Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
1. The student will understand the advantages and disadvantages of various manufacturing methods.			**#4 Functions and Algebraic Thinking:** Skills used are minimally complex, including a basic understanding of algebraic ideas and representation; an ability to create and use symbolic and graphical representations of patterns; an ability to simplify expressions and solve simple equations and inequalities; and an ability to describe, generalize, and use basic types of functional relationships. **#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#7 Mathematical Reasoning: Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	
a) The student will be able to investigate and evaluate appropriate manufacturing methods.	**Reading Comprehension (Focus on Informational Materials):** **2.3** - Generate relevant questions about readings on issues that can be researched. **2.5** - Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.		**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
	Listening and Speaking Strategies Comprehension: **1.1** - Formulate judgments about the ideas under discussion and support those judgments with convincing evidence.			
b) Establish an effective sequence of operations for a given design problem.		**Physics Conservation of Energy and Momentum 2:** The laws of conservation of energy and momentum provide a way to predict and describe the movement of objects. **Heat and Thermodynamics 3**: Energy cannot be created or destroyed, although in many processes energy is transferred to the environment as heat.	**#6 Mathematical Methods:** Problems lend themselves to a single solution that produces clear or obvious results. Methods are minimally complex and include determining what a problem is asking; making sensible, reasonable estimates; and using a variety of approaches to solve problems.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#8 Mathematical Tools: Tools used are minimally complex. Basic tools – such as pencil and paper, mental computation, and measuring devices (e.g., rulers, graph paper, measuring cups, scales), mathematical texts, manipulatives, and calculators – are used to solve problems.	
c) Will use appropriate manufacturing processes to produce an actual product.				
2. The student will understand the machinery and equipment used to manufacturing a given product.				

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
a) Will demonstrate the application of computerized controllers to operate machinery, equipment and processes			**#8 Mathematical Tools:** Tools used are minimally complex. Basic tools – such as pencil and paper, mental computation, and measuring devices (e.g., rulers, graph paper, measuring cups, scales), mathematical texts, manipulatives, and calculators – are used to solve problems.	
b) Will demonstrate the use and application of hydraulic, pneumatic, and mechanical controls in manufacturing processes.		**Physics Motion and Forces 1:** Newton's laws predict the motion of most objects. **Conservation of Energy and Momentum 2:** The laws of conservation of energy and momentum provide a way to predict and describe the movement of objects. As a basis for understanding this concept:		

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
		Heat and Thermodynamics 3: Energy cannot be created or destroyed, although in many processes energy is transferred to the environment as heat.		
c) Will be able to defend/justify their selection of manufacturing machine tools to produce their product.	**Listening and Speaking Strategies:** **1.1 -** *Comprehension* Formulate judgments about the ideas under discussion and support those judgments with convincing evidence. ***1.6*** - *Organization and Delivery of Oral Communication.* Present and advance a clear thesis statement and choose appropriate types of proof (e.g., statistics, testimony, specific instances) that meet standard tests for evidence, including credibility, validity, and relevance.		**#4 Functions and Algebraic Thinking:** Skills used are minimally complex, including a basic understanding of algebraic ideas and representation; an ability to create and use symbolic and graphical representations of patterns; an ability to simplify expressions and solve simple equations and inequalities; and an ability to describe, generalize, and use basic types of functional relationships.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
	2.4 - Write persuasive compositions: Structure ideas and arguments in a sustained and logical fashion. **c.** Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, and expressions of commonly accepted beliefs and logical reasoning. **2.5** - Deliver persuasive arguments (including evaluation and analysis of problems and solutions and causes and effects): **a.** Structure ideas and arguments in a coherent, logical fashion. **b.** Use rhetorical devices to support assertions (e.g., by appeal to logic through reasoning; by appeal to emotion or		**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
	ethical belief; by use of personal anecdote, case study, or analogy). **c.** Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, expressions of commonly accepted beliefs, and logical reasoning. **d.** Anticipate and address the listener's concerns and counterarguments.			
3. The student will understand the concepts of precision, accuracy, and appropriate units of measurement and their application in manufacturing processes.				

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
a) The students will demonstrate their ability to select and utilize the proper measurement tool based on the product and required tolerance.			**#2 Geometry, Measurement and Spatial Sense:** Skills used are minimally complex, including a basic understanding of geometry, measurement, and spatial sense; use of basic geometric shapes and terms with concrete objects or drawings; measurement of length area, perimeter, circumference, diameter, height, weight, and volume to specified degrees of precision in both the customary and metric systems; and computation of time in hours and minutes.	
b) The student will be able to verify proper calibration and take appropriate action to correct the measuring tools.			**#2 Geometry, Measurement and Spatial Sense:** Skills used are minimally complex, including a basic understanding of geometry, measurement, and	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			spatial sense; use of basic geometric shapes and terms with concrete objects or drawings; measurement of length area, perimeter, circumference, diameter, height, weight, and volume to specified degrees of precision in both the customary and metric systems; and computation of time in hours and minutes.	
c) The student will perform unit conversions between systems such as metric and traditional English based measurements.			**#1 Number Sense and Computation:** Skills used are minimally complex, including a basic understanding of whole number systems and properties, an ability to read, write, order, add, subtract, multiply, and divide whole numbers; an ability to read and write simple fractions and decimals; and computation of money in dollars and cents.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
4. Students will understand the impact and importance of environmental issues related to manufacturing processes and organizations.				
a) The student will be able to describe roles and responsibilities of state and federal regulatory agencies that affect manufacturing operations.				
b) Students will study and report on waste stream management of selected segments of manufacturing operations.	**Reading Comprehension:** *Comprehension and Analysis of Grade-Level-Appropriate Text* **2.5** - Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.	**Biology/Life Sciences Ecology 6:** Stability in an ecosystem is a balance between competing effects.		

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
	Writing Strategies: *Research and Technology* **1.3** - Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources. **1.5** - Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents).			

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
c) Students will design a plan to implement a basic recovery, disposal, recycling, or minimization system for industrial cleaning processes		**Biology/Life Sciences Ecology 6:** Stability in an ecosystem is a balance between competing effects.	**#3 Complexity of Data Analysis, Statistics, and Probability:** Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#5 Complexity of Representation and Communication: Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
5. The student will understand the different types of material processes.				
a) Students will evaluate and contrast advantages of various mechanical processes.	**Reading Comprehension:** *Comprehension and Analysis of Grade-Level-Appropriate Text* **2.3** - Generate relevant questions about readings on issues that can be researched. *Expository Critique* **2.7** - Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.	**Physics Motion and Forces 1**: Newton's laws predict the motion of most objects. **Conservation of Energy and Momentum 2:** The laws of conservation of energy and momentum provide a way to predict and describe the movement of objects.	**#3 Complexity of Data Analysis, Statistics, and Probability:** Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#5 Complexity of Representation and Communication: Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
b) Students will evaluate and contrast advantages of various chemical processes.	**Reading Comprehension:** *Comprehension and Analysis of Grade-Level-Appropriate Text* **2.3** - Generate relevant questions about readings on issues that can be researched. *Expository Critique* **2.7** - Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.	**Chemistry Atomic and Molecular Structure 1:** The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure. **Acids and Bases 5:** Acids, bases, and salts are three classes of compounds that form ions in water solutions. **Solutions 6:** Solutions are homogenous mixtures of two or more substances.	**#3 Complexity of Data Analysis, Statistics, and Probability:** Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
		Chemical Thermodynamics 7: Energy is exchanged or transformed in all chemical reactions and physical changes of matter.	**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
c) Students will evaluate and contrast advantages of various electrical processes.	**Reading Comprehension:** *Comprehension and Analysis of Grade-Level-Appropriate Text* **2.3** - Generate relevant questions about readings on issues that can be researched. *Expository Critique* **2.7** - Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.		**#3 Complexity of Data Analysis, Statistics, and Probability:** Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#5 Complexity of Representation and Communication: Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
d) Students will evaluate and contrast advantages of various thermal processes.	**Reading Comprehension:** *Comprehension and Analysis of Grade-Level-Appropriate Text* **2.3** - Generate relevant questions about readings on issues that can be researched. *Expository Critique* **2.7** - Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.	**Heat and Thermodynamics 3:** Energy cannot be created or destroyed, although in many processes energy is transferred to the environment as heat.	**#3 Complexity of Data Analysis, Statistics, and Probability:** Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#5 Complexity of Representation and Communication: Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
6. Students will understand the uses and the requirements those material selection places on the manufacturing method and processes.				
a) The student will demonstrate the ability to select an appropriate process for a given material.				
b) Students will be able to evaluate the cost effectiveness of the material selections for a given product.			**#1 Number Sense and Computation:** Skills used are minimally complex, including a basic understanding of whole number systems and properties, an ability to read, write, order, add, subtract, multiply, and divide whole numbers; an ability to read and write simple fractions and decimals; and computation of money in dollars and cents.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#3 Complexity of Data Analysis, Statistics, and Probability: Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#5 Complexity of Representation and Communication: Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
7. Students will understand the actual cost in time, material, and tooling expenses related to the product manufacturing cycle.			**#1 Number Sense and Computation:** Skills used are minimally complex, including a basic understanding of whole number systems and properties, an ability to read, write, order, add, subtract, multiply, and divide whole numbers; an ability to read and write simple fractions and decimals; and computation of money in dollars and cents. **#3 Complexity of Data Analysis, Statistics, and Probability:** Required skills are minimally complex, including a basic understanding of data analysis, statistics, and probability; an ability to collect, organize, and describe data; construction and display of data in line plots, graphs, tables, and	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			charts; interpretation of data using the concepts of largest, smallest, most often, and middle; an ability to find average (mean) of sets of data; and determination of fairness and probability outcomes.	
a) The student will be able to balance quality requirements verses timely product completion in the manufacturing process.	**Reading Comprehension** *Comprehension and Analysis of Grade-Level-Appropriate Text* **2.3** - Generate relevant questions about readings on issues that can be researched. *Expository Critique* **2.7** - Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.		**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates;	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			and making justified, logical statements.	
b) Students will determine the appropriate processes or methods to meet cost expectations.			**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#6 Mathematical Methods:** Problems lend themselves to a single solution that produces clear or obvious results. Methods are minimally complex and include determining what a problem is asking; making sensible, reasonable estimates; and using a variety of approaches to solve problems.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#7 Mathematical Reasoning: Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	
c) The student will understand the relationship between the cost and material selection.			**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#7 Mathematical Reasoning: Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	
8. Students will understand planning, scheduling, and time management for project completion.			**#1 Number Sense and Computation:** Skills used are minimally complex, including a basic understanding of whole number systems and properties, an ability to read, write, order, add, subtract, multiply, and divide whole numbers; an ability to read and write simple fractions and decimals; and computation of money in dollars and cents.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
a) Students will create a planning sequence for the production of a product.	**Writing Strategies:** *Organization and Focus* **1.1** - Establish a controlling impression or coherent thesis that conveys a clear and distinctive perspective on the subject and maintain a consistent tone and focus throughout the piece of writing. **1.2** - Use precise language, action verbs, sensory details, appropriate modifiers, and the active rather than the passive voice. **Writing Applications:** **2.6** - Write technical documents (e.g., a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, minutes of a meeting):		**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
	a. Report information and convey ideas logically and correctly. **b.** Offer detailed and accurate specifications. **c.** Include scenarios, definitions, and examples to aid comprehension (e.g., troubleshooting guide). **d.** Anticipate readers' problems, mistakes, and misunderstandings.			
b) Student will develop a schedule from start to completion of the product.	**Writing Applications:** **2.4** - Write persuasive compositions: Structure ideas and arguments in a sustained and logical fashion. **c.** Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, and expressions of commonly accepted beliefs and logical		**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
	reasoning. **d.** Address readers' concerns, counterclaims, biases, and expectations. **2.6** - Write technical documents (e.g., a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, minutes of a meeting): **a.** Report information and convey ideas logically and correctly. **b.** Offer detailed and accurate specifications. **c.** Include scenarios, definitions, and examples to aid comprehension (e.g., troubleshooting guide). **d.** Anticipate readers' problems, mistakes, and misunderstandings.			

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
c) Students will demonstrate their ability to modify or adapt their schedule and plan as required.			**#5 Complexity of Representation and Communication:** Skills used are minimally complex, including a basic representation and limited communication of basic mathematical ideas using words, numbers, symbols, pictures, charts, graphs, and tables. **#7 Mathematical Reasoning:** Reasoning used is minimally complex, including formulating conjectures and being able to argue why they must be or seem true; making sensible, reasonable estimates; and making justified, logical statements.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
9. The students will understand the standard communication (Electronic Industries Association, EIA) protocols for conveying electronic information in an industrial environment.				
a) The student will demonstrate the ability to read and interpret technical drawings accurately.	**Reading Comprehension:** *Comprehension and Analysis of Grade-Level-Appropriate Text.* **2.6** - Demonstrate use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and in access guides to World Wide Web sites on the Internet).		**#2 Geometry, Measurement and Spatial Sense:** Skills used are minimally complex, including a basic understanding of geometry, measurement, and spatial sense; use of basic geometric shapes and terms with concrete objects or drawings; measurement of length area, perimeter, circumference, diameter, height, weight, and volume to specified degrees of precision in both the customary and metric systems; and computation of time in hours and minutes.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
			#8 Mathematical Tools: Tools used are minimally complex. Basic tools – such as pencil and paper, mental computation, and measuring devices (e.g., rulers, graph paper, measuring cups, scales), mathematical texts, manipulatives, and calculators – are used to solve problems.	
b) The student will demonstrate the ability to interface technical information between computers, machine controllers and machinery.	**Writing Strategies:** *Research and Technology* **1.5** - Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents).		**#8 Mathematical Tools:** Tools used are minimally complex. Basic tools – such as pencil and paper, mental computation, and measuring devices (e.g., rulers, graph paper, measuring cups, scales), mathematical texts, manipulatives, and calculators – are used to solve problems.	

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
c) The student will demonstrate the ability to convey information electronically.			**#8 Mathematical Tools:** Tools used are minimally complex. Basic tools – such as pencil and paper, mental computation, and measuring devices (e.g., rulers, graph paper, measuring cups, scales), mathematical texts, manipulatives, and calculators – are used to solve problems.	
10. The student will understand the different aspects of manufacturing management that include things such as Personal time management, Team participation/dynamics and scheduling of priorities. The student will demonstrate these by:				
a) Actively participating in or on a team.				

Manufacturing	Language Arts Grades 9 & 10	Science	Mathematics	Social Science
b) Developing a schedule for project completion.	**Writing Applications:** **2.6** - Write technical documents (e.g., a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, minutes of a meeting): **a.** Report information and convey ideas logically and correctly.			
c) Balancing multiple demands for time (i.e., several products/ processes/ classes).				