

## Vocabulary:

Computing Devices: traditional devices (tablets, smartphones, desktops, laptops) and non-traditional computing devices (e.g., microwave, oven, car)

Algorithm: A list of steps to finish a task. A set of instructions that can be performed with or without a computer. For example, the collection of steps to make a peanut butter and jelly sandwich is an algorithm.

Loop: The action of doing something over and over again.

Program: An algorithm that has been coded into something that can be run by a

machine.

Sequence: a particular order in which related events, movements, or things follow each

other.

Debugging: Finding and fixing errors in programs.

Decompose: Break a problem down into smaller pieces.



**Standard 1:** Understand how computing devices have changed people's lives

K.IC.1.1 List different ways in which computing devices are used in your daily life.

K.IC.1.2 Discover how some tasks can be completed with or without a computing device.

**Standard 2:** Discover how computing devices have affected the way people communicate. K.IC.2.1 List different computing devices used for communication.



#### Outside Resource Connections:

<u>Learn to Drag and Drop</u>

Common Sense Education: Digital Footprint

Programming in Maze

Programming in Star Wars

Loops in Collector

Loops in Artist

Events in Plau

Sequencing: Introduction
Sequencing Algorithms

Debugging Algorithms



## Unplugged Activities:

Real-Life Algorithms: Plant a Seed

Programming Unplugged: My Robotic Friends

Loops Unplugged: My Loopy Robotic Friends

**Events Unplugged: The Big Event** 



#### Tool Suggestions:

Beebots

Code and Go Mouse

Code-A-Pillar

0zobots

# Curriculum Connections:

ELA:

K.I.1.1 Engage in daily opportunities for play and exploration to foster a sense of curiosity, develop the disposition of inquisitiveness, and begin to verbally articulate "I wonders" about ideas of interest.

K.C.3.1 Explore how ideas and topics are depicted in a variety of media and formats.

#### Science:

K.L.2A.6

Obtain and communicate information about the needs of organisms to explain why they live in particular areas.

K.P.4A.3

Obtain and communicate information about the needs of organisms to explain why they live in particular areas.

#### Social Studies:

K-1

The student will demonstrate an understanding of his or her surroundings.

K-4.2

Explain how changes in modes of transportation and communication have affected the way families live and work together.



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Decompose: Break a problem down into smaller pieces.

Function: A piece of code that you can easily call over and over again. Functions are

sometimes called 'procedures.'

Loop: The action of doing something over and over again.

Repeat: To do something again.



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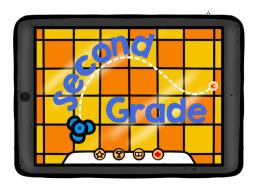
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#### **Curriculum Connections:**

- Math
- ELA
- Science
- Social Studies



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Data: Information. Often, quantities, characters, or symbols that are the inputs and outputs of computer programs.

Condition:

Conditional Statement: Statements that only run under certain conditions or situations.

Loop: Repeat:



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www.code.org