

# Grades K, 1, 2

Adopted 2023

## Data & Information

### **DI. Students collect, store, visualize, and transform data to make inferences and predictions about the world.** K-2.DI

1. Identify and collect data using digital tools (e.g., take pictures of all blue items, create a document with things that start with "a"). K-2.DI.1
  2. Define stored information as data and when appropriate, copy, search, retrieve, modify, and delete it. K-2.DI.2
  3. Model that data can be stored and manipulated using numbers or symbols to represent information. K-2.DI.3
  4. Organize and present data in different visual formats such as charts, graphs, and symbols, and identify and describe patterns to make predictions. K-2.DI.4
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## Computing Devices & Systems

### **CD. Students identify a computing system as being composed of hardware and software, troubleshooting common problems and generating solutions based on the needs of the user.** K-2.CD

1. Use appropriate terminology in identifying and describing computer hardware. K-2.CD.1
  2. Describe and troubleshoot basic hardware and software problems using appropriate terminology. K-2.CD.2
  3. Select and operate appropriate software to perform a variety of tasks and recognize that users have different needs and preferences for the technology they use. K-2.CD.3
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## Programs & Algorithms

### **PA. Students model complex tasks using algorithmic problem solving and develop simple computing programs to represent them.** K-2.PA

1. Breakdown and plan the order of the steps needed for a desired outcome to accomplish the goal K-2.PA.1
  2. Using age-appropriate vocabulary, explain steps taken and choices made to improve the design of a sequence. K-2.PA.2
  3. Develop programs with sequences and simple loops to express ideas or address a problem. K-2.PA.3
  4. Identify and fix (debug) errors in sequences and simple loops. K-2.PA.4
  5. Model daily processes by creating and following algorithms (i.e., sets of step-by-step instructions) to complete tasks. K-2.PA.5
  6. Give attribution when using the ideas and creations of others while developing programs. K-2.PA.6
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## Networking & the Internet

### **NI. Students explain that information shared over connected computer networks must be protected from unauthorized access.** K-2.NI

1. Explain what passwords are, why they are used, and why it is important to develop strong passwords to protect devices and information. K-2.NI.1
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## Impact & Culture

### **IC. Students explain how computing affects the way people live, work, and communicate.** K-2.IC

1. Compare and contrast the effects of technology on communities and social interactions. K-2.IC.1
2. Identify expected behaviors for working responsibly with others online. K-2.IC.2
3. Describe how to keep login information private and log off of devices appropriately. K-2.IC.3