

TechConnected Scope and Sequence

Overview

TechConnected is made up of 18 guided projects that are designed to be adapted to any subject, allowing students to customize and focus on content creation. Each TechConnected project can be completed in between 45-90 minutes depending on how students customize the content.

Projects guide students through the creation of useful tools like a blog, pie chart, digital diary and other types of creative media with an emphasis on enhancing, sharing and demonstrating what they have learned in different subject areas. For example, students can make a blog related to their Social Studies and Language studies or make an infographic and data analysis related to Science. Along the way, students will gather experience in coding using HTML, CSS and JavaScript. At the end of each project, students can export to Sandbox for further customization or share outputs with classmates, friends and family with a public URL.

We provide a Teacher Guide for each project that gives tips on how to customize the content for different subjects and how to customize the projects for further use. TechConnected projects can be used anytime and do not follow a defined progression. Projects are labelled as Level 1 for beginners, Level 2 for intermediate learners and Level 3 for advanced learners.

Level 1 (Beginner)	Level 2 (Intermediate)	Level 3 (Advanced)
Poem	Interactive Story	Card Sorting Filter
Meme Maker	Blog	Carrot Picker
Character Card	Review App	Coin Collector
Simple Infographic	Quiz Maker	Digital Assistant
Digital Diary	Pie Chart	
Timeline	Retro TV	
	Mad Libs	
	Digital Pocket Guide	


TechConnected Project Level Descriptions

Level 1 (Beginner)


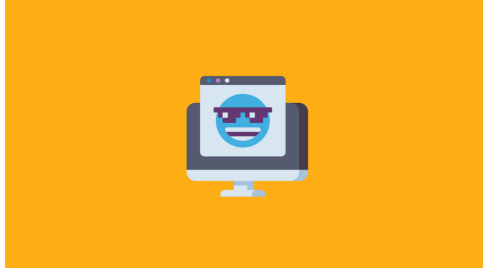
Standards Alignment


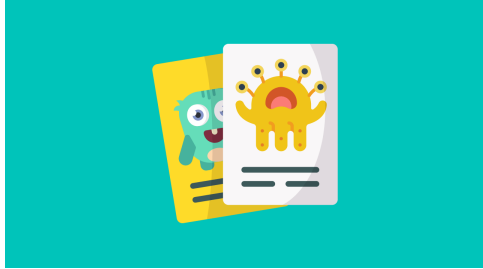
	Character Card	Simple Infographic	Digital Diary	Interactive Story	Timeline
ISTE	2c, 3c, 6b, 6d	2c, 3c, 6b, 6d	2c, 3c, 6b, 6d	3a, 4a, 6b	5d, 5b, 6c
CSTA	1B-AP-12, 1B-IC-19 ,1B-IC-20	1B-AP-12, 1B-IC-19 ,1B-IC-20	1B-AP-12, 1B-IC-19 ,1B-IC-20	1B-AP-12, 1B-IC-19 ,1B-IC-20	2-AP-14, 2-AP-16



Guided Projects



 Poem	
Difficulty	1
Learning Hours	1
Languages(s)	HTML, CSS
Theme(s)	Web design
Teacher Resources	Teaching guide
Description	Learn how to format a poem in any style using HTML. When you're finished, you'll have a one-of-a-kind page that can be shared with family and friends.
ISTE	2c, 3c, 6b, 6d
CSTA	1B-AP-12, 1B-IC-19 ,1B-IC-20


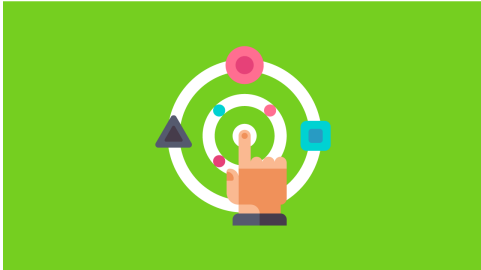



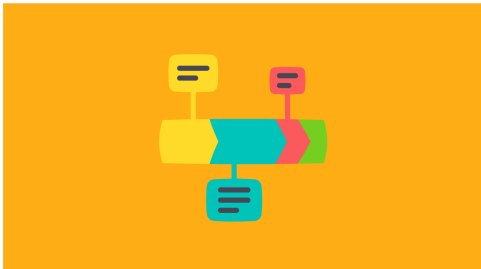
 Meme Maker		
Difficulty	1	
Learning Hours	1	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Design your own meme with a custom image and text. Along the way, learn how HTML and CSS are used together.	
ISTE	2c, 3c, 6b, 6d	
CSTA	1B-AP-12, 1B-IC-19 ,1B-IC-20	

 Character Card		
Difficulty	1	
Learning Hours	1	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Create a simple Character Card that shows the character name with an image. Students will also add character attributes like "likes" and "dislikes". After students complete the project, it can be customized in Sandbox.	
ISTE	2c, 3c, 6b, 6d	
CSTA	1B-AP-12, 1B-IC-19 ,1B-IC-20	

 Simple Infographic		
Difficulty	1	
Learning Hours	1	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Create a simple infographic using HTML and CSS to present your research and findings or reflections on any topic. This project can easily be adapted to share information on any subject with three subsections.	
ISTE	2c, 3c, 6b, 6d	
CSTA	1B-AP-12, 1B-IC-19 ,1B-IC-20	

 Digital Diary		
Difficulty	1	
Learning Hours	1	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Build a digital diary using HTML and CSS to practice expressing yourself. You can make a diary about your own experiences or choose a character from fiction or history.	
ISTE	2c, 3c, 6b, 6d	
CSTA	1B-AP-12, 1B-IC-19 ,1B-IC-20	

 TechConnected - Interactive Story		
Difficulty	1	
Learning Hours	2	
Languages(s)	HTML, JS	
Theme(s)	Programming, Web design	
Teacher Resources	Teaching guide	
Description	Build an interactive story using a combination of logic, JavaScript conditionals, and creativity to make an organized story tree. Make a short story in the Guided Project or add more scenes in the sandbox to expand the story.	
ISTE	3a, 4a, 6b	
CSTA	1B-AP-12, 1B-IC-19, 1B-IC-20	


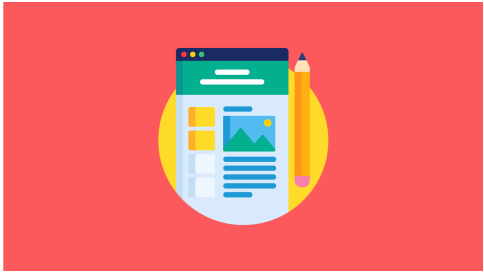
 Timeline		
Difficulty	1	
Learning Hours	2	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Make a horizontal timeline of events using HTML and CSS. This project is designed to be viewed on a mobile device and can be customized to include more events.	
ISTE	5d, 5b, 6c	
CSTA	2-AP-14, 2-AP-16	


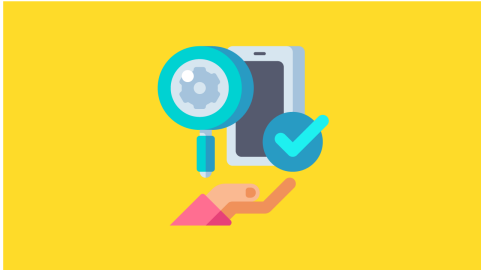
Level 2 (Intermediate)


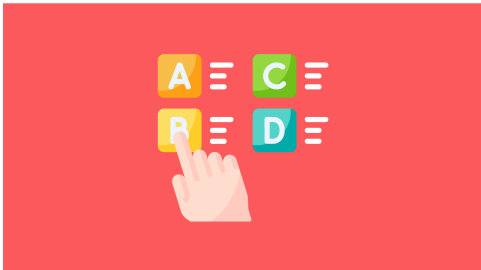
Standards Alignment



	Blog	Review App	Quiz Maker	Pie Chart	Retro TV	Mad Libs	Digital Pocket Guide
ISTE	2c, 3c, 6b, 6d	2c, 3c, 6b, 6d	2d, 3a, 3c, 5b, 5d	5a, 5b, 5d, 6c	5C, 6B, 6D	2c, 3c, 6b, 6d	1d, 3c, 6d
CSTA	1B-AP-12, 1B-IC-19, 1B-IC-21, 2-AP-16	2-AP-16	1B-AP-11, 1B-AP-12, 1B-AP-14, 1B-AP-15, 1B-IC-20	1B-DA-06, 1B-DA-07, 1B-AP-09, 2-DA-07, 2-DA-08	1B-IC-21, 2-AP-11, 2-AP-12, 2-AP-13, 2-AP-16,	2-AP-13, 2-AP-14, 2-AP-16	1B-DA-06, 1B-AP-12



Guided Projects



 Blog		
Difficulty	2	
Learning Hours	1	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Make your own blog with images and descriptions using HTML and CSS. You can create custom themes and blog about your favorite interests and adventures.	
ISTE	2c, 3c, 6b, 6d	
CSTA	1B-AP-12, 1B-IC-19, 1B-IC-21, 2-AP-16	



 Review App		
Difficulty	2	
Learning Hours	2	
Languages(s)	HTML, CSS	
Theme(s)	Web design	
Teacher Resources	Teaching guide	
Description	Create a book review app using HTML and CSS to write an introduction to introduce your app, along with 2 reviews of any book of your choosing.	
ISTE	2c, 3c, 6b, 6d	
CSTA	2-AP-16	

 Quiz Maker		
Difficulty	2	
Learning Hours	2	
Languages(s)	HTML, JS	
Theme(s)	Programming, Web design	
Teacher Resources	Teaching guide	
Description	Build a multiple choice trivia game that can be used across a variety of topics using HTML and JavaScript! You can easily add more questions to the trivia game after completing the project.	
ISTE	2d, 3a, 3c, 5b, 5d	
CSTA	1B-AP-11, 1B-AP-12, 1B-AP-14, 1B-AP-15, 1B-IC-20	

 Pie Chart		
Difficulty	2	
Learning Hours	1	
Languages(s)	HTML, JS	
Theme(s)	Data science, Programming	
Teacher Resources	Teaching guide	
Description	By using HTML and JavaScript, make your own pie chart. In this project, you will learn how to use a JavaScript array to visualize data. Once you learn how to add the data, you can customize the pie chart with new sections.	
ISTE	5a, 5b, 5d, 6c	
CSTA	1B-DA-06, 1B-DA-07, 1B-AP-09, 2-DA-07, 2-DA-08	

 Retro TV		
Difficulty	2	
Learning Hours	2	
Languages(s)	HTML, CSS, JS	
Theme(s)	Programming, Web design	
Teacher Resources	Teaching guide	
Description	Learn how to design a retro-style television with animated GIFs using HTML, CSS and JavaScript. Customize the project with your own GIFs and add multiple channels.	
ISTE	5C, 6B, 6D	
CSTA	1B-IC-21, 2-AP-11, 2-AP-12, 2-AP-13, 2-AP-16	

 Mad Libs		
Difficulty	2	
Learning Hours	1	
Languages(s)	HTML, JS	
Theme(s)	Programming, Web design	
Teacher Resources	Teaching guide	
Description	Build a digital Mad Libs style story using HTML and JavaScript. Practice using a wide range of vocabulary elements in a fun way that allows for creative storytelling.	
ISTE	2c, 3c, 6b, 6d	
CSTA	2-AP-13, 2-AP-14, 2-AP-16	


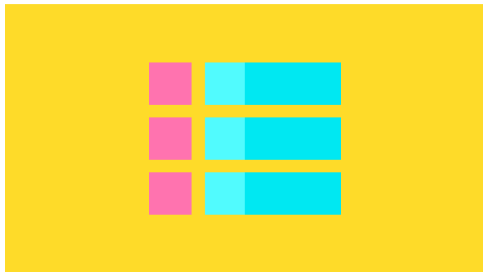
 Digital Pocket Guide		
Difficulty	2	
Learning Hours	2	
Languages(s)	HTML, JS	
Theme(s)	Programming, Web design	
Teacher Resources	Teaching guide	
Description	Learn how to make a digital field guide of rocks using HTML, CSS and JavaScript. Customize the projects by adding your own images, descriptions and titles.	
ISTE	1d, 3c, 6d	
CSTA	1B-DA-06, 1B-AP-12	



Level 3 (Advanced)


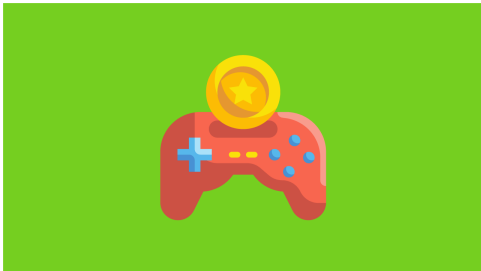
Standards Alignment


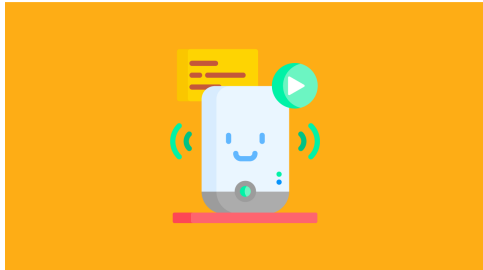
	Card Sorting Filter	Carrot Picker	Coin Collector	Digital Assistant
ISTE	5c, 5d	5b, 5c, 6d	2c, 3c, 5c, 5d, 6b	3a, 3b, 5c, 5d
CSTA	2-AP-11	2-AP-11, 2-AP-12, 2-AP-13, 2-AP-16, 2-AP-17	1B-AP-09, 2-AP-11, 1B-AP-10, 1B-AP-12, 2-AP-14, 1B-1C-19	2-AP-10, 2-AP-11, 2-AP-12, 2-AP-16

Guided Projects

 Card Sorting Filter	
Difficulty	3
Learning Hours	2
Languages(s)	HTML, CSS
Theme(s)	Web design
Teacher Resources	Teaching guide
	
Description	Create a card sorting filter that displays cards in different categories. Learn how to use lists in HTML and how to style the lists in CSS.
ISTE	5c, 5d
CSTA	2-AP-11

 Carrot Picker		
Difficulty	3	
Learning Hours	2	
Languages(s)	HTML, CSS, JS	
Theme(s)	Game development, Programming	
Teacher Resources	Teaching guide	
Description	Learn how to build a "whack-a-mole" style game using HTML, CSS and JavaScript. Learn to set up a scoring system and how to customize the characters.	
ISTE	5b, 5c, 6d	
CSTA	2-AP-11, 2-AP-12, 2-AP-13, 2-AP-16, 2-AP-17	

 Coin Collector		
Difficulty	3	
Learning Hours	4	
Languages(s)	HTML, JS	
Theme(s)	Game development, Programming	
Teacher Resources	Teaching guide	
Description	Learn to make a coin collector game using Phaser, a JavaScript framework for designing games. Customize the game with your own player, background and items to collect.	
ISTE	2c, 3c, 5c, 5d, 6b	
CSTA	1B-AP-09, 2-AP-11, 1B-AP-10, 1B-AP-12, 2-AP-14, 1B-1C-19	

 Digital Assistant		
Difficulty	3	
Learning Hours	2	
Languages(s)	HTML, CSS, JS	
Theme(s)	Artificial intelligence, Programming, Web design	
Teacher Resources	Teaching guide	
Description	Learn advanced skills in JavaScript like making arrays and how to combine strings and variables through concatenation to make a personalized digital assistant.	
ISTE	3a, 3b, 5c, 5d	
CSTA	2-AP-10, 2-AP-11, 2-AP-12, 2-AP-16	