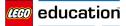
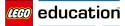
Standard ID	Standard Description	
Unit 6: Troubleshooting & Debugging		
	Testing Prototypes	
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.	
3A-AP-23	Document design decisions using text, graphics, presentations, 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.

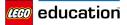


#### Unit 7: Impacting the Environment with Functions

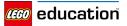
Turtle Trouble	
3A-CS-02	Compare levels of abstraction and interactions between application software, system software, and hardware layers.
3A-AP-17	Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.
3A-AP-18	Create artifacts 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.	



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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.	

