

Montana CS Standards Alignment with CodeX Curriculum			
6th-8th grade	Unit 1	Unit 2	Unit 3
Computing Systems			
Understand hardware and software components of a computing device and troubleshoot hardware and software problems.			
Use a variety of computing devices to manipulate data.			
Differentiate tasks/problems best solved by computing systems or by humans.			
Understand that network components carry out specific functions to connect computing devices, people, and services.			
Computational Thinking			
Create a new representation, define functions, and use decomposition.	[1]		
Write, debug, and analyze advanced algorithms and basic programs.	[2]		
Understand how computing devices represent and manipulate information.			
Create, modify, and manipulate databases.			
Use a variety of data collection devices.	[3]		
Create a model and use and modify a simulation for analysis.	[4]		

Montana CS Standards Alignment with CodeX Curriculum			
	Unit 1	Unit 2	Unit 3
Computing Systems			
Select and use appropriate computing devices to accomplish a real-world task.			
Understand how computing device components work.			
Use troubleshooting strategies to solve routine hardware and software problems.	[5]		
Simplify complex computing tasks or problems into subproblems to plan solutions.			
Understand how networks communicate, how they are vulnerable, and what issues may impact their functionality.			
Evaluate the benefits of using a service with respect to function and quality.			
Computational Thinking			
Create a new representation through generalization and decomposition.	[6]		
Write and debug algorithms in a structured language.	[7]		
Understand how different data representation affects storage and quality.			
Create, modify, and manipulate data structures, data sets, and data visualizations.			
Use an iterative design process to create an artifact or solve a problem.	[8]		
Create models and simulations to formulate, test, analyze, and refine a hypothesis.	[9]		

- [1] Remixes are new representations
Creation of your own functions begins in Mission 9.3
- [2] These are the remixes that are introduced in Mission 4
- [3] Different sensors and button pushes are used throughout the missions
- [4] Flowcharts and pseudocodes are introduced in the teachers' manual
Remixes create your own simulations
- [5] Mission 2 and the teachers' manual discuss troubleshooting techniques
- [6] These are done in the remixes beginning on Mission 4
- [7] These are done in the remixes beginning on Mission 4
- [8] This can be done on the remixes depending on the rubric the teacher gives
- [9] these are the flowcharts and pseudocodes