

# Standards Correlations

## Aerospace Technology I (8487)

Task	SOL Correlations	ITEEA National Standards	TSA Competitive Events
<b>Demonstrating Personal Qualities and Abilities</b>			
Demonstrate creativity and innovation.	<p>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</p> <p>History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1</p> <p>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*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1</p>		

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Demonstrate critical thinking and problem solving.	<p>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</p> <p>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</p> <p>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*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1</p>		
Demonstrate initiative and self-direction.	<p>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, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p>		

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
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		
<b>Demonstrating Interpersonal Skills</b>			
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 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		

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	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 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		
<b>Demonstrating Professional Competencies</b>			
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	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,		

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skills.	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 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,		

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
	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.	<p>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, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1</p> <p>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*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1</p>		
Demonstrate an understanding of information security.	<p>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</p>		

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
	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 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-	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7,		

<b>Task</b>	<b>SOL Correlations</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
specific tasks.	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 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,		



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	VUS.1, WG.1, WHI.1, WHII.1 Science: 6.1, PH.1, PS.1		
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		
<b>Examining All Aspects of an Industry</b>			
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		

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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		
<b>Addressing Elements of Student Life</b>			
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.			
<b>Exploring Work-Based Learning</b>			
Identify the types of work-based learning (WBL) opportunities.			
Reflect on lessons learned during			

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the WBL experience.			
Explore career opportunities related to the WBL experience.			
Participate in a WBL experience, when appropriate.			
<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
<b>Exploring the History of Aviation</b>			
Identify the contributions of the pioneers of aviation.	<p>English: 10.5, 10.6, 10.7, 11.5, 11.6, 11.7, 12.5, 12.6, 12.7</p> <p>History and Social Science: VUS.9, VUS.11, VUS.12, VUS.14, WHIL.10, WHIL.11, WHIL.12, WHIL.14</p>	<p>3. The Relationships Among Technologies and the Connections Between Technology and Other Fields</p> <p>4. The Cultural, Social, Economic, and Political Effects of Technology</p> <p>6. The Role of Society in the Development and Use of Technology</p> <p>7. The Influence of Technology on History</p> <p>18. Transportation Technologies</p>	Flight Endurance
Create a flying device.		10. The Role of Troubleshooting,	Flight Endurance

<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
		<p>Research and Development, Invention and Innovation, and Experimentation in Problem Solving</p> <p>11. Apply the Design Process</p> <p>18. Transportation Technologies</p>	
Describe the construction and initial flight of the first powered aircraft.	<p>English: 10.5, 11.5, 12.5</p> <p>History and Social Science: VUS.8, VUS.9</p>	<p>7. The Influence of Technology on History</p> <p>18. Transportation Technologies</p>	Flight Endurance
Construct helicopters.	History and Social Science: VUS.12	<p>7. The Influence of Technology on History</p> <p>10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving</p> <p>18. Transportation Technologies</p>	Flight Endurance
List major milestones in the	English: 10.5, 10.6, 10.7, 11.5, 11.6,	7. The Influence of	Flight Endurance

<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
development of aviation.	11.7, 12.5, 12.6, 12.7  History and Social Science: VUS.9, VUS.11, VUS.12, VUS.14, WHII.10, WHII.11, WHII.12, WHII.14	Technology on History  18. Transportation Technologies	
Describe the effects of war on aviation technology and the growth of civil aviation.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.12, WHII.12	6. The Role of Society in the Development and Use of Technology  7. The Influence of Technology on History  18. Transportation Technologies	Flight Endurance
Describe how aviation has influenced the development of civilization since the advent of powered flight.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14	4. The Cultural, Social, Economic, and Political Effects of Technology  7. The Influence of Technology on History  18. Transportation Technologies	Flight Endurance
Research industry trends in aviation.	English: 10.8, 11.8, 12.8  History and Social Science: VUS.14, WHII.14	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields	Flight Endurance

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
		7. The Influence of Technology on History  18. Transportation Technologies	
<b>Applying Aerodynamics</b>			
Describe the four forces of flight and how each affects an aircraft in flight.	English: 10.5, 11.5, 12.5  Science: PH.4, PH.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	Flight Endurance
Apply Bernoulli's principle to flight.	English: 10.5, 11.5, 12.5  Mathematics: AII.3  Science: PH.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	Flight Endurance
Apply Newton's laws to aerodynamics.	English: 10.5, 11.5, 12.5  Mathematics: A.4, MA.7  Science: PH.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	Flight Endurance

<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
Create virtual airfoils.	History and Social Science: VUS.12, VUS.14	10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  18. Transportation Technologies	Flight Endurance
Define common aerodynamics terms.	English: 10.3, 11.3, 12.3	18. Transportation Technologies	Flight Endurance
Describe the concept of angle of attack and airfoil stall.	English: 10.3, 10.5, 11.3, 11.5, 12.3, 12.5	18. Transportation Technologies	Flight Endurance
Create a model airfoil.	English: 10.5, 11.5, 12.5	10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  11. Apply the Design Process  12. Use and Maintain Technological Products and Systems  13. Assess the Impact of	Flight Endurance

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Design a model aircraft.	English: 10.5, 11.5, 12.5	Products and Systems 12. Use and Maintain Technological Products and Systems  13. Assess the Impact of Products and Systems  18. Transportation Technologies	Flight Endurance
Construct a model aircraft without an electric or gas engine.	English: 10.5, 11.5, 12.5	12. Use and Maintain Technological Products and Systems  13. Assess the Impact of Products and Systems  18. Transportation Technologies	Flight Endurance
<b>Exploring Aircraft Components</b>			
Demonstrate an airplane moving about the center of gravity through each of the three axes of flight by operating the rudder, aileron, winglets, and elevator deflection.		3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	Flight Endurance
Categorize aircraft instrumentation.	English: 10.5, 11.5, 12.5	18. Transportation Technologies	Flight Endurance



<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
Summarize the operation of a turboprop and turbojet engine.	English: 10.5, 11.5, 12.5	18. Transportation Technologies	Flight Endurance
Use flight instruments to simulate flight.		18. Transportation Technologies	Flight Endurance
Construct an aircraft powered by an electric or gas engine(s).	English: 10.5, 11.5, 12.5	10. The Role of Troubleshooting, Research and Development, Invention and Innovation, and Experimentation in Problem Solving  11. Apply the Design Process  12. Use and Maintain Technological Products and Systems  13. Assess the Impact of Products and Systems  18. Transportation Technologies	Flight Endurance
Operate an aircraft.		18. Transportation Technologies	Flight Endurance
Describe the functions of, and the relationships among, the parts of an aircraft.	English: 10.5, 11.5, 12.5	18. Transportation Technologies	Flight Endurance
Demonstrate the functions of the	English: 10.1, 10.5, 11.1, 11.5, 12.1,	18. Transportation	Flight Endurance

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four major control surfaces of an airplane.	12.5	Technologies	
<b>Exploring Flight Conditions</b>			
Identify atmospheric conditions and their effect on aircraft performance.	English: 10.5, 11.5, 12.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	
Describe how heat, pressure, and the Earth's rotation interact to affect global wind patterns.	English: 10.5, 11.5, 12.5 Science: ES.12	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields	
Describe how temperature and moisture affect the stability of the atmosphere.	English: 10.5, 11.5, 12.5 Science: ES.12	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields	
Identify the characteristics of clouds and their effects on flight.	English: 10.5, 11.5, 12.5 Science: ES.12	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation	

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		Technologies	
Describe the characteristics of air mass boundaries.	English: 10.5, 11.5, 12.5 Science: ES.12	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields	
Analyze flight hazards caused by various atmospheric conditions.	English: 10.5, 11.5, 12.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	
Chart atmospheric data.	Mathematics: A.9, AII.9 Science: ES.12	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields	
<b>Examining Airport and Flight Operations</b>			
Compare the function of air traffic control (ATC) in visual flight rules (VFR) and instrument flight rules (IFR) environments.	English: 10.3, 10.5, 11.3, 11.5, 12.3, 12.5	18. Transportation Technologies	Flight Endurance
Describe the layout and facilities of a typical airport.	English: 10.5, 11.5, 12.5	18. Transportation Technologies  20. Construction Technologies	Flight Endurance

<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
Identify the functions of the FAA.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14	4. The Cultural, Social, Economic, and Political Effects of Technology  18. Transportation Technologies	Flight Endurance
Describe the NAS and types of airspace.	English: 10.5, 11.5, 12.5	4. The Cultural, Social, Economic, and Political Effects of Technology  18. Transportation Technologies	Flight Endurance
<b>Exploring Space Systems</b>			
Identify the role of NASA.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.12, VUS.13, VUS.14	4. The Cultural, Social, Economic, and Political Effects of Technology  18. Transportation Technologies	
Outline the history of the U.S. space program and international space program events.	English: 10.6, 10.7, 11.6, 11.7, 12.6, 12.7  History and Social Science: VUS.12, VUS.13, VUS.14  Science: ES.3	7. The Influence of Technology on History  18. Transportation Technologies	
Describe how Earth's low, medium, and high orbits affect space mission operations.	English: 10.5, 11.5, 12.5	3. The Relationships Among Technologies and the Connections Between Technology and Other	

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
		Fields  18. Transportation Technologies	
Identify components of orbital mechanics.	English: 10.5, 11.5, 12.5  History and Social Science: WHII.4  Mathematics: T.9, AII.6, MA.6, MA.7	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	
Describe satellites and other space systems.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14  Science: ES.3	18. Transportation Technologies	
Evaluate the commercialization of space.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14  Science: ES.3	13. Assess the Impact of Products and Systems	
<b>Exploring Rocketry</b>			
Outline the evolution of rocketry.	English: 10.6, 10.7, 11.6, 11.7, 12.6, 12.7  History and Social Science: VUS.12, VUS.14, WHII.12, WHII.14	7. The Influence of Technology on History  18. Transportation Technologies	

<b>Task</b>	<b>SOL Correlation</b>	<b>ITEEA National Standards</b>	<b>TSA Competitive Events</b>
Apply Newton's three laws of motion to rocketry.	English: 10.5, 11.5, 12.5  History and Social Science: WHII.14  Mathematics: AII.6, MA.7  Science: PH.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	
Calculate the altitude of launched rockets.	Mathematics: AII.6, MA.7	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	
Demonstrate the function of rocket systems.		11. Apply the Design Process  12. Use and Maintain Technological Products and Systems  18. Transportation Technologies	
Construct a one-stage rocket.		11. Apply the Design Process  12. Use and Maintain Technological Products	

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
		and Systems  18. Transportation Technologies	
Launch a rocket.		18. Transportation Technologies	
<b>Living and Working in the Space Environment</b>			
Identify the effects of the space environment on manned operations.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields  18. Transportation Technologies	
Identify applications of unmanned spacecraft.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14  Science: ES.1	4. The Cultural, Social, Economic, and Political Effects of Technology  18. Transportation Technologies	
Examine hazards identified with space operations.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14		
Plan a space mission.	English: 10.5, 11.5, 12.5  History and Social Science: VUS.14, WHII.14		