p>6. List the standards and qualifications that must be met in order to enter a given industry.</p> <p>7. Employ critical thinking and decision making skills to exhibit qualifications to a potential employer.</p> <p>8. Maintain a career portfolio to document knowledge, skills, and experience, in a career field.</p> <p>9. Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.</p> <p>10. Identify and exhibit traits for retaining employment to maintain employment once secured.</p> <p>X. Technical Skills</p> <p>C. Analyze and assess the various roles and functions of necessary transportation-related technological systems used in the TDL community in order to demonstrate awareness of technical skills associated with the TDL industry.</p> <p>1. Compare and contrast key features of various supply chain or transit systems that transport</p>				

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	<p>people and freight.</p> <p>2. Compare and contrast key features of various systems for transportation information support systems.</p> <p>3. Evaluate the effectiveness of different features provided by various TDL information technology applications.</p>				
3	Safety				
	<p>V. Systems</p> <p>F. Implement and evaluate risk management strategies to prevent and reduce various risks and exposures within a TDL organization as a way to demonstrate understanding of risk management as a tool for improving performance.</p> <p>1. Summarize a rationale for implementing a risk management program within an organization.</p> <p>G. Demonstrate an understanding of the impact regulations have on business functioning by analyzing and summarizing the roles and functions of government in regulating and supporting TDL organizations within an industry.</p> <p>1. Summarize the role government plays in regulating</p>	<p>OSHA</p> <p>SB2</p> <p>Safety requirement</p> <p>Readings, current events, articles</p> <p>EPA</p> <p>CareerSafe</p>			

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	<p>domestic transportation operations.</p> <p>2. Summarize various government policies created to regulate international transportation operations.</p> <p>3. Summarize the impact of government policy on public transportation infrastructure management.</p> <p>4. Summarize the impact of government policy on health, safety, and environmental management in an organization.</p> <p>K. Assess and implement measures to demonstrate compliance with organizational policies and government laws and regulations common to organizations in the TDL community.</p> <p>1. Interpret relevant organizational policies and government laws and regulations for specific functions within a TDL organization.</p> <p>2. Assess compliance with policies and regulations using data and info from relevant reports and sources within the organization.</p> <p>3. Recommend improvements for compliance in an area found to be deficient based upon info produced during an assessment of compliance.</p>				

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	<p>VI. Safety, Health, and Environmental A. Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environment.</p> <ol style="list-style-type: none"> 1. Assess workplace conditions with regard to safety and health of employees using data collected through observations and experience. 2. Select appropriate personal protective equipment as needed for a safe workplace/jobsite. 3. Employ safety hierarchy and communication system within a workplace/jobsite. 4. Identify and take necessary precautions with hazardous operations and materials according to federal, state, and local regulations. 5. Identify safety and personal health hazards according to OSHA guidelines and the Right To Know list. 	<p>OSHA SB2 Safety requirement Readings, current events, articles EPA CareerSafe</p> <p>A4- Monitor/calculate VOC's, amount of pollution, transfer efficiency on paint gun</p>	<p>A4 (F1, F2, H1 (3)) Whole numbers (1) Percents (1) Decimals (1) Ratios (1)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.RP.2; 6.RP.3; 7.EE.2; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3</p>

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	<p>7. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and operation. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulations.</p> <p>8. Select and use a NIOSH approved supplied air (Fresh Air Make-Up) respirator system. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulations.</p> <p>9. Select and use the proper personal safety equipment for surface preparation, spray gun and related equipment operation. Paint mixing, matching and application, paint defects, and detailing (gloves, suits, hoods, eye and ear protection).</p> <p>B. Assess and implement methods to reduce sources of workplace hazards common in the TDL industry in order to promote a safe and accident free working environment.</p> <p>1. Demonstrate the steps involved in preventing workplace hazards.</p> <p>2. List and describe common sources of office, warehouse,</p>				

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	<p>and worksite accidents.</p> <p>Demonstrate compliance with protocols established for maintaining a healthy workplace based on an assessment of hazards.</p> <p>4. List and describe common sources of group health issues in the workplace.</p> <p>C. Complete work tasks in accordance with employee rights and responsibilities and employers obligations to maintain workplace safety and health.</p> <p>1. Identify rules and laws designed to promote safety and health in the workplace.</p> <p>2. State the rationale of rules and the laws designed to promote safety and health.</p> <p>D. Employ emergency procedures as necessary to provide aid in workplace accidents.</p> <p>1. Use knowledge of First Aid procedures as necessary.</p> <p>2. Use knowledge of CPR procedures as necessary.</p> <p>3. Use safety equipment as necessary.</p> <p>F. Describe the regulatory areas common to the TDL industry in order to demonstrate an understanding of key protocols for protecting health, safety, and</p>				

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	<p>the environment.</p> <ol style="list-style-type: none"> 1. Summarize the major areas addressed in health and safety laws and regulations. 2. Summarize the major areas addressed in environmental management laws and regulations. <p>G. Analyze and explain major aspects and benefits promoted by implementing health, safety, and environmental management systems in a TDL organization.</p> <ol style="list-style-type: none"> 1. Describe the major components of a health, safety and environmental mgt. system. 2. State the role and summarize the benefits of each component in a health, safety and environmental mgt. system. <p>H. Analyze and explain how government agencies promote compliance and improved health, safety, and environmental performance in TDL organizations.</p> <ol style="list-style-type: none"> 1. State the major measures and types of data utilized by government agencies to measure and monitor health, safety, and environmental risks and performance. 2. Identify opportunities for improvement of performance related to the problems found in an assessment of health, safety, 				

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	and environmental issues.				
	X. Technical Skills				
	<p>E. Summarize the potential impact technological systems may have on health, safety, and environmental risks in order to demonstrate an understanding of the impact a technical system can have in managing compliance.</p> <ol style="list-style-type: none"> 1. Summarize the major health, safety, and environmental risks and potential impacts associated with various technological systems. 2. Compare and contrast various processes for managing health, safety, and environmental risks and impacts within an organization. <p>G. Participate in efforts to improve the utilization and performance of technological systems to provide the correct data needed to make informed decisions dealing with managing risk and compliance.</p> <ol style="list-style-type: none"> 1. Summarize and prioritize reliability and performance problems based upon data 	<p>LEAN module (problem solving template) <i>This is an industry standard program and template for problem-solving and Systems thinking.</i></p>			

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	<p>collected during implementation of the technological system.</p> <p>2. Synthesize opportunities for improving performance based upon a prioritized list of reliability and performance problems associated with the technological system.</p> <p>3. Execute a structured problem-solving process to develop a plan for improving performance in a prioritized area.</p>				
4	Substrate Identification and Preparation				
	<p>X. Technical Skills</p> <p>H. Surface Preparation</p> <p>1. Inspect, remove, store, and replace exterior trim and components necessary for proper surface preparation.</p> <p>2. Soap and water wash entire vehicle: use appropriate trim and components necessary for proper surface preparation.</p> <p>3. Inspect and identify substrate, type of finish, surface condition, and film thickness; develop and document a plan for</p>	<p>H2—mix appropriately soap and water</p> <p>H3 inspect, measure film thickness</p>	<p>H2- Ratio for soap and water</p> <p>H3—Decimals, tolerance, measure</p>	<p>6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.3</p>	<p>G.MG.3; N.Q.3</p>

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
	<p>refinishing using a total product system.</p> <p>4. Strip paint to bare substrate (paint removal).</p> <p>5. Dry or wet sand areas to be refinished.</p> <p>6. Featheredge damaged areas to be refinished.</p> <p>8. Mask and protect other areas that will not be refinished.</p> <p>11. Apply two-component finishing filler to minor surface imperfections.</p> <p>12. Dry or wet sand area to which primer surface has been applied.</p> <p>13. Dry sand area to which two-component finishing filler has been applied.</p> <p>14. Remove dust from area to be refinished, including cracks, or moldings of adjacent areas.</p> <p>15. Clean area to be refinished using a final cleaning solution.</p> <p>22. Identify the types of rigid, semi-rigid or flexible plastic parts to be refinished.</p> <p>23. Identify aluminum parts to be refinished; determine the</p>				

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
5	Refinishing Equipment				
	<p>VI Safety Health Environment.</p> <p>A. Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.</p> <p>6. Inspect spray environment and equipment to ensure compliance with federal, state, and local regulations, and safety and cleanliness hazards.</p> <p>X. Technical Skills</p> <p>L. Spray gun and related equipment operations.</p> <p>1. Inspect, clean and determine condition of spray guns and related equipment (air hoses, regulators, air lines, air source, and spray environment).</p> <p>2. Check and adjust spray gun operation for HVLP (high volume, low pressure,) or compliant spray guns.</p> <p>3. Set-up (fluid needle, Nozzle, and cap), test, and adjust spray gun using fluid, air, and pattern control valves.</p> <p>4. Demonstrate an understanding of the operation of pressure spray equipment.</p>	<p>Pressure calculations for spray guns</p>	<p>X I (2-4)</p> <p>Whole numbers (1)</p> <p>Decimals (1)</p> <p>Metric measurements (1)</p> <p>Substituting data into formulas (2)</p> <p>Overlap percentages (1)</p> <p>Geometry—circles, hose diameter (Inner and outer) (2)</p> <p>M8, XI A 1</p> <p>Time (3)</p> <p>Ratio (hours of spray per month, to figure out how often you need to change the filter) (3)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.EE.2; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.G.1; 7.G.4; 7.G.6; 8.F.3; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.CED.4; G.CO.5; G.GMD.1; G.MG.3</p>

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
	<p>M. Environmental protection Agency Standards</p> <p>8. Routinely maintain booth and filters, select and properly install filters.</p> <p>11. Properly clean spray guns.</p> <p>XI. Facility and Mobile Equipment Maintenance Pathway</p> <p>A. Develop and manage preventative maintenance plans and systems to keep facility and mobile equipment inventory in operation.</p> <p>1. Develop preventative maintenance plans and systems to meet business and equipment manufacturer requirements.</p> <p>2. Apply strategies used to monitor and evaluate the performance of maintenance plans and systems.</p> <p>B. Assess, maintain, and improve system performance in order to keep facilities and equipment running at an optimum level of performance.</p> <p>1. Develop and execute repair plans based upon an assessment of the facility/equipment inventory.</p> <p>2. Develop plans for improving facilities/equipment/system performance.</p>				

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
	3. Execute repair plans for facilities and mobile equipment.				
6	Undercoats and Corrosion Protection				
	<p>X. Technical Skills</p> <p>H. Surface Preparation</p> <p>7. Apply suitable metal treatment of primer in accordance with total product systems.</p> <p>9. Mix primer, primer-surfacer, or primer sealer.</p> <p>10. Apply primer onto surface of repaired area.</p> <p>17. Apply suitable sealer to the area being refinisher.</p> <p>18. Scuff sand to remove nibs or imperfections from a sealer.</p> <p>19. Apply stone chip resistant coating.</p> <p>20. Restore corrosion-resistant coatings, caulking, and seam sealers to repaired areas.</p>	<p>Mixing product (sometimes by volume, sometimes by weight, sometimes by ratio)</p> <p>Holding gun at appropriate angle, distance, applying primer to the appropriate thickness</p>	<p>H7, H9</p> <p>Mixing product (volume, weight, ratio) (1)</p> <p>H10</p> <p>Angles (1)</p> <p>Measurement (linear) (1)</p> <p>Decimals (Mils, .002) (1)</p>	<p>6.G.2; 6.G.3; 7.G.6; 8.G.9; 6.EE.2; 7.G.1; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.3; 7.G.5</p>	<p>G.GMD.1; G.GMD.3; G.MG.2; G.MG.3; G.CO.9; G.CO.12; G.CO.13</p>
7	Mixing and Applying Topcoat				
	<p>I. Academic Foundations</p> <p>B. Demonstrate mathematics knowledge and skills required to</p>	I B 4, X J (2,3,12)	<p>Whole numbers (1)</p> <p>Fractions (2)</p> <p>Decimals (1)</p>	<p>6.NS.1; 6.EE.2; 7.NS.1; 7.NS.2; 7.NS.3; 6.NS.2;</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3; G.GPE.7;</p>

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
	<p>pursue the full range of post-secondary education and career opportunities.</p> <p>4. Apply data and measurement to solve a problem.</p> <p>X. Technical Skills</p> <p>H. Surface Preparation</p> <p>16. Remove, with a tack rag, any dust or lint particles from the area to be refinished.</p> <p>J. Paint Mixing, Matching, and Applying</p> <p>2. Shake, stir, reduce catalyze/activate, and strain refinish materials.</p> <p>3. Apply finish using appropriate spray techniques (gun angle, gun distance, gun speed, and spray pattern overlap) for the finish being applied.</p> <p>5. Apply single stage topcoat.</p> <p>7. Apply basecoat/clearcoat for overall refinishing.</p> <p>8. Remove nibs or imperfections from basecoat.</p> <p>9. Refinish rigid or semi-rigid and plastic parts.</p> <p>10. Refinish flexible plastic parts.</p> <p>12. Identify and mix paint using a formula.</p>	<p>Gun angle, distance, speed, arc Overlap (50%) Paint mixing</p>	<p>Percents (1)</p> <p>Ratio and proportion</p> <ul style="list-style-type: none"> • Ratio (1) • Proportion (1) • Direct and indirect variation (3) <p>Customary Measure</p> <ul style="list-style-type: none"> • Ruler (1) • Linear (1) • Area (2) • Volume (1) • Weight (1) • Capacity (1) • Temperature (1) • Time (1) <p>Metric Measurement</p> <ul style="list-style-type: none"> • Mass and weight (1) • Volume and capacity (1) • Temperature (2) • Conversions (1) <p>Algebra</p> <ul style="list-style-type: none"> • Solving linear equations (2) • Substituting data into formulas (1) • Graphing linear equations (3) <p>Geometry</p> <ul style="list-style-type: none"> • Angles (1) <p>Statistics</p> <ul style="list-style-type: none"> • Charts and tables (1) 	<p>6.NS.3; 6.NS.5; 7.EE.2; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3; 6.G.1; 6.G.2; 6.G.3; 7.G.1; 7.G.4; 7.G.6; 6.G.2; 6.G.3; 8.G.9</p> <p>6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4; 6.EE.2; 7.G.5</p> <p>6.EE.2; 6.EE.3; 6.SP.4;</p>	<p>G.MG.2; G.GMD.1; G.GMD.3; G.MG.1</p> <p>A.CED.1; A.CED.2; A.CED.3; A.CED.4; A.REI.3; A.REI.4; A.REI.10; F.LE.1; F.LE.2; F.LE.5; F.IF.5; A.SSE.1; F.BF.1; S.ID.6; G.CO.9; G.CO.12; G.CO.13</p> <p>S.IC.1; S.IC.2; S.IC.3;</p>

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			Mean measurements (2)	6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4; 6.SP.1; 6.SP.2	S.IC.4; S.IC.5; S.IC.6; S.ID.1; S.ID.2
8	Final Detailing				
	<p>III. Problem-Solving and Critical Thinking D. Develop, implement and evaluate solutions to transportation, distribution or logistics related performance problems using a structured problem-solving process in order to improve business functioning. 2. Develop and represent a comprehensive mapping of potential root and indirect causes using commonly accepted mapping methods such as the fishbone diagram and/or flowchart.</p> <p>V. Systems B. Implement quality control systems and practices to ensure quality products and services. 1. Describe quality control standards and practices common to the workplace.</p> <p>X. Technical Skills L. Final Detail 1. Apply decals, transfers, tapes, woodgrains, pinstripes, (painted and taped) etc.</p>	<p>Problem solving template</p> <p>EDP's</p> <p>Textbooks use troubleshooting flowcharts and gant scheduling charts</p> <p>Applying Decals/vinyl</p>	<p>Linear measurements (XL1) (1)</p> <p>Geometric reflections (transfers must be backwards)</p>	6.RP.3; 7.RP.1	N.Q.1; N.Q.2; N.Q.3; S.ID.6

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	2. Buff and polish finish to remove defects as required. 3. Clean interior, exterior, and glass. 4. Clean body openings (door jambs and edges). 5. Remove overspray, 6. Perform pre-delivery detail and inspection. START HERE				
9	Advance Color Mixing/Refinishing				
	III. Problem-Solving and Critical Thinking D. Develop, implement and evaluate solutions to transportation, distribution, or logistics related performance problems using a structured problem-solving process in order to improve business functioning. 6. Monitor selected solution performance through data collection and analysis. 7. Manage implementation of the selected solution using prescribed strategic plan. 8. Evaluate performance of solution implemented over time based upon data collected and analyzed throughout implementation. X. Technical Skills D. Measure, analyze and manage	Timelines based on delivery estimates of parts to minimize car time in shop Analysis of most popular colors to develop the paint mix Paint mixing calculations—like a recipe	Mean (average paint color formula based on 3 test points) XJ (4,6,11,13,14,15) Whole numbers Decimals Percents Ratios Customary measure <ul style="list-style-type: none"> • Volume • Weight • Capacity • Temperature • Time Metric measurement <ul style="list-style-type: none"> • Mass and weight • Volume and capacity Charts and tables (color wheel)	6.SP.1; 6.SP.2; 7.SP.2 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.2; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3; 6.G.2; 6.G.3; 7.G.6; 8.G.9; 6.EE.2; 7.G.1; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	S.ID.1; S.ID.2 A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3; G.GMD.1; G.GMD.3; G.MG.2; G.MG.1; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1

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	<p>the output of technological systems in order to enhance performance and reliability of timing, cost projecting and forecasting within transportation operations.</p> <ol style="list-style-type: none"> 1. Summarize the concept of reliability and its usefulness in evaluating technical system performance. 2. Summarize how reliability and overall system performance is measured and monitored. 3. Summarize the importance of extracting accurate data from technological systems to improve the performance and forecasting of TDL organizations. 4. Summarize the impact a technological system with poor reliability may have on performance within a TDL organization. 5. Summarize methods employees can use to contribute to improved reliability and performance such as design, selection, maintenance and operation/utilization. <p>H. Surface Preparation</p> <ol style="list-style-type: none"> 21. Prepare adjacent panels for blending. <p>J. Paint Mixing, Matching, and Applying</p> <ol style="list-style-type: none"> 4. Apply selected product on test and let-down panel; check 				

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	<p>for color match.</p> <p>6. Apply basecoat/clearcoat for panel refinishing.</p> <p>11. Apply multistage coats for panel blending or overall refinishing.</p> <p>13. Identify poor hiding colors; determine necessary match.</p> <p>15. Identify alternative color formula to achieve a blendable match.</p>				
10	Paint Problems/Defects				
	<p>III. Problem-Solving and Critical Thinking</p> <p>D. Develop, implement and evaluate solutions to transportation, distribution or logistics related performance problems using a structured problem-solving process in order to improve business functioning.</p> <p>3. Analyze the features, benefits and constraints associated with alternative solutions to the performance issue.</p> <p>4. Select best solutions for further testing based upon available data and historical information.</p> <p>V. Systems</p> <p>B. Implement quality control systems and practices to ensure quality products and services.</p>				

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	<p>2. Diagnose and make necessary corrections or improvements to a technical system in a business, industry, or simulated work place setting.</p> <p>X. Technical Skills K. Paint Defects- Causes and Cures</p> <ol style="list-style-type: none"> 1. Identify blistering (raising or the paint surface, air entrapment); determine the causes and correct the condition. 2. Identify blushing (milky or hazy formation); determine the causes and correct the condition. 3. Identify a dry spray appearance in the paint surface; determine the causes and correct the condition. 4. Identify the presence of fish-eyes (crater-like openings) in the finish; determine the causes and correct the condition. 5. Identify lifting; determine the causes and correct the condition. 6. Identify clouding (mottling and streaking in metallic finishes); determine the causes and correct the condition. 7. Identify orange peel; determine the causes and correct the condition. 8. Identify overspray; determine the causes and 				

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	<p>correct the condition.</p> <p>9. Identify solvent popping in freshly painted surface; determine the causes and correct the condition.</p> <p>10. Identify sags and runs in paint surface; determine the causes and correct the condition.</p> <p>11. Identify sanding marks or sandscratch swelling; determine the causes and correct the condition.</p> <p>12. Identify contour mapping/edge mapping while finish is drying; determine the causes and correct the condition.</p> <p>13. Identify color difference (off shade); determine the causes and correct the condition.</p> <p>14. identify tape tracking; determine the causes and correct the condition.</p> <p>15. Identify low gloss condition; determine the causes and correct the condition.</p> <p>16. Identify poor adhesion; determine the causes and correct the condition.</p> <p>17. Identify paint cracking (shrinking, splitting, crowsfeet, or line-checking, micro-checking) determine the causes and correct the condition.</p> <p>18. Identify corrosion determine the causes and correct the condition.</p>				

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	<p>19. Identify dirt or dust in the paint surface; determine the causes and correct the condition.</p> <p>20. Identify water spotting; determine the causes and correct the condition.</p> <p>21. Identify finish damage caused by bird droppings, tree sap, and other natural causes; correct the condition.</p> <p>22. Identify finish damage caused by airborne contaminants (acids, soot, rail dust, and other industrial-related causes) correct the condition.</p> <p>23. Identify die-back conditions (dulling of the paint film showing haziness); determine the causes and correct the condition.</p> <p>24. Identify chalking (oxidation); determine the causes and correct the condition.</p> <p>25. Identify bleed-through (staining) determine the causes and correct the condition.</p> <p>26. Identify pin-holing; determine the causes and correct the condition.</p> <p>27. Identify buffing-related imperfections (swirl marks, wheel burns); correct the condition.</p> <p>28. Identify pigment flotation (color change through film build); determine the causes and correct the condition.</p>				

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11	Damage Analysis Estimating				
	<p>I. Academic Foundations</p> <p>A. Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities.</p> <p>2. Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communications in the workplace.</p> <p>5. Use correct grammar, punctuation, and terminology to write and edit documents.</p>	<p>I B 1</p> <p>LEAN module</p> <p>Problem solving template</p> <p>Estimating and work order</p>	<p>I B 1,2,3,5,6</p> <p>Whole numbers (1)</p> <p>Decimals(1)</p> <p>Fractions (1)</p> <p>Charts and graphs (1)</p> <p>Substituting data into formulas (1)</p> <p>II A 1,2</p> <p>Charts and graphs (1)</p> <p>III C7, D1,5</p> <p>Charts and tables (1)</p> <p>Line graphs (1)</p> <p>Time</p> <p>Decimals (money)</p> <p>V I1-3</p> <p>Decimals</p> <p>Whole numbers</p> <p>Ratios</p>	<p>6.NS.2; 6.NS.3;</p> <p>6.NS.5; 7.NS.1;</p> <p>7.NS.2; 7.NS.3;</p> <p>6.NS.1; 6.EE.2;</p> <p>7.EE.3; 6.EE.2; 6.EE.3;</p> <p>6.SP.4; 6.SP.5; 7.SP.2;</p> <p>7.SP.3; 7.SP.4; 8.SP.3;</p> <p>8.SP.4</p>	<p>A.APR.1; A.APR.7;</p> <p>N.RN.3; N.Q.1; S.IC.1;</p> <p>S.IC.2; S.IC.3; S.IC.4;</p> <p>S.IC.5; S.IC.6; S.ID.1;</p> <p>A.CED.4; G.MG.3</p>

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	<p>B. Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career opportunities.</p> <ol style="list-style-type: none"> 1. Identify whole numbers, decimals, and fractions. 2. Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication, and division. 3. Demonstrate use of relational expressions such as equal to, not equal, greater than, less than, etc. 5. Analyze mathematical problem-solving statements for missing and/or irrelevant data. 6. Construct charts/tables/graphs from functions and data. 				
	<p>II. Communications</p> <p>A. Develop and interpret tables, charts, and figures to support written and oral communications.</p> <ol style="list-style-type: none"> 1. Create tables, charts, and figures to support written and oral communications. 2. Interpret tables, charts, and figures used to support written and oral communication. <p>D. Exhibit public relations skills to increase internal/external customer client satisfaction.</p>				

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
	<p>1. Communicate effectively when developing positive customer/client relationships.</p>				
	<p>III. Problem-solving and Critical Thinking. A. Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation. 1. Employ critical thinking skills independently and in teams to</p>				
	<p>solve problems and make decisions. (eg: analyze, synthesize and evaluate). 4. Conduct technical research to gather info necessary for decision-making. B. Formulate ideas, proposals and solutions to transportation, distribution, and/or logistics related problems in order to ensure effective and efficient delivery of products or services to targeted consumers. 7. Appraise the best solution based on factors such as risk involved, cost incurred, and benefits gained. 8. Present a proposed solution to a client along with the logic and rationale for selecting the solution. C. Analyze and evaluate ideas,</p>				

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	<p>proposals, and solutions to transportation, distribution and logistics related problems in order to select the best deliverable to meet business objectives.</p> <ol style="list-style-type: none"> 1. Confirm definition of problem and objectives for the proposed solution. 2. Appraise the validity of the constraints and parameters presented in the proposal. 3. Evaluate the accuracy of the basic assumptions outlined in the proposal. 4. Appraise the quality of info used to support a solution. 5. Evaluate the data analysis techniques and data presented in support of the proposed solution. 6. Evaluate the logic and reasoning used to develop the proposed solution. 7. Assess the potential impact of the risks, costs, and benefits of testing and implementing the proposed solution. 8. Make recommendations on supporting the proposed solution based upon sound reasoning and data. <p>D. Develop, implement and evaluate solutions to transportation, distribution, or logistics related performance</p>				

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	<p>problems using a structured problem-solving process to improve business functioning.</p> <ol style="list-style-type: none"> 1. Describe the performance problem completely and accurately using data, graphs, and charts. 5. Formulate an implementation strategy for one of the solutions that considers multiple variables such as time, costs, scope, and quality. 				
	<p>IV. Information Technology Applications</p> <p>B. Employ technological tools to expedite workflow.</p> <ol style="list-style-type: none"> 13. Create a spreadsheet. 14. Perform calculations and analyses on data using a spreadsheet. <p>Manipulate data elements.</p> <ol style="list-style-type: none"> 16. Manage interrelated data elements. 17. Analyze interrelated data elements. 18. Generate reports showing interrelated data elements. 19. Facilitate group work through management of shared schedule and contact information. 25. Operate computer driven equipment and machines. 				

Segment	CTE Segments/Performance Elements	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
	<p>V. Systems</p> <p>H. Manage ongoing customer relationships with both internal and external TDL customer groups in order to maintain ongoing business.</p> <ol style="list-style-type: none"> 1. Generate a list of potential customer needs and requirements based upon info gathered through client interactions. 2. Generate a list of next steps that will fulfill customer requirements and produce customer satisfaction. 3. State how to appropriately respond to customer problems and complaints in an effective and efficient manner. <p>I. Develop and manage plans and budgets to accomplish TDL organizational goals and objectives.</p> <p>Develop a work plan and budget that effectively and efficiently allocates people and resources using relevant data about the organization and/or workgroup.</p> <ol style="list-style-type: none"> 2. Develop a report that summarizes the key info about the performance and utilization of resources within an organization and/or workgroup. 3. Based upon organization and/or workgroup data, modify a 				

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	<p>program or work and related budgets to improve alignment with a TDL organizations goals and objectives.</p>				
	<p>VIII. Ethics and Legal Responsibilities B. Evaluate and apply strategies for responding to unethical or illegal actions of individuals and organizations in the TDL industry in order to demonstrate how to respond to unethical situations. 2. Recommend procedures and rationale for applying the best strategy after thorough consideration of alternatives.</p>				
	<p>X. Technical Skills A. Employ information management techniques and strategies in the workplace to assist in decision-making. 1. Use info literacy skills when accessing, evaluating and disseminating info. 2. Describe the nature and scope of info management. 3. Maintain records to facilitate ongoing business operations. F. Evaluate and recommend a technological system for implementation in a TDL organization in order to demonstrate an understanding</p>				

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	<p>of the factors involved in selecting an appropriate system to manage risk and compliance.</p> <ol style="list-style-type: none"> 1. Summarize organizational requirements and selection criteria for technological systems. 2. Assess alternative technological systems based upon a set of requirements and selection criteria. 3. Recommend technological system that best fits the organization in light of the corporate and regulatory requirements identified. <p>J. Paint Mixing, Matching, and Applying</p> <ol style="list-style-type: none"> 1. Identify type and color code by manufacturer’s vehicle info label. 				
12	Refinishing Certifications				
	<p>V. Systems</p> <p>D. Monitor, analyze and improve performance within a TDL organization using metrics common to the TDL community as a way to demonstrate understanding of how</p>	<p>Time/planning for licensing certification</p> <p>SB2.org CareerSafe Transfer efficiency</p>	<p>IX B 5 Time</p> <p>X M 1-10 Whole numbers (1) Decimals (1)</p>	<p>6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.RP.2; 6.RP.3; 7.EE.2; 6.EE.2; 7.EE.3; 6.G.1; 7.G.4; 7.G.6; 8.F.3</p>	<p>A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.CED.4; G.CO.5; G.GMD.1</p>

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	<p>organizations manage and improve business functioning.</p> <p>4. State how metrics for organizational health, safety, and environmental compliance may be used to identify areas for improvement in business functioning.</p>		<p>Metric measurements (1)</p> <p>Substituting data into formulas (2)</p> <p>Overlap percentages (1)</p> <p>Geometry—circles,</p>		
	<p>IX. Employability and Career Development</p> <p>B. Explore, plan, and effectively manage careers.</p> <p>4. Continue professional development to keep current on relevant trends and info within the industry.</p> <p>5. Examine licensing, certification and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.</p>		<p>hose diameter (Inner and outer) (2)</p> <p>Time (3)</p> <p>Ratio (hours of spray per month, to figure out how often you need to change the filter) (3)</p>	<p>6.G.1; 7.G.4; 7.G.6; 8.F.3; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3</p>	<p>G.CO.5; G.GMD.1; G.MG.3</p>
	<p>X. Technical Skills</p> <p>M. Environmental Protection Agency standards.</p> <ol style="list-style-type: none"> 1. Define coatings that contain targeted Hazardous Air Pollutants (HAPs). 2. Define purpose of the NESHAP ruling. 3. Identify ways to reduce the amount of hazardous liquid and solid waste that is 				

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	<p>generated during the refinishing and equipment cleaning processes.</p> <p>4. Explain how to extend the longevity of spray booth fillers through more efficient processes.</p> <p>Identify standards for spray booth and prep</p> <ol style="list-style-type: none"> 1. station requirements and standards. 2. Select, set up, and operate spray gun equipment. 3. 7. Demonstrate best spray technique to improve transfer efficiency and minimize overspray. 4. 9. Demonstrate control technique requirements, including use of high volume, low pressure (HVLP) spray guns and 98% efficient spray booths. 5. 10. Demonstrate reporting and record/keeping requirements. 				

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