

9th Grade

Networks & Internet:
Networks link computers and devices locally and around the world allowing people to access and communicate information. [9.NI](#)

- 1 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology). [9.NI.1](#)
- 2 Understand the implications of accessing publicly available Internet connections. (CYSEC) [9.NI.2](#)

Hardware & Software:
Devices, hardware, and software work together as a system to accomplish tasks. [9.HS](#)

- 1 Compare and contrast appropriate device/hardware/software to complete a task. [9.HS.1](#)
- 2 Define software and security patches/update. (CYSEC) [9.HS.2](#)
- 3 Explain why a backup is necessary. (CYSEC) [9.HS.3](#)

Troubleshooting:
Strategies for solving technology system problems. [9.T](#)

- 1 Describe basic hardware and software problems using appropriate and accurate terminology. [9.T.1](#)

Problem Solving & Algorithms: Strategies for understanding and solving problems [9.PSA](#)

- 1 Identify, recognize, and use an algorithm to solve a complex problem across disciplines. [9.PSA.1](#)

Data Creation & Analysis: Data can be collected, used, and presented with computing devices or digital tools. [9.DCA](#)

- 1 Collect and analyze complex data. [9.DCA.1](#)

Access: Effective searches strategies can locate information for intellectual or creative pursuits. [9.A](#)

- 1 Plan and employ effective research strategies to locate information. [9.A.1](#)

Evaluate: Information sources can be evaluated for accuracy, currency, appropriateness, and purpose. 9.E

- 1 Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources. 9.E.1

Create: It is important to both consume and produce information to be digitally literate. 9.C

- 1 Create original works or responsibly repurpose or remix digital resources into new creations to communicate an idea. 9.C.1

Intellectual Property: Respect for the rights and obligations of using and sharing intellectual property. 9.IP

- 1 Properly use copyrighted works, works in the creative commons, and works in the public domain. 9.IP.1
- 2 Cite sources in a standard format to ethically reference the intellectual property of others. 9.IP.2
- 3 Engage in positive, safe, legal, and ethical behavior when using technology. 9.IP.3

Impacts of Computing: Past, present, and possible future impact of technology on society. 9.IC

- 1 Evaluate how technology has impacted the workforce positively and negatively. 9.IC.1

Social Interactions: Technology facilitates collaboration with others. 9.SI

- 1 Identify how technology has affected our means of communication. 9.SI.1

Safety & Ethics: There are both positive and negative impacts in social and ethical behaviors for using technology. 9.SE

- 1 Recognize the effects sharing information online can have on others' privacy. (CYSEC) 9.SE.1
- 2 Know how to modify account settings to protect privacy and security. (CYSEC) 9.SE.2
- 3 Recognize that data collection technology can be used to track navigation online. (CYSEC) 9.SE.3
- 4 Describe ways to prevent identity theft. (CYSEC) 9.SE.4

Responsible Use: Respect and dignity in virtual and physical communities. 9.RU

- 1 Apply cyberbullying prevention strategies. 9.RU.1
- 2 Apply safe and ethical behaviors to personal electronic communication and interaction. (CYSEC) 9.RU.2

3 Continued growth. 9.RU.3

4 Understand the purpose of and comply with Acceptable Use Policies. 9.RU.4

Digital Identity: The responsibilities and opportunities that come with living, learning, and working in an interconnected digital world. 9.DI

1 Manage a digital identity and be aware of the permanence of actions in the digital world. (CYSEC) 9.DI.1