Louisiana Computer Science

Kindergarten through Grade 5

Computing Systems

1 Hardware and Software E.CS.1

- A Identify and select the appropriate hardware to complete computing tasks. E.CS.1A
- B Identify and select the appropriate software to complete computing tasks. E.CS.1B
- C Evaluate hardware and software types to meet users' needs in completing various computing tasks. E.CS.1C

2 Troubleshooting E.CS.2

- A Propose potential ways to address computing problems using appropriate hardware or software. E.CS.2A

Networks and the Internet

1 Hardware and Network Communication E.NI.1

- A Explain how networks connect computers to other computing systems and the internet. E.NI.1A

2 Cybersecurity E.NI.2

- A Describe personally identifiable information (PII) and identify practices for when and where sharing PII is appropriate. E.NI.2A
- B Identify ways to maintain data security when using networks. E.NI.2B

Data and Analysis

1 Data Representation E.DA.1

- A Organize and present data visually to highlight relationships and support claims. E.DA.1A
- B Classify types of data and describe the attributes used to sort data. E.DA.1B

2 Data Collection E.DA.2

- A Select the appropriate data collection tool and technique to gather data to support a claim or communicate information. E.DA.2A
- B Describe and collect data utilizing the appropriate units of measure and discuss how data format impacts a computing system. E.DA.2B

3 Data Storage E.DA.3

- A Compare and contrast ways to store data using technology. E.DA.3A
- B Explain how to save and name data, search for data, retrieve data, modify data, and delete data using a computing device. E.DA.3B

4 Visualizations and Transformations E.DA.4

- A Organize and present data visually in at least three ways to highlight relationships and evaluate a claim. E.DA.4A
- B Evaluate data quality and clean data when indicated using the criteria of validity, accuracy, completeness, consistency, and uniformity. E.DA.4B

5 Inference and Models E.DA.5

- A Utilize data to create models, answer investigative questions, and make predictions. E.DA.5A
- B Analyze data for patterns and relationships. E.DA.5B

Algorithms and Programming

1 Variables and Algorithms E.AP.1

- A Create clearly named variables representing different data types and perform operations on the variables' values. E.AP.1A
- B Create, use, and apply an algorithm to complete a task. Compare the results of algorithm usage trials and refine the algorithm. E.AP.1B

2 Control Structures E.AP.2

- A Define what a control structure is and create programs that include sequences, conditionals, events, and loops. E.AP.2A

3 Modularity E.AP.3

- A Define and apply decomposition to a complex problem in order to create smaller subproblems that can be solved through step-by-step instructions. E.AP.3A
- B Modify, remix, or incorporate parts of an existing problem's solution to develop something new or add more advanced features to a program. E.AP.3B

4 Program Development E.AP.4

- A Create a simple program to achieve a goal with expected outcomes. E.AP.4A
- B Test and debug a program or algorithm to ensure the program produces the intended outcome. E.AP.4B
- C Collaborate with a team of peers to design, implement, test, and review the stages of program development. E.AP.4C
- D Identify intellectual property rights and apply the appropriate attribution when creating or remixing programs. E.AP.4D
- E Describe and justify the steps taken and choices made during a program's development. E.AP.4E
- F Using an iterative process, test a program step-by-step and document areas of refinement. E.AP.4F

Impacts of Computing

1 Intellectual Achievements E.IC.1

- A Describe how computing has changed the ways people live and work. E.IC.1A

2 Social Interaction E.IC.2

- A Identify and describe examples of appropriate versus inappropriate computer communications. E.IC.2A
- B Identify examples of cyberbullying with age-appropriate responses. E.IC.2B

3 Laws, Safety, and Industry Practices E.IC.3

- A Explain how online actions have real-world consequences and that laws and rules may also apply online. E.IC.3A
- B Describe the safe versus unsafe uses of computing systems at age-appropriate levels. E.IC.3B
- C Explain how the school and school system's computing rules and policies keep students safe. E.IC.3C