



1st Quarter (45 Days)

	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
1st: Aug 8-12 (5 days)	Unit 1 Technology Computer Science: Coding Introduction, code.org, lightbot.com, https://scratch.mit.edu/	Understand the History and Effects of Technology. Activity: Introduction to Technology Unit Coding: CS Discoveries introduces students to computer science as a vehicle for problem solving, communication, and personal expression. As a whole this semester focuses on the visible aspects of computing and computer science, encouraging students to see where computer science exists around them and how they can engage with it as a tool for exploration and expression.	TEKS 3(A)
2nd: Aug 15-19 (5 days)	Unit 2 Technology Introduction to Microsoft Office Fundamentals	Develop Skill Sets for Careers in Technology. Activity 1: Job Safety Skills Unit (TEA) MS Office: Students will learn the purpose and uses of each Microsoft Office application. They will practice opening applications, downloading applications and saving files. Students will also explore the Microsoft Help system.	TEKS 1(A-I)
3rd: Aug 22-26 (5 days)	Unit 2 Technology	Develop Skill Sets for Careers in Technology. Activity 2: Lab Safety and Hand Tools Unit	TEKS 1(A-I)
4th: Aug 29-Sept 2 (5 days)	Unit 3 Technology Computer Science: Coding Unit 1	The Proper and Ethical Use of Computers and Networks. Activity 1: Network and Hackers Unit (TEA) Coding: Unit 1 - Problem Solving: Computers and Logic. Computers are all around us, and for students much of their everyday action is impacted by computing. In the unit students will explore what it means for something to be a computer - what core functionality brings together all these items we think of as computers. Students should know how to use computers effectively - this means being able to navigate a computer and accomplish tasks. Students look at the many things computers allow people to do.	TEKS 12(A-F)
5th: Sept 6-9 (4 days)	Unit 3 Technology	The Proper and Ethical Use of Computers and Networks. Activity 2: Synergistic Module Orientation	TEKS 12(A-F)
6th: Sept 15-16 (2 days)	Unit 3 Technology Introduction to Microsoft Word	The Proper and Ethical Use of Computers and Networks. Activity 2: Synergistic Module Orientation MS Office: Students will learn the basics of Microsoft Word. The first lesson takes students on a tour of Microsoft Word, including parts of the screen and word views. Students learn and practice character formatting in the second lesson.	TEKS 12(A-F)
7th: Sept 19-23 (5 days)	Unit 4 Technology Computer Science: Coding Unit 2	Explore Careers in Technology. Activity 1: Investigating IT Employment Opportunities Unit (TEA) Coding: Unit 2 - The Internet: Web Development Students will find empowerment through the realization that they too can take part in this creation and dissemination of information online by developing their own web pages from scratch using just HTML and CSS. By critically examining the web pages they visit every day, students will start to explore what makes a strong	TEKS 2(A-C)



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		website and then use their new design process to implement parts of those designs.	
8 th : Sept 26-30 (5 days)	Unit 4 Technology	Explore Careers in Technology. Activity 2: Synergistic Module (Rotation 1)	TEKS 2(A-C)
9 th : Oct 3-7 (5 days)	Unit 5 Technology Microsoft Word Skills Project	Develop Skill Sets for careers in Technology Activity 1: Resume Writing Unit (TEA) MS Office: In this module students select one of four topics and then create a Microsoft Word 2010 document based on that topic. Students research, draft and revise their documents. During the revision phase of the project, students can do a peer review. They also organize their document using lists and tables, and enhance it using text boxes and shapes. After all the revisions are complete, a final edit is done before the document is prepared and then published as a PDF.	TEKS 1(A-I)
10 th : Oct 10-14 (5 days)	Unit 5 Technology	Develop Skill Sets for careers in Technology Activity 2: Synergistic Module (Rotation 2)	TEKS 1(A-I)

2 nd Quarter (39 Days)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
1 st : Oct 17-21 (5 days)	Unit 6 Technology Microsoft Excel Fundamentals	Use of Emerging Technology to Exchange Information. Activity 1: Cutting Edge Technology Unit (TEA) MS Office: Students will learn the fundamentals of Microsoft Excel 2010. This includes understanding rows and columns, selecting cells, entering formulas and functions, and formatting data and text.	TEKS 3(A-H)
2 nd : Oct 24-28 (5 days)	Unit 6 Technology	Use of Emerging Technology to Exchange Information. Activity 2: Synergistic Module (Rotation 3)	TEKS 3(A-H)
3 rd : Oct 31- Nov 4 (5 days)	Unit 7 Technology Computer Science: Coding Unit 3	Demonstrate Knowledge of Hardware Components. Activity 1: Keyboards, Mice, and Other Input Devices Unit (TEA), Introduction to Scanners Unit (TEA), Introduction to Digital Cameras Unit (TEA), Peripheral Devices Unit (TEA) Coding: Unit 3 - Programming: Interactive Games and Animations. Starting off with simple primitive shapes and building up to more sophisticated sprite-based games, students will become familiar with the basic concepts that form the foundation of computer programming. The development of a personalized final project will engage students in design, testing, and iteration as they come to see	TEKS 4(A-E)



2nd Quarter (39 Days)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
		that failure and debugging are an expected (and valuable) part of the programming process that make your end product better.	
4 th : Nov 7-11 (5 days)	Unit 7 Technology	Demonstrate Knowledge of Hardware Components. Activity 2: Synergistic Module (Rotation 4)	TEKS 4(A-E)
5 th : Nov 14-18 (5 days)	Unit 8 Technology Microsoft Excel Skills Project	Demonstrate Knowledge of Software. Activity 1: Understanding Types and Uses of Software, Unit (TEA), Introduction to Software and Information, Systems Unit (TEA) MS Office: In this module, students learn how to use Microsoft Excel 2010 through a series of hands on activities. The activities are based around a scenario where students help a local sports club determine their profits for four food stands they operate. This module has four units built around this scenario.	TEKS 5(A-L)
6 th : Nov 28- Dec 2 (5 days)	Unit 8 Technology Microsoft PowerPoint Fundamentals	Demonstrate Knowledge of Software. Activity 2: Synergistic Module (Rotation 5) MS Office: Students will learn the basics of Microsoft PowerPoint 2010. This includes adding slides, changing slide views and themes, spell checking, creating text boxes, adding WordArt, inserting clip art and audio clips, and defining hyperlinks and Action Buttons. Students will also learn how to create effective presentations and practice skills through several hands on activities.	TEKS 5(A-L)
7 th : Dec 5-9 (5 days)	Unit 9 Technology Microsoft PowerPoint Skills Project	Use of Emerging Technology to Exchange Information and Demonstrate Knowledge of Software. Activity 1: Cutting Edge Technology Unit (TEA) MS Office: In this module students create a PowerPoint 2010 presentation from scratch. Students select a topic, define their objectives and start building a presentation. Students will follow a defined process for planning and creating presentations. Along the way they will learn new PowerPoint skills covering areas such as creating outlines, adjusting images, animations and transitions.	TEKS 3(A-H) and 5(A-L)
8 th : Dec 12-16 (5 days)	Unit 9 Technology	Use of Emerging Technology to Exchange Information and Demonstrate Knowledge of Software. Activity 2: Engineering Towers Unit (Includes internet research and use of drafting software). The instructor may choose a different project that incorporates the use of information technology.	TEKS 3(A-H) and 5(A-L)



3rd Quarter (46 Days)

Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
1st : Jan 3-6 (4 days)	Unit 10 Technology Computer Science: Coding Unit 4	Understanding Network Systems. Activity 1: Networking Fundamentals Unit (TEA) Coding - Unit 4 - Problem Solving: The Design Process. By following the design process and working with structured group roles, student groups will identify an audience, investigate their needs, and develop a concept and paper wireframe for an app to serve that audience. With concept and wireframe in hand, students will then develop and interactive prototype of their apps that they can use to test with actual users, taking feedback to drive further development.	TEKS 6(A-D)
2nd : Jan 9-13 (5 days)	Unit 10 Technology	Understanding Network Systems. Activity 2: Synergistic Module (Rotation 6)	TEKS 6(A-D)
3rd : Jan 17-19 (3 days)	Unit 11 Technology Microsoft Access Fundamentals	Using Word Processing Applications. Activity 1: Using Text Effects Unit (TEA) Formatting a Research Paper MLA Style Unit (TEA), Introduction to Desktop Publishing Unit (TEA) MS Office: Students will learn basic database theory and gain practical experience with Microsoft Access 2010. The module will include hands on lessons where students will create databases, tables, forms, queries, and reports. Students will also use several methods for entering, maintaining, finding, and browsing data.	TEKS 7(A-G)
4th : Jan 23-27 (5 days)	Unit 11 Technology	Using Word Processing Applications. Activity 2: Synergistic Module (Rotation 7)	TEKS 7(A-G)
5th : Jan 30-Feb 3 (5 days)	Unit 12 Technology Microsoft Publisher Fundamentals	Applying Spreadsheet Technology. Activity 1: Basic Spreadsheet Formulas Unit (TEA) MS Office: Students will learn the fundamentals of Microsoft Publisher 2010 by creating a number of desktop publishing documents. These documents include a calendar, bookmark, birthday card and poster.	TEKS 8(A-E)
6th : Feb 6-10 (5 days)	Unit 12 Technology	Applying Spreadsheet Technology. Activity 2: Synergistic Module (Rotation 8)	TEKS 8(A-E)
7th : Feb 13-17 (5 days)	Unit 13 Technology Computer Science: Coding Unit 5	Applying Database Technology. Activity 1: Databases Unit (TEA) Unit 5 - The Internet: Data and Society. Students will learn what information they leave behind online, and ways to control who has access to their information. In addition students will learn simple ways to collect data and use it to create apps the display the data to the user in visual ways so that they can gain insight into how data that is uninteresting at the individual level can reveal useful information when compiled. Finally, students will return to the app they began in unit 4 to integrate simple data collection.	TEKS 9(A-F)



3rd Quarter (46 Days)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
8 th : Feb 21-24 (4 days)	Unit 13 Technology	Applying Database Technology. Activity 2: Synergistic Module (Rotation 9)	TEKS 9(A-F)
9 th : Feb 27- Mar 3 (5 days)	Unit 14 Technology Microsoft Integration Skills Project	Applying Presentation Management Technology. Activity 1: Power Point Presentation MS Office: In this module, students learn about different ways to share information between Office applications, such as linking and embedding.	TEKS 10(A-C)
10 th : Mar 6-10 (5 days)	Unit 14 Technology	Applying Presentation Management Technology. Activity 2: Synergistic Module (Rotation 10)	TEKS 10(A-C)

4th Quarter (48 Days)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
1 st : Mar 20-24 (5 days)	Unit 15 Technology Google Apps Fundamentals	Applying Design and Web Publishing Techniques. Activity 1: Design and Publications Unit (TEA). Google Apps: Students will learn the purpose and uses of Google Docs, Sheets, and Slides. They will practice opening applications and working within Google Drive. Students will also explore Google's help feature.	TEKS 11(A-E)
2 nd : Mar 27-31 (5 days)	Unit 15 Technology	Applying Design and Web Publishing Techniques. Activity 2: Synergistic Module (Rotation 11)	TEKS 11(A-E)
3 rd : Apr 3-7 (5 days)	Unit 13 Technology Computer Science: Coding Unit 6	Understand and Demonstrate Legal and Ethical Procedures as Applied in Information Technology. Activity 1: Copyright Unit (TEA). Coding: Unit 6 - Programming: The Internet of Things. By exploring innovative computing devices from a variety of fields, students will explore the essential elements of computer hardware. Using a bare microcontroller board with several integrated sensors and output devices students will learn how software interacts with hardware and they will develop prototypes of physical computing devices. In the final stage of the course student groups will once again return to their capstone apps, this time connecting them with their physical computing boards as a means of input, output, or both.	TEKS 12 (A-F)
4 th : Apr 10-14 (5 days)	Unit 16 Technology	Understand and Demonstrate Legal and Ethical Procedures as Applied in Information Technology. Activity 2: Synergistic Module (Rotation 12)	TEKS 12 (A-F)
5 th : April 18-22	Unit 17 Technology	Use of Information Technology in Engineering, Project Development,	TEKS 1(A-I) and 3(A-H)



4th Quarter (48 Days)			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS SEs)
(5 days)	Google Docs Fundamentals	Manufacturing and / or Construction. Activity: Selected Tool Use and Safety (includes internet research). The tools selected are those needed for the project in Unit 18. Google Apps: Students will learn about the basics of Google Docs, including how to format text and paragraphs, change the document layout and use available tools such as the Research and Define tools.	
6 th : Apr 24- 28 (5 days)	Unit 17 Technology	Use of Information Technology in Engineering, Project Development, Manufacturing and / or Construction. Activity: Selected Tool Use and Safety (includes internet research). The tools selected are those needed for the project in Unit 18.	TEKS 1(A-I) and 3(A-H)
7 th : May 1-5 (5 days)	Unit 18 Google Sheets Fundamentals	Use of Information Technology in Engineering, Project Development, Manufacturing and / or Construction. Activity: CO2 Car Research, Design, Manufacturing, and Testing (incorporating the use of information technology). The instructor may choose a different project that incorporates the use of information technology.	TEKS 1E, G, & I; 2A; 3C, E, & H; 4E; 5H, K, & L; 7C, F, & G; 8C, D, & E; 9B; 10B; and 12A
8 th : May 8-12 (5 days)	Unit 18	Use of Information Technology in Engineering, Project Development, Manufacturing and / or Construction. Activity: CO2 Car Research, Design, Manufacturing, and Testing (incorporating the use of information technology). The instructor may choose a different project that incorporates the use of information technology.	TEKS 1E, G, & I; 2A; 3C, E, & H; 4E; 5H, K, & L; 7C, F, & G; 8C, D, & E; 9B; 10B; and 12A
9 th : May 15-19 (5 days)	Unit 18 Google Slides Fundamentals	Use of Information Technology in Engineering, Project Development, Manufacturing and / or Construction. Activity: CO2 Car Research, Design, Manufacturing, and Testing (incorporating the use of information technology). The instructor may choose a different project that incorporates the use of information technology. Google Apps: Students will learn the basics of Google Slides. This includes using templates, changing themes and layouts, spell checking, adding and moving slides, creating text boxes, inserting WordArt and images, cropping images, defining hyperlinks and more. Students will learn these skills by completing several hands-on activities.	TEKS 1E, G, & I; 2A; 3C, E, & H; 4E; 5H, K, & L; 7C, F, & G; 8C, D, & E; 9B; 10B; and 12A
10 th : May 22-24 (3 days)	Unit 18	Use of Information Technology in Engineering, Project Development, Manufacturing and / or Construction. Activity: CO2 Car Research, Design, Manufacturing, and Testing (incorporating the use of information technology). The instructor may choose a different project that incorporates the use of information technology.	TEKS 1E, G, & I; 2A; 3C, E, & H; 4E; 5H, K, & L; 7C, F, & G; 8C, D, & E; 9B; 10B; and 12A