

PROJECT 1.1 – CUSTOMERS RULE (page 9)

PROJECT 1.2 – DOWNTIME COSTS (page 12)

Topic: Customer Relationships	Topic: Production Implications of Maintenance
<p>Communications</p> <ul style="list-style-type: none"> Identify and prepare support materials to accompany oral presentation. Interpret verbal behaviors to enhance communication. Interpret nonverbal behaviors to enhance communication. Interpret message/information given to clarify information. Interpret information found in tables, charts and figures to support written and oral communications. Use tables, charts and figures to support written and oral communications. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. Prepare ideas, proposals and solutions to problems using concrete terms. Analyze and evaluate ideas, proposals and solutions to problems. <p>Information Technology Applications</p> <ul style="list-style-type: none"> Perform calculations and analysis on data. <p>Systems</p> <ul style="list-style-type: none"> Explain the role and major functions of manufacturing businesses. Explain how manufacturing businesses manage performance. Explain how manufacturing businesses manage customer relationships. Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> Collaborate with others. Conduct and participate in meetings. Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. Exhibit commitment to the organization. 	<p>Communications</p> <ul style="list-style-type: none"> Select and use the reading strategy or strategies needed to fully comprehend a written document. Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. Locate written information needed by co-workers and clients/participants. Use correct grammar, spelling, punctuation and capitalization to prepare written documents. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. Analyze and evaluate ideas, proposals and solutions to problems. <p>Information Technology Applications</p> <ul style="list-style-type: none"> Search for information and resources. Prepare simple documents and other business communications. <p>Systems</p> <ul style="list-style-type: none"> Explain how manufacturing businesses manage performance. Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. Explain how planning and budgeting are used to accomplish organizational goals and objectives. Explain how planning is used to improve overall performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> Discuss how specific organizational policies and rules influence a specific work situation.

PROJECT 1.3 – IT’S IN THE DESIGN (page 15)

<p>Topic: Design for the Market</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Organize information for use in written and oral communications. • Interpret verbal behaviors to enhance communication. • Interpret nonverbal behaviors to enhance communication. • Interpret message/information given to clarify information. • Respond with restatement and clarification techniques to clarify information. • Interpret information found in tables, charts and figures to support written and oral communications. • Use tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Prepare simple documents and other business communications. • Prepare reports and other business communications integrating graphics and other non-text elements. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Collaborate with others. • Conduct and participate in meetings. • Develop plans to improve performance. 	<p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. <p>Technical Skills</p> <ul style="list-style-type: none"> • Understand the planning and layout processes used in manufacturing.

PROJECT 1.4 – DELIVER THE GOODS (page 20)

PROJECT 1.5 – GET CONTROL (page 27)

Topic: Crossdocking	Topic: Japanese 5S System
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Organize information for use in written and oral communications. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Interpret information found in tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Search for information and resources. • Prepare simple documents and other business communications. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use computer skills to design and develop written and supporting material. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Search for information and resources. • Prepare reports and other business communications, integrating graphics and other non-text elements. • Manage, analyze and report on interrelated data elements. • Operate computer-driven equipment and machines. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 2 – INNOVATE WITH CORN (page 31)

<p>Part One: The Customer’s Voice (page 32)</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Interpret verbal behaviors to enhance communication. • Interpret message/information given to clarify information. • Interpret information found in tables, charts and figures to support written and oral communications. • Use tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how manufacturing businesses manage customer relationships. • Explain how planning and budgeting are used to accomplish organizational goals and objectives. • Explain how planning is used to improve overall performance. 	<p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 2 – INNOVATE WITH CORN

Part Two: How It All Begins <i>(page 33)</i>	Part Three: Adjust the Formula – Find the Ideal Mixture <i>(page 34)</i>
<p>Communications</p> <ul style="list-style-type: none"> • Interpret message/information given to clarify information. • Respond with restatement and clarification techniques to clarify information. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. • Interpret information found in tables, charts and figures to support written and oral communications. • Use tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how planning and budgeting are used to accomplish organizational goals and objectives. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Conduct and participate in meetings. • Develop plans to improve performance. <p style="text-align: right;"><i>(continued)</i></p>

PROJECT 2 – INNOVATE WITH CORN

<p>Part Three: Adjust the Formula – Find the Ideal Mixture <i>(continued)</i></p>	<p>Part Four: Check It Out – Is This Idea Feasible? <i>(page 35)</i></p>
<p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. <p>Technical Skills</p> <ul style="list-style-type: none"> • Understand the planning and layout processes used in manufacturing. • Understand how materials can be processed using tools and machines. • Understand inspection and quality control in the manufacturing process. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. • Interpret information found in tables, charts and figures to support written and oral communications. • Use tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p style="text-align: right;"><i>(continued)</i></p>

PROJECT 2 – INNOVATE WITH CORN

Part Four: Check It Out – Is This Idea Feasible? <i>(continued)</i>	Part Five: Analyze Shipping <i>(page 36)</i>
<p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Interpret information found in tables, charts and figures to support written and oral communications. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how planning and budgeting are used to accomplish organizational goals and objectives. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 2 – INNOVATE WITH CORN

<p>Part Six: Analyze the Product’s Life Cycle <i>(page 36)</i></p>	
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Locate written information needed by co-workers and clients/participants. • Organize information for use in written and oral communications. • Use computer skills to design and develop written and supporting material. • Interpret information found in tables, charts and figures to support written and oral communications. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Search for information and resources. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain the roles and functions of government in regulating and supporting manufacturing businesses. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Demonstrate commitment to policies and procedures. 	<p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. <p>Ethics and Legal Responsibilities</p> <ul style="list-style-type: none"> • Apply ethical reasoning to different workplace situations. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 3.1 – TEST OIL (page 46)

PROJECT 3.2 – GO WITH THE FLOW (page 50)

Topic: Lubrication	Topic: Oil Viscosity
<p>Communications</p> <ul style="list-style-type: none"> • Use computer skills to design and develop written and supporting material. • Interpret message/information given to clarify information. • Respond with restatement and clarification techniques to clarify information. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how planning is used to improve overall performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. • Use tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how planning is used to improve overall performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 3.3 – THE RIPPLE EFFECT (page 53)

PROJECT 3.4 – INTERNAL AUDIT (page 60)

Topic: Vibration	Topic: Six Sigma
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Use computer skills to design and develop written and supporting material. • Interpret nonverbal cues to enhance communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document to use in an actual situation. • Organize information for use in written and oral communications. • Use computer skills to design and develop written and supporting material. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 3.5 – BORDER CROSSINGS (page 66)

Topic: Certification	
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Locate written information needed by co-workers and clients/participants. • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Search for information and resources. • Prepare simple documents and other business communications. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how planning is used to improve overall performance. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Describe the major regulatory areas. 	<p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 4.1 – DESIGN BY CONSENSUS (page 72)

<p>Topic: Perfecting a Customer’s Design</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use computer skills to design and develop written and supporting material. • Prepare oral presentation to provide information for intended purpose and audience. • Identify and prepare support materials to accompany an oral presentation. • Deliver a presentation to sustain listeners’ attention and interest. • Interpret verbal behaviors to enhance communication. • Interpret nonverbal behaviors to enhance communication. • Interpret message/information given to clarify information. • Respond with restatement and clarification techniques to clarify information. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Deliver presentations with supporting materials. 	<p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Conduct and participate in meetings. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. • Exhibit commitment to the organization. <p>Technical Skills</p> <ul style="list-style-type: none"> • Understand the planning and layout processes used in manufacturing.

PROJECT 4.2 – PROACTIVE IMPROVEMENT (page 77)

PROJECT 4.3 – ADDRESS THE ISSUES (page 80)

Topic: Stock Designs	Topic: Address Labels
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. • Identify and prepare support materials to accompany oral presentation. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use computer skills to design and develop written and supporting material. • Use tables, charts and figures to support written and oral communications. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Create a spreadsheet. • Perform calculations and analysis on data. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 4.4 – DIAMOND DRIFT LOGO DESIGN (page 83)

<p>Topic: Snowboard Logo Design and Cost</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Use knowledge of audience and their needs to prepare written documents. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. • Interpret information found in tables, charts and figures to support written and oral communications. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how planning and budgeting are used to accomplish organizational goals and objectives. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. 	<p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. <p>Technical Skills</p> <ul style="list-style-type: none"> • Understand the planning and layout processes used in manufacturing.

PROJECT 4.5 – PLAN THE WORK AND WORK THE PLAN (page 87)

<p>Topic: Organizational Skills</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Organize information for use in written and oral communications. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how planning is used to improve overall performance. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Demonstrate commitment to policies and procedures. • Develop plans to improve safety performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. <p>Ethics and Legal Responsibilities</p> <ul style="list-style-type: none"> • Demonstrate awareness of legal responsibilities for different roles and functions within organizations. • Apply ethical reasoning to different workplace situations. 	<p>Employability and Career Development</p> <ul style="list-style-type: none"> • Discuss how specific organizational policies and rules influence a specific work situation. • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. • Exhibit commitment to the organization.

PROJECT 5.1 – EVERY LINK COUNTS (page 92)

<p>Topic: Supply Chain Management</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Locate written information needed by co-workers and clients/participants. • Organize information for use in written and oral communications. • Use knowledge of audience and their needs to prepare written documents. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. • Use computer skills to design and develop written and supporting material. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how planning and budgeting are used to accomplish organizational goals and objectives. • Explain how planning is used to improve overall performance. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Describe the major regulatory areas. • Demonstrate commitment to policies and procedures. 	<p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Develop plans to improve performance. <p>Ethics and Legal Responsibilities</p> <ul style="list-style-type: none"> • Distinguish between ethical and legal responsibilities. • Apply ethical reasoning to different workplace situations.

PROJECT 5.2 – GRAB THAT DRINK (page 97)

PROJECT 5.3 – FILL THE TANK (page 101)

Topic: Sports Drink Container Size	Topic: Volume
<p>Communications</p> <ul style="list-style-type: none"> • Use computer skills to design and develop written and supporting material. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. <p>Technical Skills</p> <ul style="list-style-type: none"> • Understand the planning and layout processes used in manufacturing. 	<p>Communications</p> <ul style="list-style-type: none"> • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Use tables, charts and figures to support written and oral communication. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how changes outside the manufacturing business impact the manufacturing business.

PROJECT 5.4 – IT’S ALL IN THE PACKAGE (page 104)

PROJECT 5.5 – FOLLOW THE TRAIL (page 107)

Topic: Packaging Improvement	Topic: RFID Technology
<p>Communications</p> <ul style="list-style-type: none"> • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Use tables, charts and figures to support written and oral communication. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. • Explain how manufacturing businesses manage customer relationships. • Explain how planning is used to improve overall performance. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Describe the major regulatory areas. • Demonstrate commitment to policies and procedures. <p>Ethics and Legal Responsibilities</p> <ul style="list-style-type: none"> • Distinguish between ethical and legal responsibilities. • Apply ethical reasoning to different workplace situations. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Discuss how specific organizational policies and rules influence a specific work situation.

PROJECT 6.1 – BONDING TIME (page 113)

PROJECT 6.2 – IF IT’S GOOD FOR BUSINESS ... (page 116)

Topic: Nanotechnology	Topic: Pareto Analysis
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use computer skills to design and develop written and supporting material. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Search for information and resources. <p>Systems</p> <ul style="list-style-type: none"> • Explain how changes outside the manufacturing business impact the manufacturing business. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Organize information for use in written and oral communications. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. <p>Problem Solving And Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain how manufacturing businesses manage performance. • Explain how planning is used to improve overall performance. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 6.3 – GETTING THE RIGHT ANGLE *(page 122)*

PROJECT 6.4 – WATER: THE LIQUID OF LIFE *(page 125)*

Topic: Ladder Safety	Topic: Water Conservation
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Use tables, charts and figures to support written and oral communication. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role of risk management in reducing risks and improving performance in manufacturing businesses. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Describe the major regulatory areas. • Explain how government agencies ensure compliance and promote improved performance. • Demonstrate commitment to policies and procedures. <p>Ethics and Legal Responsibilities</p> <ul style="list-style-type: none"> • Demonstrate awareness of legal responsibilities for different roles and functions within organizations. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Discuss how specific organizational policies and rules influence a specific work situation. 	<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Interpret verbal behaviors to enhance communication. • Interpret nonverbal behaviors to enhance communication. • Interpret message/information given to clarify information. • Respond with restatement and clarification techniques to clarify information. • Use tables, charts and figures to support written and oral communication. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Analyze and evaluate ideas, proposals and solutions to problems. • Develop solutions to performance problems using a structured problem-solving process. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how planning is used to improve overall performance. <p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Describe the major regulatory areas. • Demonstrate commitment to policies and procedures. <p>Leadership and Teamwork</p> <ul style="list-style-type: none"> • Provide group leadership. • Collaborate with others. • Develop plans to improve performance. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation. • Demonstrate flexibility and willingness to learn new knowledge and skills.

PROJECT 6.5 – CRADLE-TO-GRAVE MANUFACTURING (page 129)

<p>Topic: Life Cycle of a Product</p>	
<p>Communications</p> <ul style="list-style-type: none"> • Select and use the reading strategy or strategies needed to fully comprehend a written document. • Interpret, transcribe and communicate information, data and observations from a written document for use in an actual situation. • Locate written information needed by co-workers and clients/participants. • Organize information for use in written and oral communications. • Use correct grammar, spelling, punctuation and capitalization to prepare written documents. <p>Problem Solving and Critical Thinking</p> <ul style="list-style-type: none"> • Describe the value of using problem-solving and critical-thinking skills to improve a situation or process. • Prepare ideas, proposals and solutions to problems using concrete terms. • Analyze and evaluate ideas, proposals and solutions to problems. <p>Information Technology Applications</p> <ul style="list-style-type: none"> • Search for information and resources. • Prepare simple documents and other business communications. <p>Systems</p> <ul style="list-style-type: none"> • Explain the role and major functions of manufacturing businesses. • Explain how manufacturing businesses manage performance. • Explain how changes outside the manufacturing business impact the manufacturing business. • Explain the roles and functions of government in regulating and supporting manufacturing businesses. • Explain how planning and budgeting are used to accomplish organizational goals and objectives. • Explain how planning is used to improve overall performance. 	<p>Safety, Health and Environmental</p> <ul style="list-style-type: none"> • Describe the major regulatory areas. • Explain how government agencies ensure compliance and promote improved performance. • Demonstrate commitment to policies and procedures. <p>Ethics and Legal Responsibilities</p> <ul style="list-style-type: none"> • Distinguish between ethical and legal responsibilities. • Demonstrate awareness of legal responsibilities for different roles and functions within organizations. • Apply ethical reasoning to different workplace situations. <p>Employability and Career Development</p> <ul style="list-style-type: none"> • Demonstrate flexibility and willingness to learn new knowledge and skills.