

MILLSTONE TOWNSHIP SCHOOL DISTRICT
Computer Course
GRADE: 1
(Updated October 2021)

Unit of Study: Computers 1st Grade	
<p>Unit Overview: 8.1 Computer Science All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge</p>	
Enduring Understandings:	Essential Questions:
<ul style="list-style-type: none"> ● Students will demonstrate appropriate and effective use of technology ● Students will work with all of the tools and features of word processing, spreadsheets, multimedia presentations, and graphic design layouts. ● Students will understand that digital tools offer opportunities for new experiences and means of outreach and collaboration that support creative and innovative approaches. ● Students will explore computer programming skills for real world application. ● Students will improve their keyboarding skills in individual accuracy. 	<ul style="list-style-type: none"> ● When do you use each type of software (word document, spreadsheet, presentation, graphic design layout)? ● How do you use the key tools for a word document, spreadsheet, presentation, graphic design? ● What searching techniques help when using the Internet to locate information? ● How do you determine what web site to use – reliability check? ● How does technology improve/change your lifestyle? ● Why is it important to use proper keyboarding techniques?
Objectives/Teaching Points:	Grade Level Standards:
<ul style="list-style-type: none"> ● Engage in the best practices for using files. ● Explore differences between various software. ● Focus on word processing, organizational charts and pictures ● Create and design a document and pictures ● Utilize different types of design techniques (text formatting, layout and colors) to create a brochure or document. ● Explain the uses of the Internet and its impact on daily life. 	<p>.8.1.2.DA.2: Store, copy, search, retrieve, modify, and delete data using a computing device. 8.1.2.DA.3: Identify and describe patterns in data visualizations. 8.1.2.DA.4: Make predictions based on data using charts or graphs 8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide.</p>

<ul style="list-style-type: none"> • Work together in groups as well as individually to demonstrate computer knowledge and skills. 	<p>8.1.2.CS.3: Describe basic hardware and software problems using accurate terminology.</p> <p>8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.</p> <p>8.2.2.ED.1: Communicate the function of a product or device.</p> <p>8.2.2.ED.3: Select and use appropriate tools and materials to build a product using the design process.</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.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.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world</p> <p>Media Arts</p> <p>1.2.2.Pr5b: Identify, describe and demonstrate basic creative skills such as trial-and-error and playful practice, within media arts production.</p> <p>1.2.2.Cr1a: Discover, share and express ideas for media artworks through experimentation, sketching and modeling.</p> <p>1.2.2.Pr4a: With guidance and moving towards independence, combine art forms and media content into media artworks such as an illustrated story or narrated animation.</p>
<p>2020 NJSLC Career Readiness, Life Literacies & Key Skills:</p>	
<p>9.1.2.PB.1: Determine various ways to save and places in the local community that help people save and accumulate money over time.</p>	

- 9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.
- 9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem
- 9.4.2.DC.1: Explain differences between ownership and sharing of information
- 9.4.2.DC.3: Explain how to be safe online and follow safe practices when using the internet
- 9.4.2.DC.4: Compare information that should be kept private to information that might be made public.
- 9.4.2.TL.1: Identify the basic features of a digital tool and explain the purpose of the tool
- 9.4.2.TL.2: Create a document using a word processing application.

Interdisciplinary Connections:

Language Arts: create a document with pictures online

NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Learning Experiences:

The following learning experiences will help students explore the big ideas and essential questions:

Computer Skills/ Techniques observation:

- Demonstration of techniques for using various software programs
- Interaction with other students designing/creating in unique methods.
- View teacher made projects previously made prior to creating their own.

Computer Skills/Techniques exploration:

- Working with Google Docs, Sheets and Slides
- Explore various effects and options to enhance projects.
- Creating various types of projects using skills demonstrating student knowledge and understanding.
- Students sharing new creative ideas.

Assessments:

Skills for Assessment

- Grading Rubrics which include sections for
 - **Appearance** (focus on color, size and layout)
 - **Computer Skills** (depending on project and software)
 - **Information** (correct, current, and informative, audience based, grammar, spelling and punctuation)
 - **Printing** (Correct printer, fit on required # of pages, and one time)

Other Evidence and Student Self-Assessment

- Follows directions, safety concerns, and classroom procedures
- Demonstrates creativity within projects and software.
- Experiments with a variety of tools and techniques available in software.
- Seeks to explore options not required /demonstrated to enhance the overall project.

	<p>Benchmark</p> <ul style="list-style-type: none"> ● SGO ● Observation of the students ● evaluation of the finished product
<p>Ideas for Differentiation:</p>	
<p>Based on the needs of the students, there may be a need for additional teaching points, extending beyond or substituting in for those outlined in the curriculum map.</p> <p>English Language Learners:</p> <ul style="list-style-type: none"> ● Speak and display terminology and movement ● Teacher modeling ● Peer modeling ● Develop and post routines ● Label classroom materials ● Word banks <p>IEP/504 Learners:</p> <ul style="list-style-type: none"> ● Utilize modifications and accommodations delineated in the student's IEP ● Work with paraprofessional ● Use multi-sensory teaching approaches. Provide helpful visual, auditory, and tactile reinforcement of ideas. ● Work with a partner ● Provide concrete examples and relate all new strategies to previously learned strategies. ● Solidify and refine concepts through repetition. <p>Students at Risk of Failure:</p> <ul style="list-style-type: none"> ● Using visual demonstrations, illustrations, and models ● Give directions/instructions verbally and in simple written format. ● Peer Support ● Teachers may modify instructions by modeling what the student is expected to do ● Instructions may be printed out in large print and hung up for the student to see during the time of the lesson. ● Review behavior expectations and make adjustments for personal space or other behaviors as needed. ● Oral prompts can be given <p>Gifted and Talented Learners:</p> <ul style="list-style-type: none"> ● Curriculum compacting ● Inquiry-based instruction ● Independent study ● Higher order thinking skills ● Adjusting the pace of lessons 	

- Interest based content
- Real world scenarios
- Student Driven Instruction

Suggested Resources:

Student Materials:

Technology:

- Google-Docs, Slides, Sheets and Paint, Maps
- Paint
- Starfall
- ABCYA, Starfall,
- Internet for information and practicing skills using the keyboard and mouse
- Type to Learn, Rapid Typing -keyboarding
- Minimouse-mouse skills

Teaching Materials:

Worksheets

Direction worksheets

Google Classroom – Documents

Teacher Resources:

Google

Websites

Lesson Plans