Standards Correlations
Production Systems (8446 / 8447)

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Demonstrating Personal Qualities and Abilities			
Demonstrate creativity and innovation.	English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10*		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate critical thinking and problem solving.	English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1,		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Demonstrating Interpersonal Skills			
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1		
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1		
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrating Professional Competencies			
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4		
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1		
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8		
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5,		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10		
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1		
Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1		
Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: 6.1, PH.1, PS.1		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Examining All Aspects of an Industry			
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16		
Examine aspects of management within an industry/organization.			
Examine aspects of financial responsibility within an industry/organization.			
Examine technical and production skills required of workers within an industry/organization.			
Examine principles of technology that underlie an industry/organization.			
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16		
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16		
Addressing Elements of Student Life			
Identify the purposes and goals of the student organization.			
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.			
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.			
Identify Internet safety issues and procedures for complying with acceptable use standards.			
Exploring Work-Based Learning			

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Identify the types of work-based learning (WBL) opportunities.			
Reflect on lessons learned during the WBL experience.			
Explore career opportunities related to the WBL experience.			
Participate in a WBL experience, when appropriate.			
Exploring the Nature of Technology			
Define the role of production in using technology to solve human needs and wants.	English: 9.3, 10.3, 11.3 History and Social Science: VUS.13, WG.2, WG.4, WG.14, WG.17	1. The Characteristics and Scope of Technology	Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation Technology Bowl
Describe components of the systems model as it relates to production.	English: 9.5, 10.5, 11.5	2. The Core Concepts of Technology	Debating Technological Issues Essays on Technology Extemporaneous Speech

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
			Future Technology Teacher Prepared Presentation Technology Bowl
Identify the primary processes used to obtain and produce industrial materials.	English: 9.5, 10.5, 11.5 History and Social Science: GOVT.9, GOVT.15, VUS.8, VUS.10, VUS.13, VUS.14, WG.1, WG.2, WG.3	2. The Core Concepts of Technology 19. Manufacturing Technologies	Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation Technology Bowl
Describe the secondary processes used to convert stock into finished products.	English: 9.5, 10.5, 11.5	2. The Core Concepts of Technology 19. Manufacturing Technologies	Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation Technology Bowl
Describe how advances in science, technology, engineering, and mathematics	English: 9.5, 10.5, 11.5	3. The Relationships Among Technologies and the	Debating Technological Issues

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
(STEM) fields have influenced production.	History and Social Science: VUS.13	Connections Between Technology and Other Fields	Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation Technology Bowl
Examining Technology and Society			
Identify the four phases of the industrial revolution, focusing on industrial revolution 4.0.	English: 9.5, 10.5, 11.5 History and Social Science: VUS.8, VUS.13, WHII.1, WHII.8, WHII.14		
Explain the relationship between production technology and the economy.	English: 9.5, 10.5, 11.5 History and Social Science: GOVT.9, GOVT.15, VUS.8, WHI.1, WHI.8	4. The Cultural, Social, Economic, and Political Effects of Technology 6. The Role of Society in the Development and Use of Technology	Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation
Appraise the environmental effects of production by-products.	English: 9.5, 10.5, 11.5 History and Social Science: WG.2, WG.4, WG.16, WG.17, WG.18	5. The Effects of Technology on the Environment	Debating Technological Issues Essays on Technology Extemporaneous Speech

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
			Future Technology Teacher Prepared Presentation
Explain how society/culture and the development of products influence one another.	English: 9.5, 10.5, 11.5 History and Social Science: VUS.13, WG.2, WG.4, WG.16, WG.17, WG.18, WHII.8	6. The Role of Society in the Development and Use of Technology 7. The Influence of Technology on History	Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation
Describe how society's development is influenced by its ability to produce goods.	English: 9.5, 10.5, 11.5 History and Social Science: GOVT.9, GOVT.15, WG.2, WG.4, WG.16, WG.17, WG.18	7. The Influence of Technology on History	Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation
Describe how the social/cultural influences affect the design and quality of produced goods.	English: 9.5, 10.5, 11.5		
Describe how the economy influences the ability to produce goods.	English: 9.5, 10.5, 11.5 History and Social Science: VUS.1, WG.1, WHI.1, WHII.1, WHII.14		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Compare types of company ownership.	English: 9.5, 10.5, 11.5 History and Social Science: VUS.8, WG.5	19. Manufacturing Technologies	Future Technology Teacher Technology Bowl
Analyzing Design			
Describe the engineering design process.	English: 9.5, 10.5, 11.5 Mathematics: COM.3	8. The Attributes of Design	Dragster Design Engineering Design Fashion Design and Technology Flight Endurance Future Technology Teacher Structural Design and Engineering System Control Technology Technology Problem Solving Transportation Modeling
Employ different problem-solving techniques.	English: 9.5, 10.5, 11.5 Science: PH.3	8. The Attributes of Design 9. Engineering Design 10. The Role of Troubleshooting, Research and Development, Invention	Dragster Design Engineering Design Fashion Design and Technology

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
		and Innovation, and Experimentation in Problem Solving	Flight Endurance Future Technology Teacher Music Production On Demand Video Structural Design and Engineering System Control Technology Technology Problem Solving Transportation Modeling Video Game Design
Communicate ideas through sketching, technical drawing, computer-aided design and drafting (CADD), or storyboarding.	English: 9.5, 10.5, 11.5 Mathematics: G.3, G.14, COM.1	9. Engineering Design 10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving	Animatronics Architectural Design Biotechnology Design Computer-Aided Design (CAD), Architecture Computer-Aided Design (CAD), Engineering

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
			Dragster Design
			Engineering Design
			Flight Endurance
			Future Technology Teacher
			Structural Design and Engineering
			Transportation Modeling
Practicing Safety			
Discuss the importance of a safety plan.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8		
Implement a safety plan.	English: 9.5, 10.5, 11.5	12. Use and Maintain Technological Products and Systems	Future Technology Teacher
Operate lab equipment according to instructor guidelines.	English: 9.5, 10.5, 11.5 Science: PH.1	12. Use and Maintain Technological Products and Systems	Future Technology Teacher
Identify job hazards.	English: 9.5, 10.5, 11.5	12. Use and Maintain Technological Products and Systems	Future Technology Teacher
Maintain safe working practices around production equipment.	English: 9.5, 10.5, 11.5	12. Use and Maintain Technological Products and Systems	Future Technology Teacher

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Explain OSHA's role in production.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8	12. Use and Maintain Technological Products and Systems 19. Manufacturing Technologies	Debating Technological Issues Future Technology Teacher Technology Bowl
Developing Abilities for a Technological World			
Compose a design portfolio to solve a technological problem.	English: 9.5, 10.5, 11.5	8. The Attributes of Design 9. Engineering Design 10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving 11. Apply the Design Processes	Animatronics Architectural Design Biotechnology Design Computer-Aided Design (CAD), Architecture Computer-Aided Design (CAD), Engineering Digital Video Production Dragster Design Engineering Design Fashion Design and Technology Flight Endurance

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
			Future Technology Teacher
			Music Production
			On Demand Video
			Photographic Technology
			Structural Design and Engineering
			Transportation Modeling
			Video Game Design
Construct models and/or prototypes.	Mathematics: G.3, G.13, G.14	11. Apply the Design Processes 19. Manufacturing Technologies	Animatronics Architectural Design Computer Integrated Manufacturing (CIM) Dragster Design Engineering Design Fashion Design and Technology Flight Endurance

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
			Future Technology Teacher Structural Design and Engineering System Control Technology Transportation Modeling
Perform secondary processing operations on stock to produce products.		12. Use and Maintain Technological Products and Systems 19. Manufacturing Technologies	Computer Integrated Manufacturing (CIM) Dragster Design Engineering Design Flight Endurance Future Technology Teacher Structural Design and Engineering Technology Problem Solving Transportation Modeling
Implement a preventative maintenance program.	English: 9.5, 10.5, 11.5		
Design a production process for mass producing a product.	English: 9.5, 10.5, 11.5		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Complete a post-production evaluation of a production process.	English: 9.5, 10.5, 11.5	13. Assess the Impact of Products and Systems 19. Manufacturing Technologies	Animatronics Dragster Design Engineering Design Future Technology Teacher Transportation Modeling
Predict future trends related to production systems.	English: 9.5, 10.5, 11.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields 4. The Cultural, Social, Economic, and Political Effects of Technology 5. The Effects of Technology on the Environment 13. Assess the Impact of Products and Systems	Animatronics Debating Technological Issues Essays on Technology Extemporaneous Speech Future Technology Teacher Prepared Presentation System Control Technology Technology Bowl
Evaluate the importance of market research and customer requirements throughout the design process.	English: 9.5, 10.5, 11.5		
Examining the Designed World			

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Research materials to determine their mechanical, physical, and chemical properties for a designed product.	English: 9.8, 10.8, 11.8 Science: CH.2, PH.3, PH.4	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields 19. Manufacturing Technologies	Biotechnology Design Engineering Design Future Technology Teacher Technology Bowl
Select materials for use, based on their properties.	Science: CH.2	19. Manufacturing Technologies	Biotechnology Design Engineering Design Fashion Design and Technology Future Technology Teacher Technology Bowl
Differentiate among custom, intermittent, flexible, and continuous manufacturing.	English: 9.5, 10.5, 11.5	2. The Core Concepts of Technology 19. Manufacturing Technologies	Future Technology Teacher Technology Bowl
Develop a plan for a facility to produce a specified product.	English: 9.5, 10.5, 11.5 History and Social Science: GOVT.1, GOVT.15	19. Manufacturing Technologies	Future Technology Teacher
Explore a connected industry.	English: 9.3, 9.5, 10.3, 10.5, 11.3, 11.5	19. Manufacturing Technologies	Future Technology Teacher
Create products using a combination of CADD, computer-aided	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8	19. Manufacturing Technologies	Computer Integrated Manufacturing (CIM)

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
manufacturing (CAM), computer numerical controlled (CNC), CIM, and flexible manufacturing systems (FMS) processes.	Mathematics: COM.1, COM.17		Future Technology Teacher
Human Resources			
Describe the management of personnel needed to produce a specific product.	English: 9.5, 10.5, 11.5	19. Manufacturing Technologies	Chapter Team Future Technology Teacher System Control Technology Technology Bowl
Implement production personnel systems.	English: 9.5, 10.5, 11.5 History and Social Science: GOVT.1, GOVT.16	19. Manufacturing Technologies	Chapter Team Future Technology Teacher Technology Bowl
Research career outlook and training requirements for production employment.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8	19. Manufacturing Technologies	Essays on Technology Future Technology Teacher