

Computer Science: Grades 3-5

Data & Information

- 1 Decompose a familiar problem into steps to reach a solution or solve a problem. (E) 3-5.DI.1A**

- 2 Organize provided data into a visual representation (e.g., pictograph, chart, table, slide) and make a claim that is supported by the data. 3-5.DI.2A**

- 3 Demonstrate what variables are and how they store information. 3-5.DI.3A**

- 4 Describe that data can be represented in different forms understandable by people, including words, symbols, and digital displays of color. 3-5.DI.4A**

- 5 Observe data presented (e.g., chart, pictograph) to identify a pattern or communicate an idea. (E) 3-5.DI.5A**

Computing Devices & Systems

- 1 Identify an example of computer hardware and an example of computer software. 3-5.CD.1A**

- 2 Use simple troubleshooting strategies to solve a hardware or software problem (e.g., The computer screen is black because the battery isn't charged. The screen is black because my Chromebook isn't plugged in. The computer is working slowly because there are too many things open at once). (E) 3-5.CD.2A**

- 3 Identify external parts of a computer system (e.g., mouse, keyboard, monitor, case). 3-5.CD.3A**

- 4 Identify an action that is specific to humans (e.g., care, breathe, smile) or identify an action that people rely on a computer to do (e.g., solve a complex math problem, get data to answer a question). 3-5.CD.4A**

Programs & Algorithms

- 1 Work with one or more people to complete provided steps to solve a problem or complete a task. (E) 3-5.PA.1A**

- 2 Identify and incorporate sequences, loops, events, and conditionals in computer programs. 3-5.PA.2A**

- 3 Fix an error in a list of steps that explains a familiar process or solution to a problem. (E) 3-5.PA.3A**

- 4 Attribute credit to others when creating and remixing programs by including code comments within the lines of code. (E) 3-5.PA.4A**

5 Explain the function of a piece of code and how changing the code changes the function or outcome. (E) 3-5.PA.5A

Networking & the Internet

1 Identify a way to protect people's personal information on computer systems. (E) 3-5.NI.1A

2 Identify parts of a model that show how information moves across networks or the internet. 3-5.NI.2A

Impact & Culture

1 Identify a positive or negative impact technology has had on how people communicate or live. (E) 3-5.IC.1A

2 Implement improvements to a computational artifact (e.g., digital animations, apps, webpages) based on provided feedback or suggestions from others. 3-5.IC.2A

3 Explain how computing technologies have changed how people communicate or live (e.g., smartphones, computers, email, texting). 3-5.IC.3A