

Grade preK - 2nd - Digital Literacy - Unit 4: Coding

Massachusetts Learning Standards Taught in this Unit

Abstraction [K-2.CT.a]

1. List the attributes of a common object, for example, cars have a color, type (e.g., pickup, van, sedan), number of seats, etc.

Algorithms [K-2.CT.b]

1. Define an algorithm as a sequence of defined steps.
2. Create a simple algorithm, individually and collaboratively, without using computers to complete a task (e.g., making a sandwich, getting ready for school, checking a book out of the library).
3. Enact an algorithm using tangible materials (e.g., manipulatives, your body) or present the algorithm in a visual medium (e.g., storyboard).

Data [K-2.CT.c]

1. Identify different kinds of information (e.g., text, charts, graphs, numbers, pictures, audio, video, collections of objects.)
2. Identify, research, and collect information on a topic, issue, problem, or question using age-appropriate digital technologies.
3. Individually and collaboratively, propose a solution to a problem or question based on an analysis of information.
4. Individually and collaboratively, create information visualizations (e.g., charts, infographics).

Programming and Development [K-2.CT.d]

1. Define a computer program as a set of commands created by people to do something.
2. Explain that computers only follow the program's instructions.
3. Individually or collaboratively, create a simple program using visual instructions or tools that do not require a textual programming language (e.g., "unplugged" programming activities, a block-based programming language).

Modeling and Simulation [K-2.CT.e]

1. Describe how models represent a real-life system (e.g., globe, map, solar system, digital elevation model, weather map).
2. Define simulation and identify the concepts illustrated by a simple simulation (e.g., growth and health, butterfly life cycle).