

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