Alabama Digital Literacy and Computer Science

Grade 6

Computational Thinker CT

Ab. Abstraction CT.AB

1 Remove background details from an everyday process to highlight essential properties CT.AB.1

2 Define a process as a function. CT.AB.2

Al. Algorithms CT.AL

3 Create pseudocode that uses conditionals. CT.AL.3

4 Differentiate between flowcharts and pseudocode. CT.AL.4

5 Identify algorithms that make use of sequencing, selection or iteration CT.AL.5

Programming and Development CT.PD

6 Identify steps in developing solutions to complex problems using computational thinking. CT.PD.6

7 Describe how automation works to increase efficiency CT.PD.7

8 Create a program that initializes a variable CT.PD.8

Citizen of a Digital Culture CDC

SPS. Safety, Privacy, and Security CDC.SPS

9 Differentiate between a secure and a non-secure website including how they affect personal data. CDC.SPS.9

LEB. Legal and Ethical Behavior CDC.LEB

10 Describe the causes and effects of illegal use of intellectual property as it relates to print and digital media, considering copyright, fair use, licensing, sharing, and attribution. CDC.LEB.10

11 Differentiate between appropriate and inappropriate digital content and the use of that content. CDC.LEB.11

DI. Digital Identity CDC.DI

12 Define digital permanence. CDC.DI.12

13 Define personal privacy, digital footprint, and open communication. CDC.DI.13

IC. Impact of Computing CDC.IC

14 Discuss digital globalization and Internet censorship. CDC.IC.14

15 Identify emerging technologies in computing. CDC.IC.15

Global Collaborator GC

CC. Creative Communications GC.CC

16 Communicate and/or publish collaboratively to inform others from a variety of backgrounds and cultures about issues and problems. GC.CC.16

DT. Digital Tools GC.DT

17 Type 30 words per minute with 95% accuracy using appropriate keyboarding techniques. GC.DT.17

SI. Social Interactions GC.SI

18 Define censorship. GC.SI.18

Computing Analyst CA

D. Data CA.D

19 Track data change from a variety of sources. CA.D.19

20 Identify data transferring protocols, visualization, and the purpose of data and methods of storage. CA.D.20

21 Identify varying data structures/systems and methods of classification, including decimal and binary. CA.D.21

22 Summarize the purpose of the American Standard Code for Information Interchange (ASCII). CA.D.22

S. Systems CA.S

23 Discuss how digital devices may be used to collect, analyze, and present information. CA.S.23

24 Compare and contrast types of networks. CA.S.24

25 Differentiate between secure and non-secure systems. CA.S.25

MS. Modeling and Simulation CA.MS

26 Explain why professionals may use models as logical representations of physical, mathematical, or logical systems or processes. CA.MS.26

27 Explain how simulations serve to implement models. CA.MS.27

Innovative Designer ID

HCP. Human/Computer Partnerships ID.HCP

28 Define assistive technologies and state reasons they may be needed. ID.HCP.28

29 Define artificial intelligence and identify examples of artificial intelligence in the community. ID.HCP.29

DT. Design Thinking ID.DT

30 Discuss and apply the components of the problem-solving process. ID.DT.30