

**TOWNSHIP OF UNION PUBLIC SCHOOLS**



**Grade K / Computer Literacy Applications**

Adopted February 15, 2022

### **Mission Statement**

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

### **Philosophy Statement**

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

### **Course Description**

The purpose of the district computer education program is to educate students on how to use computers properly and for the use of research and education. It will also be used to teach students about appropriate computer etiquette and internet safety. Additionally, the program will be used to educate students on different software programs and how to make effective presentations at their appropriate grade levels. Furthermore, students will be exposed to computer programming and computer science using various resources.

Different software programs will be used for students to reach their fullest potential in Computer Literacy Applications class. They will learn internet safety and typing skills to prepare them for course work in grade levels in and beyond the elementary level. Students will be able to take what they have learned in Computer Literacy Applications education class and apply it to their grade level class work. There will be an emphasis on using Google, Google Classroom, Google Doc, & Google Slides. Students will be exposed to code.org and scratch to explore computer science and programming.

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## Curriculum Units/Pacing Guide

<b>Unit # / Title</b>	<b>Number of Weeks</b>
Unit 1: <u>Computing Systems/Data Analysis/Technology Literacy</u>	5 weeks
Unit 2: <u>Networks &amp; The Internet/ Impacts of Computing/ Information &amp; Media Literacy</u>	5 weeks
Unit 3: <u>Engineering, Design/ Algorithms &amp; Programming/ Critical Thinking &amp; Problem Solving</u>	16 weeks
Unit 4: <u>Interaction of Technology &amp; Humans/ Nature of Technology/Digital Citizenship</u>	5 weeks
Unit 5: <u>Effects of Technology on the Natural World/ Ethics &amp; Culture/ Global &amp; Cultural Awareness</u>	5 weeks

## Unit Standards Overview

Overview	Standards	Unit Skills Focus	Content-Specific Practices (when applicable)
<p><b>Unit 1</b> <b>Computing Systems/ Data Analysis/Technology Literacy</b></p>	<p>8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences.</p> <p>8.1.12.CS.2: Model interactions between application software, system software, and hardware.</p> <p>8.1.12.CS.3: Compare the functions of application software, system software, and hardware.</p> <p>8.1.12.CS.4: Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.</p> <p>8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats.</p> <p>8.1.2.DA.2: Store, copy, search, retrieve, modify, and delete data using a computing device.</p> <p>8.1.2.DA.3: Identify and describe patterns in data visualizations.</p> <p>9.4.2.TL.1: Identify the basic features of a digital tool and explain the purpose of the tool.</p>	<p>Demonstrate responsible behavior when safely operating technology equipment.</p> <p>Understand terms and concepts related with applications in Google Docs</p> <p>Understand that a computing system is composed of software and hardware.</p> <p>Open and use multiple programs, windows, and/or browser tabs simultaneously.</p> <p>Use concepts and skills from basic software.</p> <p>Organize and create a Google Doc, modify data using functions.</p> <p>Explain and understand that individuals use computing devices to perform a variety of tasks accurately and quickly.</p> <p>Mouse control skills.</p>	<p>Essential Question: How is technology useful?</p> <p>How can word processing software be used for a range of purposes? (i.e. Google Docs, Webpages)</p> <p>How can software be used to help with tasks?</p> <p>How can software be used for presentations?</p> <p>How are hardware and software different?</p>

	9.4.2.TL.2: Create a document using a word processing application.		
Suggested Resources	Google Apps (Docs), Youtube, Nearpod, BrainPop, NewsELA, Flocabulary, Wixie	<p>Identify ways to be safe on the internet.</p> <p>Explain why a safe and secure password is important.</p> <p>Use software properly for video clips, and animation in presentations.</p> <p>Using search engines, etc., search for images, cut/paste them in a Google document, and then find information on the topic and cut/paste the information below the picture.</p> <p>Explain the difference between a credible and non credible source.</p> <p>Understand how computers and technology has improved our lives.</p>	<p>Essential Questions:</p> <ol style="list-style-type: none"> <li>1. What are the basic rules of using the internet?</li> <li>2. How can the internet be used to find useful information?</li> <li>3. How can the internet be used for different purposes?</li> <li>4. What is the appropriate behavior to use online?</li> <li>5. Why is it important to have a safe and secure password?</li> <li>6. How has technology improved our lives?</li> </ol>
<p><b>Unit 2</b></p> <p><b>Networks &amp; The Internet/ Impacts of Computing/ Information &amp; Media Literacy</b></p>	<p>8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network.</p> <p>8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide.</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 need 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>9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions</p>	
	<p>code.org, scratch, NewELA, Nearpod, Youtube, BrainPopJr., KidBlog, Email, Google Apps, Wixie</p>		
	<p>By using code.org &amp; scratch jr. Students will complete interactive puzzles using code.org  Engineers create and modify technologies to meet people's needs and wants; scientists ask questions about the natural world.</p>	<p>8.1.2.AP.1: Model daily processes by creating and following algorithms to complete tasks. 8.1.2.AP.2: Model the way programs store and manipulate data by using numbers or other symbols to represent information. 8.1.2.AP.3: Create programs with sequences and simple loops to accomplish tasks. 8.1.2.AP.4: Break down a task into a sequence of steps. 8.1.2.AP.5: Describe a program's sequence of events, goals, and expected outcomes.</p>	<p><b>Unit 3 Engineering, Design/ Algorithms &amp; Programming/ Critical Thinking &amp; Problem solving</b></p>

	<p>8.1.2.AP.6: Debug errors in an algorithm or program that includes sequences and simple loops.</p> <p>8.2.2.ED.1: Communicate the function of a product or device.</p> <p>8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.</p> <p>8.2.2.ED.3: Select and use appropriate tools and materials to build a product using the design.</p> <p>8.2.2.ED.4: Identify constraints and their role in the engineering design process.</p> <p>9.4.2.CT.2: Identify possible approaches and resources to execute a plan .</p> <p>9.4.2.CT.3: Use a variety of types of thinking to solve problems.</p>		<p><b>Suggested Resources</b></p>
<p>code.org, scratch, CS First, Kodable, BrainPopJr. , Wixie</p>		<p><b>Essential Questions:</b></p> <ol style="list-style-type: none"> <li>1. How do engineers use collaboration to solve problems?</li> <li>2. How can Debugging help you?</li> <li>3. How does breaking up a bigger problem into smaller pieces help to figure out a solution?</li> <li>4. How are loops helpful in coding?</li> </ol>	

<p><b>Unit 4 Interaction of Technology &amp; Humans/ Nature of Technology/ Digital Citizenship</b></p>	<p>8.2.2.ITH.1: Identify products that are designed to meet human wants or needs.</p> <p>8.2.2.ITH.2: Explain the purpose of a product and its value.</p> <p>8.2.2.ITH.3: Identify how technology impacts or improves life.</p> <p>8.2.2.ITH.4: Identify how various tools reduce work and improve daily tasks.</p> <p>8.2.2.ITH.5: Design a solution to a problem affecting the community in a collaborative team and explain the intended impact of the solution.</p> <p>8.2.2.NT.1: Model and explain how a product works after taking it apart, identifying the relationship of each part, and putting it back together.</p> <p>8.2.2.NT.2: Brainstorm how to build a product, improve a designed product, fix a product that has stopped working, or solve a simple problem.</p> <p>9.4.5.DC.5: Identify the characteristics of a positive and negative online identity and the lasting implications of online activity.</p>	<p>Identify that human needs and desires determine which new tools are developed.</p> <p>Understand that engineers create and modify technologies to meet people's needs and wants; scientists ask questions about the natural world.</p> <p>Digital Citizenship overview.</p> <p>Understand that technology has changed the way people live and work.</p> <p>Identify how various tools can improve daily tasks and quality of life.</p> <p>Explain how innovation and the improvement of existing technology involves creative thinking.</p>	<p>Essential Questions:</p> <ol style="list-style-type: none"> <li>1. How does technology impact our lives?</li> <li>2. How do engineers modify their designs &amp; use the engineering process?</li> <li>3. How does society determine how new tools are created and used?</li> <li>4. What does it mean to be a good digital citizen?</li> <li>5. Why is it important to use creative thinking when solving a problem? How can collaboration help with this?</li> </ol>
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<p><b>Suggested Resources</b></p>	<p>Nearpod, Google Apps, CS First, NewsELA, BrainPopJr., Youtube, Scratch Jr., Wixie</p>	<p>8.2.2.ETW.1: Classify products as resulting from nature or produced as a result of technology.</p> <p>8.2.2.ETW.2: Identify the natural resources needed to create a product.</p> <p>8.2.2.ETW.3: Describe or model the system used for recycling technology.</p> <p>8.2.2.ETW.4: Explain how the disposal of or reusing a product affects the local and global environment.</p> <p>8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.</p>	<p>Explain how the use of technology developed for the human designed world can affect the environment, including land, water, air, plants, and animals.</p> <p>Technologies that use natural sources can have negative effects on the environment, its quality, and inhabitants.</p> <p>Reusing and recycling materials can save money while preserving natural resources and avoiding damage to the environment.</p> <p>Explain how the availability of technology for essential tasks varies in different parts of the world.</p>
<p><b>Unit 5</b>  <b>Effects of Technology on the Natural World/ Ethics &amp; Culture/ Global &amp; Cultural Awareness</b></p>			<p>Essential Questions:</p> <ol style="list-style-type: none"> <li>1. What are some unintended consequences that technology has on the environment?</li> <li>2. What are some ways technology can help the environment?</li> <li>3. Why is recycling important?</li> <li>4. How does access to technology vary based on where you live? Does every part of the world have access to the same technology?</li> </ol>

<p><b>Suggested Resources</b></p>	<p>9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view</p>		
<p><b>Suggested Resources</b></p>		<p>NewsELA, BrainPopJr., Google Apps, Youtube, Nearpod, Google Earth, Wixie</p>	

## Curricular Units

<b>Unit 1: Computing Systems/ Data Analysis/Technology Literacy</b>			
<b>Content Standards</b>	<b>Critical Knowledge &amp; Skills</b> (“Unpacked” Standards)	<b>Content-Specific Practices</b> (when applicable)	<b>Standard Mastery Examples</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
<p>8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences.</p> <p>8.1.12.CS.2: Model interactions between application software, system software, and hardware.</p> <p>8.1.12.CS.3: Compare the functions of application software, system software, and hardware.</p> <p>8.1.12.CS.4: Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.</p> <p>8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats.</p> <p>8.1.2.DA.2: Store, copy, search, retrieve, modify, and delete data using a computing device.</p> <p>8.1.2.DA.3: Identify and describe patterns in data visualizations.</p>	<ul style="list-style-type: none"> <li>• Demonstrate responsible behavior when safely operating technology equipment.</li> <li>• Understand terms and concepts related with applications in Google Docs</li> <li>• Understand that a computing system is composed of software and hardware.</li> <li>• Open and use multiple programs, windows, and/or browser tabs simultaneously.</li> <li>• Use concepts and skills from basic software.</li> <li>• Organize and create a Google Doc, modify data using functions.</li> <li>• Explain and understand that individuals use computing devices to perform a variety of tasks accurately and quickly.</li> <li>• Mouse control skills.</li> </ul>	<p>Using Google Apps (Docs) Mouse Control Skills</p>	

<p>9.4.2.TL.1: Identify the basic features of a digital tool and explain the purpose of the tool.</p>			
<p>9.4.2.TL.2: Create a document using a word processing application.</p>			

Unit 1 Assessment Plan	
<p><b>Formative Assessment</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Summative Assessment</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p> <p>typing.com WPM tests, click and drag activities (Google Sheets) teacher observations, Q&amp;A, Nearpod responses, quick writing responses.</p> <p>Typing Test, Vocabulary Test, PBLs, Google Sheets activities</p>

Unit 1 Suggested Modifications/Accommodations/Extension Activities		
<p><b>English Language Learners (ELL)</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Special Education / 504</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p> <p>extended time, explicit directions, directions posted,work in conjunction with SPed teacher/ aid (when applicable)</p>	<p><b>Gifted and Talented</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p> <p>extension activities via Nearpod/NewsELA, PBL activities, student tutors/mentors, choice board</p>

**Unit 1 Connections**

<p align="center"><b>NJSLS - Technology</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Technology Standards</u></p>	<p align="center"><b>Career Readiness Practices</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Career Readiness Practices</u></p>
<p align="center"><b>21st Century Skills</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i> Refer to the <u>21st Century Life and Skills</u></p>	<p align="center"><b>Interdisciplinary Connections</b></p> <p><i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i> Refer to the <u>NJ Student Learning Standards</u></p>
<p>N/A</p>	<p>CRP1. Act as a responsible and contributing citizen CRP2. Apply appropriate academic and technical skills. CRP4. Communicate clearly and effectively and with reason. CRP11. Use technology to enhance productivity. CRP12. Work productively in teams while using cultural global competence.</p>
<p>CRP1. Act as a responsible and contributing citizen CRP2. Apply appropriate academic and technical skills. CRP4. Communicate clearly and effectively and with reason. CRP11. Use technology to enhance productivity. CRP12. Work productively in teams while using cultural global competence.</p>	<p>K.OA.A.5 KNBT.A.1 K.G.A.2 RI.K.1 RI.K.10.</p>

Unit 2: Networks & The Internet/ Impacts of Computing/ Information & Media Literacy			
Content Standards	Critical Knowledge & Skills ("Unpacked" Standards)	Content-Specific Practices (when applicable)	Standard Mastery Examples When possible, provide links to specific samples/ documents/ assignments/etc.
<p>8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network.</p> <p>8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide.</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 need 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>9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions</p>	<ul style="list-style-type: none"> <li>Identify ways to be safe on the internet.</li> <li>Explain why a safe and secure password is important.</li> <li>Use software properly for video clips, and animation in presentations.</li> <li>Using search engines, etc., search for images, cut/paste them in a Google document, and then find information on the topic and cut/paste the information below the picture.</li> <li>Explain the difference between a credible and non credible source.</li> <li>Understand how computers and technology have improved our lives.</li> </ul>	<p>Digital Citizenship Google &amp; Research skills</p>	

**Unit 2 Assessment Plan**

<b>Formative Assessment</b>	<b>Summative Assessment</b>
<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
typing.com WPM tests, Google Sheets assessment, teacher observations, Q&A, Nearpod responses, quick writing responses.	Typing Test, Vocabulary Test, PBLs, Google sheets

**Unit 2 Suggested Modifications/Accommodations/Extension Activities**

<b>English Language Learners (ELL)</b>	<b>Special Education / 504</b>	<b>Gifted and Talented</b>
<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
labeling, explicit directions, directions posted, access to native language dictionary (digital), work in conjunction with ELL teacher	extended time, explicit directions, directions posted, work in conjunction with SPed teacher/ aid (when applicable)	extension activities via Nearpod/NewsELA, PBL activities, student tutors/mentors, choice boards

**Unit 2 Connections**

<b>NJSLS - Technology</b>	<b>Career Readiness Practices</b>
<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>	<i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
Refer to the <a href="#">NJ Technology Standards</a>	Refer to the <a href="#">NJ Career Readiness Practices</a>

<p>N/A</p>	<p>CRP1. Act as a responsible and contributing citizen  CRP2. Apply appropriate academic and technical skills.  CRP4. Communicate clearly and effectively and with reason.  CRP11. Use technology to enhance productivity.  CRP12. Work productively in teams while using cultural global competence.</p>
<p><b>21st Century Skills</b>  <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>  Refer to the <a href="#">21st Century Life and Skills</a></p>	<p><b>Interdisciplinary Connections</b>  <i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i>  Refer to the <a href="#">NJ Student Learning Standards</a></p>
<p>CRP1. Act as a responsible and contributing citizen  CRP2. Apply appropriate academic and technical skills.  CRP4. Communicate clearly and effectively and with reason.  CRP11. Use technology to enhance productivity.  CRP12. Work productively in teams while using cultural global competence.</p>	<p>K.OA.A.5  KNBT.A.1  K.G.A.2  RI.K.1  RI.K.10.</p>



**Unit 3: Engineering, Design/Algorithms & Programming/ Critical Thinking & Problem Solving**

<b>Content Standards</b>	<b>Critical Knowledge &amp; Skills</b> (“Unpacked” Standards)	<b>Content-Specific Practices</b> (when applicable)	<b>Standard Mastery Examples</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
<p>8.1.2.AP.1: Model daily processes by creating and following algorithms to complete tasks.</p> <p>8.1.2.AP.2: Model the way programs store and manipulate data by using numbers or other symbols to represent information.</p> <p>8.1.2.AP.3: Create programs with sequences and simple loops to accomplish tasks.</p> <p>8.1.2.AP.4: Break down a task into a sequence of steps.</p> <p>8.1.2.AP.5: Describe a program's sequence of events, goals, and expected outcomes.</p> <p>8.1.2.AP.6: Debug errors in an algorithm or program that includes sequences and simple loops.</p> <p>8.2.2.ED.1: Communicate the function of a product or device.</p> <p>8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to</p>	<p>By using code.org &amp; scratch jr. students will complete interactive puzzles using code.org</p> <p>Engineers create and modify technologies to meet people's needs and wants; scientists ask questions about the natural world.</p>	<p>Coding skills and knowledge (code.org)</p>	

<p>build a product using the design process.</p> <p>8.2.2.ED.3: Select and use appropriate tools and materials to build a product using the design.</p> <p>8.2.2.ED.4: Identify constraints and their role in the engineering design process.</p> <p>9.4.2.CT.2: Identify possible approaches and resources to execute a plan .</p> <p>9.4.2.CT.3: Use a variety of types of thinking to solve problems.</p>			
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Unit 3 Assessment Plan	
<p><b>Formative Assessment</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p> <p>typing.com WPM tests, Google Sheets, teacher observations, Q&amp;A, Nearpod responses, quick writing responses.</p>	<p><b>Summative Assessment</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p> <p>Typing Test, Vocabulary Test, PBLs, Google Sheets,</p>

Unit 3 Suggested Modifications/Accommodations/Extension Activities		
<p><b>English Language Learners (ELL)</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Special Education / 504</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Gifted and Talented</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>

labeling, explicit directions, directions posted, access to native language dictionary (digital), work in conjunction with ELL teacher	extended time, explicit directions, directions posted, work in conjunction with SPed teacher/ aid (when applicable)	extension activities via Nearpod/NewseLA, PBL activities, student tutors/mentors, Choice Boards
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Unit 3 Connections		
<p><b>NJSLS - Technology</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <a href="#">NJ Technology Standards</a></p>	<p><b>Career Readiness Practices</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <a href="#">NJ Career Readiness Practices</a></p>	
N/A	<p>CRP1. Act as a responsible and contributing citizen</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>	
<p><b>21st Century Skills</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <a href="#">21st Century Life and Skills</a></p>	<p><b>Interdisciplinary Connections</b></p> <p><i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i></p> <p>Refer to the <a href="#">NJ Student Learning Standards</a></p>	<p>K.OA.A.5</p> <p>KNBT.A.1</p> <p>K.G.A.2</p> <p>RI.K.1</p> <p>RI.K.10.</p>
<p>CRP1. Act as a responsible and contributing citizen</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>		

**Unit 4: Interaction of Technology & Humans/ Nature of Technology/Digital Citizenship**

<p><b>Content Standards</b></p>	<p><b>Critical Knowledge &amp; Skills</b> ("Unpacked" Standards)</p>	<p><b>Content-Specific Practices</b> (when applicable)</p>	<p><b>Standard Mastery Examples</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p>
<p>8.2.2.ITH.1: Identify products that are designed to meet human wants or needs.</p> <p>8.2.2.ITH.2: Explain the purpose of a product and its value.</p> <p>8.2.2.ITH.3: Identify how technology impacts or improves life.</p> <p>8.2.2.ITH.4: Identify how various tools reduce work and improve daily tasks.</p> <p>8.2.2.ITH.5: Design a solution to a problem affecting the community in a collaborative team and explain the intended impact of the solution.</p> <p>8.2.2.NT.1: Model and explain how a product works after taking it apart, identifying the relationship of each part, and putting it back together.</p> <p>8.2.2.NT.2: Brainstorm how to build a product, improve a designed product, fix a product that has stopped working, or solve a simple problem.</p>	<p>Identify that human needs and desires determine which new tools are developed.</p> <p>Understand that engineers create and modify technologies to meet people's needs and wants; scientists ask questions about the natural world.</p> <p>Digital Citizenship overview.</p> <p>Understand that technology has changed the way people live and work.</p> <p>Identify how various tools can improve daily tasks and quality of life.</p> <p>Explain how innovation and the improvement of existing technology involves creative thinking.</p>	<p>Digital Citizenship Innovation &amp; Technology Digital Citizenship &amp; internet Safety</p>	

<p>9.4.5.DC.5: Identify the characteristics of a positive and negative online identity and the lasting implications of online activity.</p>			
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Unit 4 Assessment Plan	
<p><b>Formative Assessment</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p>	<p><b>Summative Assessment</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p>
<p>typing.com WPM tests, Google Sheets teacher observations, Q&amp;A, Nearpod responses, quick writing responses.</p>	<p>Typing Test, Vocabulary Test, PBLs, Google Sheets</p>

Unit 4 Suggested Modifications/Accommodations/Extension Activities			
<p><b>English Language Learners (ELL)</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p>	<p><b>Special Education / 504</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p>	<p><b>Gifted and Talented</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p>	<p>labeling, explicit directions, directions posted, access to native language dictionary (digital), work in conjunction with ELL teacher</p> <p>extended time, explicit directions, directions posted, work in conjunction with SPed teacher/ aid (when applicable)</p> <p>extension activities via Nearpod/NewsELA, PBL activities, student tutors/mentors, Choice Boards</p>

Unit 4 Connections	
<p style="text-align: center;"><b>NJSLS - Technology</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>NJ Technology Standards</u></p>	<p style="text-align: center;"><b>Career Readiness Practices</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>NJ Career Readiness Practices</u></p>
<p>N/A</p>	<p>CRP1. Act as a responsible and contributing citizen  CRP2. Apply appropriate academic and technical skills.  CRP4. Communicate clearly and effectively and with reason.  CRP11. Use technology to enhance productivity.  CRP12. Work productively in teams while using cultural global competence.</p>
<p style="text-align: center;"><b>21st Century Skills</b></p> <p><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>21st Century Life and Skills</u></p>	<p style="text-align: center;"><b>Interdisciplinary Connections</b></p> <p><i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i></p> <p>Refer to the <u>NJ Student Learning Standards</u></p>
<p>CRP1. Act as a responsible and contributing citizen  CRP2. Apply appropriate academic and technical skills.  CRP4. Communicate clearly and effectively and with reason.  CRP11. Use technology to enhance productivity.</p>	<p>K.OA.A.5  KNBT.A.1  K.G.A.2  RI.K.1  RI.K.10.</p>

**Unit 5: Effects of Technology on the Natural World/ Ethics & Culture/ Global & Cultural Awareness**

<b>Content Standards</b>	<b>Critical Knowledge &amp; Skills</b> (“Unpacked” Standards)	<b>Content-Specific Practices</b> (when applicable)	<b>Standard Mastery Examples</b> <i>When possible, provide links to specific samples/ documents/ assignments/etc.</i>
<p>8.2.2.ETW.1: Classify products as resulting from nature or produced as a result of technology.</p> <p>8.2.2.ETW.2: Identify the natural resources needed to create a product.</p> <p>8.2.2.ETW.3: Describe or model the system used for recycling technology.</p> <p>8.2.2.ETW.4: Explain how the disposal of or reusing a product affects the local and global environment.</p> <p>8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.</p> <p>9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view</p>	<p>Explain how the use of technology developed for the human designed world can affect the environment, including land, water, air, plants, and animals.</p> <p>Technologies that use natural sources can have negative effects on the environment, its quality, and inhabitants.</p> <p>Reusing and recycling materials can save money while preserving natural resources and avoiding damage to the environment.</p> <p>Explain how the availability of technology for essential tasks varies in different parts of the world.</p>		

Unit 5 Assessment Plan	
<p><b>Formative Assessment</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Summative Assessment</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>
<p>typing.com WPM tests, teacher observations, Q&amp;A, Nearpod responses, quick writing responses.</p>	<p>Typing Test, Vocabulary Test, PBLs</p>

Unit 5 Suggested Modifications/Accommodations/Extension Activities		
<p><b>English Language Learners (ELL)</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Special Education / 504</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>	<p><b>Gifted and Talented</b> When possible, provide links to specific samples/ documents/ assignments/etc.</p>
<p>labeling, explicit directions, directions posted, access to native language dictionary (digital), work in conjunction with ELL teacher</p>	<p>extended time, explicit directions, directions posted, work in conjunction with SPed teacher/ aid (when applicable)</p>	<p>extension activities via Nearpod/NewsELA, PBL activities, student tutors/mentors, Choice Boards</p>

Unit 5 Connections	
<p><b>NJSLS - Technology</b> When possible, provide links to specific samples/ documents/ assignments/etc. Refer to the <a href="#">NJ Technology Standards</a></p>	<p><b>Career Readiness Practices</b> When possible, provide links to specific samples/ documents/ assignments/etc. Refer to the <a href="#">NJ Career Readiness Practices</a></p>
<p>N/A</p>	<p>CRP1. Act as a responsible and contributing citizen and employee. CRP2. Apply appropriate academic and technical skills. CRP3. Attend to personal health and financial well-being. CRP4. Communicate clearly and effectively and with reason.</p>



<p style="text-align: center;"><b>21st Century Skills</b></p> <p style="text-align: center;"><i>When possible, provide links to specific samples/ documents/ assignments/etc.</i></p> <p style="text-align: center;">Refer to the <u>21st Century Life and Skills</u></p>	<p style="text-align: center;"><b>Interdisciplinary Connections</b></p> <p style="text-align: center;"><i>When possible, provide links to specific ELA/Math/Sci/SS standards as well as samples/ documents/ assignments/etc.</i></p> <p style="text-align: center;">Refer to the <u>NJ Student Learning Standards</u></p>
<p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity. CRP12. Work productively in teams while using cultural global competence.</p>	<p>K.OA.A.5</p> <p>KNBT.A.1</p> <p>K.G.A.2</p> <p>RI.K.1</p> <p>RI.K.10.</p>

