



Course Overview: *Gaming Concepts: Technology Skills (Grade 4)*

The fourth grade *Gaming Concepts: Technology Skills* builds on the foundations from 3rd grade and prepares students for applied technology in 5th grade. Fourth-grade students deepen their digital literacy, expand collaboration skills, and connect technology use to both real-world careers and emotional well-being. They learn to communicate across cultures and languages, reflecting the needs of English Language Learners, while exploring responsible digital citizenship. The course blends practical technology skills with esports-related contexts, helping students see themselves as capable digital learners and future professionals. Aligned to CSTA, ISTE, CASEL, and PERMA frameworks, the curriculum emphasizes critical thinking, respectful communication, and creativity while developing healthy digital habits.

National Standards

This comprehensive curriculum is guided by several nationally recognized knowledge and skill standards:

- **The International Society for Technology in Education 7 Standards (ISTE)** provide the competencies for learning, teaching and leading with technology, and are a comprehensive road map for the effective use of technology in schools worldwide.
- **The Collaborative for Academic, Social, and Emotional Learning Competencies (CASEL)** cover five broad and interrelated areas of competence for social and emotional learning.
- **Computer Science Teachers Association Standards (K12 CS)** are a core set of learning objectives designed to provide the foundation for a complete computer science curriculum and its implementation at the K-12 level.

Unit 1: Foundations of Technology in Gaming

Students begin the year by strengthening their ability to navigate digital devices and manage information. They explore tools used in professional esports arenas while practicing keyboarding, mouse control, and file management. Lessons also highlight emotional regulation strategies such as managing frustration when technology malfunctions. Through discussion and practice, students learn to recognize how emotions influence digital behavior, setting the stage

for safe and productive participation. The unit concludes with a career connection to IT Support, showing students how technical skills and patience support others in real-world gaming environments.

Unit 2: Communication & Collaboration in Gaming

In this unit, students build communication and teamwork skills across different modes: text, voice, and collaborative tools. They examine the role of clear language, cultural differences, and respectful digital etiquette. By practicing with shared documents, chat platforms, and mock team scenarios, students develop habits of collaboration and learn how digital tools can either strengthen or weaken relationships. Lessons emphasize empathy, moderation, and managing misunderstandings. The unit culminates with a career spotlight on Community Managers, helping students see the human side of digital communities.

Unit 3: Responsible Tech Use & Future Careers

Here, students examine the ethical and responsible use of technology. Lessons guide them through balancing screen time, protecting personal information, and avoiding harmful digital behaviors like cheating or hacking. Accessibility in gaming provides a window into how technology can create inclusion, while emotional regulation strategies support healthy digital habits. Future-focused topics like AI, VR, and ethics in design encourage critical thinking about fairness, bias, and the evolving role of technology in society. Students finish the unit by exploring career pathways in AI and game design.

Unit 4: Creativity & Content Creation

Students transition into being content creators, using digital tools to express ideas and design media. Lessons focus on graphic design, streaming setup, game level creation, coding, storytelling, and video editing. Each activity supports digital literacy while also encouraging emotional resilience when projects become challenging. Language-rich tasks, like writing digital stories or narrating streams, support ELL learners. The unit concludes with career exploration in shoutcasting and streaming, connecting creativity to esports industries.

Unit 5: Data, Strategy & Problem Solving

In the final unit, students analyze and use data to make strategic decisions. They learn to calculate percentages, recognize patterns, and build spreadsheets. By connecting math to gaming strategies, students strengthen digital literacy and critical thinking skills. Emotional regulation is emphasized through handling wins and losses in strategy games and practicing patience with data interpretation. Lessons encourage students to see themselves as problem-solvers who can use evidence to support decisions, preparing them for higher-level academic work. The unit ends with a career spotlight on data analytics in esports.