Illinois Computer Science

# Grades K-2

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| **Computing Systems** K-2.CS | 1 **Devices: Select and operate appropriate software to perform a variety of tasks and recognie that users have different needs and preferences for the technology they use** K-2.CS.01 |
| | 2 **Hardware and Software: Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware)** K-2.CS.02 |
| | 3 **Troubleshooting: Describe basic hardware and software problems using accurate terminology** K-2.CS.03 |
| **Networks and the Internet** K-2.NI | 4 **Cybersecurity: Explain what passwords are and why we use them and use strong passwords to protect devices and information from unauthorized use.** K-2.NI.04 |
| **Data and Analysis** K-2.DA | 5 **Storage: Store, copy, search, retrieve, modify and delete information using a computing device and define the information stored as data** K-2.DA.05 |
| | 6 **Collection, Visualization and Transformation: Collect and present the same data in various visual formats** K-2.DA.06 |
| | 7 **Inference and Models: Identify and describe patterns in data visualizations, such as charts or graphs, to make predictions** K-2.DA.07 |
| **Algorithms and programming** K-2.AP | 8 **Algorithms: Model daily processes by creating and following algorithms (sets of step by step instructions) to complete tasks.** K-2.AP.08 |
| | 9 **Variables: Model the way programs store and manipulate data by using numbers or other symbols to represent information** K-2-AP.09 |
| | 10 **Control: Develop programs and sequences and simple loops, to express ideas or address a problem** K-2.AP.10 |
| | 11 **Modularity: Decompose (break down) the steps needed to solve a problem into a precise sequence of instructions** K-2.AP.11 |

**Program Development:**

12 Develop plans that describe a program's sequence of events, goals, and expected outcomes. K-2.AP.12

13 Give attribution when using the ideas and creations of others while developing programs K-2.AP.13

14 Debug (identify and fix) errors in an algorithm or program that includes sequences and simple loops K-2.AP.14

15 Using correct terminology, describe steps taken and choices made during the iterative process of program development K-2.AP.15

**Impacts of Computing** K-2.IC

**16 Culture: Compare how people live and work before and after the implementation or adoption of new computing technology** K-2.IC.16

**17 Social Interactions: Work respectfully and responsibly with others online.** K-2.IC.17

**18 Safety Law and Ethics: Keep login information private and log off of devices appropriately.** K-2.IC.18

**Emerging and Future Technologies** K-2.ET

**A Explain that the fields of emerging technologies will be evolving and rapidly growing** K-2.ET.A

**B Comparing existing and emerging technologies, ideas, and concepts** K-2.ET.B

**C Describe how emerging technologies are influencing current events a a local and global scale** K-2.ET.C

**D Predict the positive and negative societal, cultural, and economic impacts that emerging and future technologies may generate** K-2.ET.D

**E Create new or original work by applying emerging technolgies** K-2.ET.E