### MILLSTONE TOWNSHIP SCHOOL DISTRICT

Computer/Technology GRADE: Kindergarten (updated October 2021)

### **Unit of Study: Computers Kindergarten**

#### **Unit Overview:**

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

Enduring Understandings:	Essential Questions:
<ul> <li>Students will demonstrate appropriate and effective use of technology</li> <li>Students will work with all of the tools and features of Paint and organizational charts.</li> <li>Students will understand that digital tools offer opportunities for new experiences and means of outreach and collaboration that support creative and innovative approaches.</li> <li>Students will improve their keyboarding skills in individual accuracy.</li> </ul>	<ul> <li>When do you use each type of software (word document, spreadsheet, presentation, graphic design layout)?</li> <li>How do you use the key tools for a word document,</li> <li>How does technology improve/change your lifestyle?</li> <li>Why is it important to use proper keyboarding techniques?</li> </ul>
Objectives/Teaching Points:	2020 New Jersey Student Learning Standards:
<ul> <li>Explore differences between various softwares.</li> <li>Focus on word processing and organizational charts</li> <li>Utilize different types design techniques to create a chart or a picture</li> <li>Explain the uses of the Internet and its impact on daily life.</li> <li>Work together in groups as well as individually to demonstrate computer knowledge and skills.</li> </ul>	Computer Science & Design Thinking 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.CS.3: Describe basic hardware and software problems using accurate terminology. 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology. 8.2.2.ETW.1: Classify products as resulting from nature or produced as a result of technology. Media Arts

1.2.2.Pr5b: Identify, describe and demonstrate basic creative skills such as trial-and-error and playful practice, within media arts production.
1.2.2.Cr1a: Discover, share and express ideas for media artworks through experimentation, sketching and modeling.
1.2.2.Pr4a: With guidance and moving towards independence, combine art forms and media.

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#### 2020 NJSLS Career Readiness, Life Literacies & Key Skills

CRP1. Act as a responsible and contributing citizen and employee

CRP2 Apply appropriate academic and technical skills

CPR6 demonstrate creativity and innovation

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community.

9.1.2. FI.1: Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards)

9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.

9.4.2.DC.1: Explain differences between ownership and sharing of information.

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

#### **Interdisciplinary Connection**

Language Arts- create an alphabet document/page

L.K.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

A. Print many upper- and lowercase letters.

Math- counting, fractions, shapes using online programs

K.CC.A. Know number names and count sequence

1. Count to 100 by ones and by tens.

Science- create a weather project, dress for the weather, classifying, sorting

K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.

Learning Experiences:	Assessments:
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# 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,Paint to create documents for their level
- Explore various effects and options to enhance projects.
- Creating various types of projects using Word, Starfall and ABCYA
- Use mini mouse program and ABCYA for keyboard practice
- Students sharing new creative ideas.

# Skills for Assessment Formative Assessment:

#### Summative Assessment

- Grading Rubrics which include sections for
  - o **Appearance** (focus on color, size and layout)
  - o **Computer Skills** (depending on project and software)
  - o **Information** (correct, current, and informative,
  - o **Printing** (Correct printer,

## Alternative Assessment and Student Self-Assessment

- Follows directions, safety concerns, and classroom procedures
- Demonstrates creativity within project 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.

#### **Benchmark**

Observation and skill assessment of the finished product

#### Ideas for Differentiation:

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.

#### **English Language Learners:**

- Speak and display terminology and movement
- Teacher modeling
- Peer modeling
- Develop and post routines
- Label classroom materials
- Word banks

#### IEP/504 Learners:

- 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.

#### Students at Risk of Failure:

- 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

#### Gifted and Talented Learners:

- 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 suite -Docs,Paint
- Paint
- Internet for information, images and sounds
- Keyboard Zoo (keyboarding)
- Minimouse (mouse skills)
- Starfall

#### **Teaching Materials:**

Worksheets Direction worksheets Samples

Teacher Resources: Websites