PLTW Launch Modules Overview

Texas Essential Knowledge and Skills Technology Applications TEKS (K-5)

This Module Overview highlights the PLTW Launch Modules with the most connections to Computer Science through the Technology Applications TEKS.

All PLTW Launch Modules contain connections to this body of standards, and more detail on all modules can be found in the PLTW Launch Standards Guide for Technology Applications.

PLTW Launch Modules have been thoughtfully connected to the TEKS for use by Texas educators. Each grade level contains 3-6 PLTW Launch Modules that are the “best-fit” for the Science TEKS; for consistency, the same modules are used in this guide. When grade level suggestions vary from the intended grade level it is shown like this: *Light and Sound (1)* to indicate that the module was originally developed for use in 1st Grade.

Texas educators also have the flexibility to utilize the PLTW Launch Modules in the grade level that works best for their students.

PLTW Computer Science

PLTW Engineering

PLTW LAUNCH

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LAUNCH K-5 Technology Applications TEKS

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

PLTW LAUNCH Technology Applications

		Essential Questions	Technology Application TEKS	
K	**Animals and Algorithms**	How can 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?	K.1.A → C K.2 K.3.A, B	K.5 K.7.A, B K.8.A K.8.B
1	**Animated Storytelling**	In what ways can stories be told using different tools? How does technology impact our lives? How can a step-by-step process help you design or improve a solution to a problem?	1.1.A → C 1.2 1.3.A, B 1.3.B	1.7.B 1.8.A → C 1.9.A, B 1.9.A, C
2	**Grids and Games**	How can learning from others help you design or improve a solution to a problem? In what ways can computer science impact our lives?	2.1.A → D 2.2.B 2.3.A, B	2.7 2.9.A → C 2.10.A → C
3	**Programming Patterns**	How does technology impact our lives? How can a step-by-step process help you design or improve a solution to a problem?	3.3.A, B 3.8.A 3.10.A, C	3.1.A → D 3.2.B
4	**Input/Output: Computer Systems**	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?	4.1.A → D 4.2.A, B 4.3.A, B 4.4 4.5.A 4.6	4.7 4.8.A 4.9.A 4.10.A, C 4.12.B, E
5	**Robotics and Automation: Challenge**	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?	5.2.B, C 5.3.A, B 5.4 5.5.B	
	Infection: Modeling and Simulation	How do computer models and simulations help us to 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?	5.1.A → D 5.2.A → C 5.3.B	5.4 5.5.A 5.6