

Leonia School District Technology Kindergarten

Course Description

Technology meets once a week for 18-27 weeks in the school year. The students are introduced to basic skills and applications for readiness in this century (critical thinking, communication, collaboration, and creativity).

Pacing Guide

Time Frame	Unit Title
18-27 weeks	Basic Operations and Concepts
2 weeks	Coding
10 weeks	Global Citizenship

Unit 1 - Basic Operations & Concepts

Goals/Objectives of Unit:

- Identify the main components of computer
- Use mouse
- Navigate to programs and websites
- Launch programs
- Open and close computer programs
- Print files under teacher direction

Core Instructional Resources/Materials:

- SmartBoard
- Computers / Chromebooks
- Mouse
- Drawing program
- Story maker program

NJ-Student Learning Standards:

2020 NJSLS Computer Science and Design Thinking

- 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.
- 8.1.2.CS.2: Explain the functions of common software and hardware components of computing systems.
- 8.1.2.CS.3: Describe basic hardware and software problems using accurate terminology.
- 8.1.2.NI.4: Explain why access to devices need to be secured.

Born on:

Board Approved:

Readopted:

- 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology.
- 8.1.2.DA.2: Store, copy, search, retrieve, modify, and delete data using a computing device.
- 8.1.2.AP.1: Model daily processes by creating and following algorithms to complete tasks.
- 8.1.2.AP.4: Break down a task into a sequence of steps.

2020 NJSLS Visual and Performing Arts

- 1.2.2.Cr1a: Discover, share and express ideas for media artworks through experimentation, sketching and modeling.
- 1.2.2.Cr1c: Explore form ideas for media art production with support.
- 1.2.2.Cr1d: Connect and apply ideas for media art production.
- 1.2.2.Cr2c: Choose ideas to create plans for media art production.
- 1.2.2.Cr3a: Create and assemble content for media arts productions, identifying basic principles (e.g., pattern, positioning, attention, and repetition.)
- 1.2.2.Pr5a: Identify and enact basic skills such as handling tools, making choices, and soft skills for planning and creating media artworks.
- 1.2.2.Cn10a: Use personal experiences, interests, information and models in creating media artworks.
- 1.2.2.Cn11b: Interact appropriately with media arts tools and environments considering safety, rules and fairness.

Unit 2 - Coding Goals/Objectives of Unit: SmartBoard Computers / Chromebooks Mouse Drawing program Story maker program Unit 2 - Coding Core Instructional Resources/Materials: SmartBoard Computers / Chromebooks Mouse Drawing program Drawing program Story maker program Story maker program

NJ-Student Learning Standards:

2020 NJSLS Computer Science and Design Thinking

- 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.
- 8.1.2.DA.3: Identify and describe patterns in data visualizations.
- 8.1.2.AP.1: Model daily processes by creating and following algorithms to complete tasks.
- 8.1.2.AP.4: Break down a task into a sequence of steps.
- 8.1.2.AP.6: Debug errors in an algorithm or program that includes sequences and simple loops.
- 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.

Goals/Objectives of Unit:

- Create an informational piece about self
- Create drawings with drawing tools
- Type name
- Type text

Core Instructional Resources/Materials:

- SmartBoard
- Computers / Chromebooks
- Mouse
- Drawing program
- Story maker program

NJ-Student Learning Standards:

2020 NJSLS Computer Science and Design Thinking

- 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.
- 8.1.2.CS.3: Describe basic hardware and software problems using accurate terminology.
- 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.AP.4: Break down a task into a sequence of steps.

2020 NJSLS Visual and Performing Arts

- 1.2.2.Cr1a: Discover, share and express ideas for media artworks through experimentation, sketching and modeling.
- 1.2.2.Cr1c: Explore form ideas for media art production with support.
- 1.2.2.Cr1d: Connect and apply ideas for media art production.
- 1.2.2.Cr2c: Choose ideas to create plans for media art production.
- 1.2.2.Cr3a: Create and assemble content for media arts productions, identifying basic principles (e.g., pattern, positioning, attention, and repetition.)
- 1.2.2.Pr5a: Identify and enact basic skills such as handling tools, making choices, and soft skills for planning and creating media artworks.
- 1.2.2.Cn10a: Use personal experiences, interests, information and models in creating media artworks.
- 1.2.2.Cn11b: Interact appropriately with media arts tools and environments considering safety, rules and fairness.
- 1.2.5.Cn11b: Examine, discuss and interact appropriately with media arts tools and environments, considering safety, ethics, rules, and media literacy.
- 1.2.2.Cr1d: Connect and apply ideas for media art production.
- 1.2.2.Cr2c: Choose ideas to create plans for media art production.
- 1.2.2.Cr3a: Create and assemble content for media arts productions, identifying basic principles (e.g., pattern, positioning, attention, and repetition.)
- 1.2.2.Pr5a: Identify and enact basic skills such as handling tools, making choices, and soft skills for planning and creating media artworks.
- 1.2.2.Cn10a: Use personal experiences, interests, information and models in creating media artworks.
- 1.2.2.Cn11b: Interact appropriately with media arts tools and environments considering safety, rules and fairness.

General Assessments (may include but not limited to):

Possible Summative Assessment:

- Benchmark Assessments through progress on Google Classroom
- Pre/Post Assessments
- Project Completion

Optional Daily Assessment:

- Exit ticket/survey (game/web-based: <u>Kahoot!</u>, <u>Pear Deck</u>, <u>EdPuzzle</u>, <u>Plickers</u>, <u>Quizizz</u>, <u>FlipGrid</u>, Google Suite)
- Reflection/self-assessment tool
- Graphic organizers
- Anecdotal notes/teacher observations