

Standard ID	Standard Description
Unit 6: Troubleshooting & Debugging	
Testing Prototypes	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-CS-03	Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.
Break Dancer Break Down	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-CS-03	Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.
Dance to the Beat	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.

3A-CS-03	Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.
Testing for Trouble	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-CS-03	Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.
Debug-inator	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-CS-03	Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.
Ideas to Help with the Debug-inator	
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.

Unit 7: Impacting the Environment with Functions	
Turtle Trouble	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
Clean Up with Multiple Functions	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
Clean Indicator	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.

Automate the Clean Up	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
Taking Care of My Environment	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
Ideas to Help with Taking Care of My Environment	
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Unit 8: Compound Conditionals and Logic Operators	
Password Protection	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-NI-05	Give examples to illustrate how sensitive data can be affected by malware and other attacks.
3A-NI-07	Compare various security measures, considering tradeoffs between the usability and security of a computing system.

3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
Make it Physically Safe	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-NI-05	Give examples to illustrate how sensitive data can be affected by malware and other attacks.
3A-NI-07	Compare various security measures, considering tradeoffs between the usability and security of a computing system.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
Make a Safer Safe	
3A-NI-05	Give examples to illustrate how sensitive data can be affected by malware and other attacks.
3A-NI-07	Compare various security measures, considering tradeoffs between the usability and security of a computing system.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
Security Operating with Logic	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.

Escape Room	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-23	Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.
Ideas to Help with Escape Room	
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Unit 9: Data and Math Functions	
Counting Your Steps	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-DA-12	Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
Make it Move	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-DA-12	Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.

3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
Parking Lot	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-DA-12	Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
My Transportation	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-DA-12	Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
Ideas to Help with My Transportation	
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Unit 10: Lists	
Listing Letters	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.

3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Stretch Your Muscles and Lists	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Mind Games	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Jumping for Lists	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.

3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Word Games with Lists	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-22	Design and develop computational artifacts working in team roles using collaborative tools.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-21	Evaluate and refine computational artifacts to make them more usable and accessible.
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.
Ideas to Help with Word Games with Lists	
3A-AP-19	Systematically design and develop programs for broad audiences by incorporating feedback from users.