



# PLTW Launch Modules Overview K-5

## CSTA

PLTW Launch Modules integrate Science, Engineering, Computer Science, ELA, and Math. This Module Overview highlights the PLTW Launch Modules that focus on Computer Science and provide the greatest number of connections to the CSTA Standards. All modules contain connections to this body of standards; more detail on all modules can be found in the PLTW Launch Standards Guide for the CSTA.

*In Spring 2023, PLTW submitted all necessary documentation required by the Computer Science Teachers Association for a crosswalk review of our Launch and Gateway curricula by the CSTA Standards Review Team. While we anticipate approval and validation by CSTA, the review is pending.*

Please note: The information included in this document is subject to change. As with all course materials, we will continue to update as more information becomes



PLTW  
Computer Science









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Engineering



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# LAUNCH K-5 Modules Overview

	Physical Science 	Life Science 	Earth and Space Science 	Engineering 	Computer Science 		
K	Pushes and Pulls	Living Things: Needs and Impacts	Sunlight and Weather	Structure and Function: Exploring Design	Structure and Function: Human Body	Animals and Algorithms	
1	Light and Sound	Designs Inspired by Nature	Animal Adaptations	Light: Observing the Sun, Moon, and Stars		Animated Storytelling	
2	Materials Science: Properties of Matter	Materials Science: Form and Function	Living Things: Diversity of Life	The Changing Earth		Grids and Games	
3	Stability and Motion: Forces and Interactions	Stability and Motion: Science of Flight	Variation of Traits	Environmental Changes	Life Cycles and Survival	Weather: Factors and Hazards	Programming Patterns
4	Energy Exploration	Waves and the Properties of Light	Organisms: Structure and Function	Input/Output: Human Brain	Earth: Past, Present, and Future	Earth: Human Impact and Natural Disasters	Input/Output: Computer Systems
5	Matter: Properties and Reactions	Ecosystems: Flow of Matter and Energy	Patterns in the Universe	Earth’s Water and Interconnected Systems	Robotics and Automation: Infection: Detection	Robotics and Automation: Challenge	Infection: Modeling and Simulation

		Essential Questions	CSTA	
<b>K</b>	<b>Animals and Algorithms</b>	How do you use algorithms in your daily life? How can you use computer programming to complete a task? How can a step-by-step process help you design or improve a solution to a problem?	1A-CS-01 1A-AP-09 → 12	1A-AP-14, 15 1A-AP-17, 18
<b>1</b>	<b>Animated Storytelling</b>	In what ways can stories be told using different tools? How does technology impact our lives? How can collaboration help you design or improve a solution to a problem?	1A-CS-01 → 03 1A-NI-04 1A-DA-05	1A-AP-08 → 15 1A-IC-16 → 18
<b>2</b>	<b>Grids and Games</b>	How can learning from others help you design or improve a solution to a problem? In what ways can computer science impact our lives?	1A-CS-01 → 03 1A-NI-04 1A-DA-05	1A-AP-09 → 15 1A-IC-16 → 18
<b>3</b>	<b>Programming Patterns</b>	How does technology impact our lives? How can a step-by-step process help you design or improve a solution to a problem?	1B-CS-02, 03 1B-NI-05 1B-AP-08	1B-AP-10, 11 1B-AP-13 1B-AP-15 → 17
<b>4</b>	<b>Input/Output: Computer Systems</b>	How does technology impact our lives? In what ways do computing systems work together to accomplish tasks? How can a step-by-step process help you design or improve a solution to a problem?	1B-CS-01 → 03 1B-NI-04, 05 1B-DA-06, 07	1B-AP-08 → 17 1B-AP-19, 20
<b>5</b>	<b>Robotics and Automation: Challenge</b>	How can autonomous robots be used to help people? How can a step-by-step process help you design or improve a solution to a problem?	1B-CS-01, 03 1B-NI-05	1B-AP-08, 10 → 13 1B-AP-15, 17 1B-IC-18
	<b>Infection: Modeling and Simulation</b>	How do computer models and simulations help us make sense of scientific phenomena? In what ways can computer models and simulations be used to predict outcomes? How can a step-by-step process help you design or improve a solution to a problem?	1B-CS-03 1B-NI-05 1B-DA-06, 07	1B-AP-08 → 17 1B-IC-20