

Unit	Unit Title	Recommended Instructional Days
2	Computer Programming, Course B	Trimester 2
<p>Disciplinary Concept:</p> <p>CS NI IC AP</p>	<p>Practice:</p> <p>Collaborating Around Computing and Design</p> <p>Recognizing and Defining Computational Problems</p> <p>Creating Computational Artifacts</p> <p>Testing and Refining Computational Artifacts</p> <p>Communicating About Computing and Design</p>	<p>Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-CSDT within Unit</p>
<p>Core Idea:</p>	<p>Performance Expectation/s:</p>	
<p>Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally. Connecting devices to a network or the Internet provides great benefits, but care must be taken to use authentication measures, such as strong passwords, to protect devices and information from unauthorized access. Computing technology has positively and negatively changed the way individuals live and work (e.g., entertainment, communication,</p>	<p>8.1.2.CS.1: Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.</p> <p>8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others.</p> <p>8.1.2.NI.4: Explain why access to devices needs to be secured.</p> <p>8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.</p> <p>8.1.2.AP.1: Model daily processes by</p>	<p><u>Essential Question/s:</u></p> <p>What information is OK to have in your digital footprint? Why are computer lab manners important?</p> <p>What is an algorithm, and how can I use it to build a program?</p> <p>How do I identify and locate bugs in a program?</p> <p>What are loops, and how can I use them to draw images and create patterns?</p> <p>What can the corn plant teach us about making new things or solving tricky problems?</p>

<p>Social Awareness</p> <p>Responsible. Decision-Making</p> <p>Relationship Skills</p>	<ul style="list-style-type: none"> ● Recognize and identify the thoughts, feelings, and perspectives of others ● Develop, implement, and model effective problem-solving and critical thinking skills ● Establish and maintain healthy relationships ● Utilize positive communication and social skills to interact effectively with others 	<p>Use loops to help Laurel the Adventurer collect treasure in open cave spaces. Watch video “Using Repeat Blocks.” Complete the challenge puzzle (plugged activity, Lesson 8).</p> <p>Draw images using loops to create patterns. Watch videos, “The Artist in Code Studio” and “Repeat blocks with the Artist.” Complete the challenge puzzle (plugged activity, Lesson 9). Engage in free play.</p> <p>Discuss: What was life like before and after the invention of different types of computers? Engage in Station Activities (Station 1: Matching activity; Station 2: Sorting activity). Design the “right app” for a fictional smartphone user addressing their needs (empathy) (unplugged activity, Lesson 10).</p> <p>Watch video “The Big Event.” Experience the concept of events as a whole group. Use handouts to explain events, Feeling Faces, and The Big Event. Assess understanding independently, the big event handout (unplugged activity, Lesson 11).</p> <p>Examine how cause and effect can be seen in animals as you view the behavioral patterns of offspring (the cause) to determine how to increase the offspring’s survival (the effect). (unplugged activity, Lesson 11).</p> <p>Create an animated game using events in Play Lab (plugged activity, Lesson 12).</p> <p>Plan and create a Play Lab project (Lesson 13).</p> <p>Interdisciplinary Connections: Content: ELA 1.L.6, 1.SL.1, SL.1.1.a., SL.1.1.b., SL.1.1.c, SL.1.2., 1.SL.5, 1.W.6 Math 1.OA.A.1 NGSS K-2-ETS1-1; K-2-ETS1-2</p>
<p>Assessments (Formative)</p>		<p>Assessments (Summative)</p>

<i>To show evidence of meeting the standard/s, students will successfully engage within:</i>		<i>To show evidence of meeting the standard/s, students will successfully complete:</i>	
Formative Assessments: <ul style="list-style-type: none"> • Observations • Discussions • Self Assessments/Reflection • Lesson Activity Worksheets/Drawings • Independent Online Activities 		Benchmarks: <ul style="list-style-type: none"> • Performance Assessment Summative Assessments: <ul style="list-style-type: none"> • District/Department Assessment 	
Differentiated Student Access to Content: Teaching and Learning Resources/Materials			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core Resources
<ul style="list-style-type: none"> • Code.Org (Course B) 2025 • Common Sense Media 	<ul style="list-style-type: none"> • Reteaching worksheets • Spanish version of lesson activities 	<ul style="list-style-type: none"> • Dictionary for native language • Code.Org: Course B earlier versions available in different languages 	<ul style="list-style-type: none"> • Enrichment/Extension activities
Supplemental Resources			
Technology: <ul style="list-style-type: none"> • Chromebooks, MacBook • Projector, Interactive Whiteboard • Clever • Code.Org • GAFE • YouTube • Commonsensemedia.org Other: <ul style="list-style-type: none"> • Pencils, crayons, markers, paper • Common Sense Media and Code.Org handouts/unplugged activities 			
Differentiated Student Access to Content: Recommended Strategies & Techniques			

Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core
<ul style="list-style-type: none"> Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed. 	<ul style="list-style-type: none"> Special Education: Adhere to IEP/504s. Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake test for additional credit, provide additional times and preferential seating as needed, review, restate and repeat directions, provide study guides, and/or break assignments into segments of shorter tasks. Students at Risk of School Failure: Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed. 	<ul style="list-style-type: none"> English Language Learners: Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of online or paper bilingual dictionaries, and modified assessment and/or rubric. 	<ul style="list-style-type: none"> Provide extension activities related to the topic being discussed. Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect students to related talent development opportunities.

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Disciplinary Concept:	
	<i>Core Ideas:</i>	<ul style="list-style-type: none"> ● Brainstorming can create new, innovative ideas ● Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem. ● Individuals should practice safe behaviors when using the Internet ● An individual’s digital footprint reflects the various actions an individual makes online, both positive and negative. ● Digital communities allow for social interactions that can result in positive or negative outcomes. ● Young people can have a positive impact in the natural world in the fight against climate change. ● A variety of diverse sources, contexts, disciplines, and cultures provide valuable and necessary information that can be used for different purposes. ● Digital tools have a purpose.
	<i>Performance Expectation/s:</i>	<ul style="list-style-type: none"> ● 9.4.2.CI.1; 9.4.2.CI.2.; 9.4.2.CT.1; 9.4.2.CT.2; 9.4.2.CT3; 9.4.2.DC3; 9.4.2.DC.4; 9.4.2.DC.5; 9.4.2.DC.6; 9.4.2.DC.7; 9.4.2.IML.3; 9.4.2.TL.1; 9.4.2.TL.4
	Career Readiness, Life Literacies, & Key Skills Practices	
	<ul style="list-style-type: none"> ● Act as a responsible and contributing community members and employee. ● Consider the environmental, social and economic impacts of decisions ● Demonstrate creativity and innovation. ● Utilize critical thinking to make sense of problems and persevere in solving them. ● Use technology to enhance productivity, increase collaboration and communicate effectively. 	

	Amistad Law: <i>N.J.S.A. 18A 52:16A-88</i>		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: <i>N.J.S.A. 18A:35-4.35</i>	X	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	X	Standards in Action: <i>Climate Change</i>
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