

2026-2026 SCHOOL YEAR

SCIENCE & ENGINEERING

COMPUTER SCIENCE & ROBOTICS

K	2026-2027		2026-2027	
	Life Science	HABITAT HEROES Animals & Habitats Students examine how humans affect animals' ability to meet their needs. They collect observations and water quality samples at Chatfield State Park, engage with a topographic habitat model and witness the effects of pollution and urban development on habitats. Students aim to educate others about ways to reduce human impact. • Observations • Animals' needs • Habitats	Computational Thinking	FUNDAMENTALS Introduction to Computers and Coding Students begin their journey by learning computer basics. They practice secure login and create a strong password, while also differentiating hardware from software. They build computational thinking skills by mastering sequencing with simple robot commands. Students prepare for block coding by practicing drag-and-drop mechanics and using physical block-code tiles to create simple sequences aligned with digital interfaces. • Secure login and strong passwords • Hardware vs. Software • Sequencing steps • Computational thinking • Block coding preparation
	Environmental Science	PEOPLE AND THE PLANET Technology & Innovation Students explore the benefits and consequences of technology for our health and the environment. They'll investigate the past, present, and future of technology, learn how engineers ask questions, explore current technologies built to help people, and ultimately engineer a new technology that prioritizes the well-being of both people and the planet. • Engineering design process • Past, present, and future • Asking questions	Coding and Programming	CODING CONCEPTS Programming and Storytelling Students transition to digital icon-based block coding by mastering a visual coding interface to create simple animated scenes. They use motion and appearance commands to animate characters and develop short, interactive stories using events and sequencing. Students also explore foundational physical-to-digital coding concepts through hands-on activities. • Motion and appearance commands (animation) • Events and sequencing • Interactive storytelling • Physical-to-digital coding

	Physical Science	PLAYGROUND ENGINEERING Motion Students experiment with the effects of pushes and pulls on playground equipment and learn how playground designers make choices about new designs. They explore new ways to play and move, and apply their knowledge of push, pull, strength, and direction to design and build innovative playground equipment. • Push and pull • Strength and direction • Speed • Stop and start	Robotics	PROGRAMMING MOVEMENT Robotics & Physical Computing Students explore robotics by controlling physical floor robots using simple commands and sequences. They work in teams to complete directed missions and solve floor mazes. Students master sequencing commands and directionality to navigate their devices, grasping the fundamental concept that digital block code gives precise, physical directions that make real-world machines move and act. • Digital block coding • Sequencing and directionality • Code as physical instructions • Team problem-solving
	Earth & Life Science	GARDENS AROUND THE WORLD Plants & Weather Students investigate the effect of weather and climate on crops around the world, learning about how to manage the amount of water and sunlight needed to help crops survive in tough conditions. Students grow plants and explore ways to protect plants from changing conditions. • Sunlight's effects • Maps and globes • Plants' needs • Local weather conditions	Gaming	ADVENTURES WITH VR Computer Control Students develop technical skills to control movement and interaction within virtual (VR) environments using the computer's keyboard and mouse. They master these keyboard and mouse commands to navigate, learning proper finger placement and the function of keys like W, A, S, D for movement and the mouse/trackpad for adjusting the camera view. Students apply problem-solving strategies to complete item collection tasks in various VR environments. They practice command logic by learning how opposite keys affect movement and how the program registers object interaction. • Keyboard and mouse control • VR environment navigation • Command logic and input registration • Digital Citizenship

2027-2028 SCHOOL YEAR

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