Creative Coding Level 1 - Beginner





Storytelling

In Storytelling, students use computer science to tell fun and interactive stories. Storytelling emphasizes creativity by encouraging students to tell a unique story each day.

- 1. Introduction to Scratch About scratch
- 2. Dialogue Introduction to Dialogue and Sequencing, Setting the Scene, Speaking and Responding
- 3. Check It Out What is Computer Science? Unexpected Encounter
- **4. Setting** Introduction to setting and Randomness, Make it Rain, Lightning Flash, Random Lightning, Making your "Stormy Day" Setting into Story
- 5. Premise Introduction to Premise, Introduction to Modules
- **6. Characterization** Introduction to Characterization and Broadcast, Using Actions to Learn About a Character, Broadcasting Messages, Characters on Parade, Broadcasting your own Message
- **7. Interactive Storytelling** Introduction to Interactive Stories, Questions and Answers, Making Decisions, Telling the Story
- 8. Personal Narrative
- **9. Your Innovation Story** Pitching your Innovation

Creative Coding Level 1 - Beginner





Music & Sound

In Music & Sound, students use the computer to play musical notes, create a music video, and build an interactive music display while learning how programming is used to create music.

- 1. Introduction and Discovery Program Something Unexpected
- 2. Dance Party Remix the Dance Party Starter Project, Make Cassy Dance in One Spot, Make Cassy Move, Add Dance Music for Cassy
- 3. Musical Art Become a Music Maker, Fill the Stage with Color, Color Me Musical
- 4. Guru Introduction Musical Talent Show Musical Talent Show Intro, Choose the Talents
- 5. DJ Mixer Choose your Track and Play a Note, Add a Repeating Sound, Control The Speed
- 6. Music Video Music Video Inspiration, Music and Block Making
- **7. Music Sound Effects and Musical Composition** Designing Sound Effects and Composing Music for Movies, Customize the Projectile Sprite, Make Some Noise
- 8. Create Thank You Project!
- 9. Final Project



Creative Coding Level 2 - Intermediate





Friends

In Friends, students are encouraged to sign up with a friend or make a new friend in the class. Friends emphasizes teamwork by allowing students to tell the story of how their friendship started and imagine a company together.

- 1. Introduction and Explore 5 Things About Us, 5 Things!
- 2. Two Truths & A Lie Ask a Question, Check the Answer, Alternate Answers
- 3. Imaginator Imagine Tomorrow, Your Home will be..., Your Job will be...
- 4. Our Story Introduction to Our Story, Set the Scene, Sequencing your Story
- 5. Texting Story Imagine a Conversation, Start the Conversation, Reply, Complete the Story
- **6. Work Together to Win** Variables are Everywhere!, Let's Move!, One Falling Object, Many Falling Objects, Keeping Score, Shared Score
- 7. Create a Company Imagine your Company, Pitch your Product, Ready Set Action!, Sell with Sound!
- 8. Scrapbook Scrapbook Introduction, Narrate the Scenes
- **9. Your Innovation Story** Pitching your Innovation

Creative Coding Level 2 - Intermediate





Art

In Art, students create animations, interactive artwork, photograph filters, and other exciting, artistic projects.

- 1. Introduction and Discovery Art Moves
- 2. Animation Introduction to Animation, Time to Dance, Adding More Frames
- 3. Interactive Art Living Artwork, Talking Artwork, Interactive Artwork
- 4. Paint with Terra Introduction to Painting, Motion, Color and Stamping, Speed and Variables
- 5. Graffiti Introduction to Graffiti, Moving and Stamping, Check a Condition
- 6. Digital Art Computers, Art, and Pixels, Change Pixel Colors, Decide what to Stamp
- 7. Building Blocks of Architecture Introduction to Architecture, Creating Clones, Creating Stamps, Copying Code, Clear Button
- 8. Greeting Card Introduction to Greeting Card Project
- 9. Final Project



Creative Coding Level 3 - Advanced





Sports

In Sports, students use computer science to simulate extreme sports, make their own fitness gadget commercial, and create commentary for a big sporting event.

- 1. Victory Celebration Sports Introduction, Program your Victory Celebration
- **2. Sports Commentary** Introduction to Events, Show Off your Moves, Sports Commentator Talk, Comment on Atheletes
- **3. Net Sports** Introduction to Conditionals, Move Athelete Around, Make the Ball Sprite Bounce, Bounce Off the Athelete
- **4. Fitness Gadget Commercial** Introduction to Modularization, Introduce Your Gadget, Performance Time, Pump Up The Volume, Final Showcase
- **5. All-Star Passing Drill** Introduction to Sensing, Pass the Ball, Aim in the Right Direction, Pass Reception, Add More Receivers
- **6. Batter Up** Introduction to Variables, Throw the Baseball, In the Strikezone, What's the count, Baseball Average Calculator
- **7. Extreme Sports** Introduction to Loops, Control the Racer, Moving Obstacles, Clone More Obstacles, Program the Losing Condition
- 8. Post-Game Interview Season In Review, Post-Game Interview
- 9. Final Project



Creative Coding Level 3 - Advanced





Game Design

In Game Design, students learn basic video game coding concepts by making different types of games, including racing, platform, launching, and more!

- 1. Gaming Story Choose a Character, Tell a Story
- 2. Racing Game Starter Project, Move the Sprite, Moving More Smoothly with "Repeat Until"
- **3. Maze Game** Remix the Maze Starter Project, Following the Mouse Pointer, Stay inside the Lines, Using 'if' statements to Win
- **4. Platform Game** Platform Games: Intro and Design, Use Events to Make the Sprite Jump, Move the Sprite Left and Right, Create a Winning Condition
- **5. Escape Game** Escape Games and Randomness, The Chase is on!, Programming the Player Sprite, Keeping Score
- **6. Launcher Game** Launcher Game and Randomness, Launch a Sprite, Turn the Spite Left and Right, Spawning Enemies, Keeping Score
- 7. Quest Game Introduction to Quest Game, Places to Go, Add an Exit, Hide the Object, Add Storytelling Elements
- **8.** Cave Surfing Game Side Scrolling Games and if-else statements, Creating a Scrolling Backdrop, Making the Parrot Rise and Fall, Winning and Losing the Cave Sufing
- 9. Final Project

