

8th Grade

Networks & Internet:
Networks link computers and devices locally and around the world allowing people to access and communicate information. **8.NI**

- 1 Investigate how data is sent from one computer to another across networks. 8.NI.1**

Hardware & Software:
Devices, hardware, and software work together as a system to accomplish tasks. **8.HS**

- 1 Choose appropriate device/hardware/software to complete a task. 8.HS.1**
- 2 Continued growth. 8.HS.2**
- 3 Organize, store, and retrieve digital information efficiently. 8.HS.3**
- 4 Describe ways to protect against threats to technology systems. (CYSEC) 8.HS.4**
- 5 Compare and contrast security measures used to protect technology systems. (CYSEC) 8.HS.5**

Troubleshooting:
Strategies for solving technology system problems. **8.T**

- 1 Continued growth. 8.T.1**

Problem Solving & Algorithms: Strategies for understanding and solving problems. **8.PSA**

- 1 Create and test an algorithm to solve a problem across disciplines. 8.PSA.1**
- 2 Continued growth. 8.PSA.2**

Data Creation & Analysis: Data can be collected, used, and presented with computing devices or digital tools. **8.DCA**

- 1 Represent data from multiple sources in order to defend or refute a claim. 8.DCA.1**

Development & Design:
Design processes to create new, useful, and

- 1 Create programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types. 8.DD.1**

imaginative solutions to solve problems. 8.DD

Access: Effective search strategies can locate information for intellectual or creative pursuits. 8.A

1 Use advanced search strategies to locate information online. 8.A.1

Information sources can be evaluated for accuracy, currency, appropriateness, and purpose. 8.E

1 Continued growth. 8.E.1

Create: It is important to both consume and produce information to be digitally literate. 8.C

1 Continued growth. 8.C.1

Intellectual Property: Respect for the rights and obligations of using and sharing intellectual property. 8.IP

1 Properly use copyrighted works, works in the creative commons, and works in the public domain. 8.IP.1

2 Continued growth. 8.IP.2

3 Debate the risks and benefits of sharing personal works online (CYSEC) 8.IP.3

Impacts of Computing: Past, present, and possible future impact of technology on society. 8.IC

1 Explore and create solutions for the negative impacts of technology, including bias and accessibility. 8.IC.1

Social Interactions: Technology facilitates collaboration with others. 8.SI

1 Use collaborative technology to communicate information to a specific audience. 8.SI.1

2 Continued growth. 8.SI.2

Safety & Ethics: There are both positive and negative impacts in social and ethical behaviors for using technology. 8.SE

1 Continued growth. 8.SE.1

2 Identify advanced methods to maintain digital privacy and security. (CYSEC) 8.SE.2

3 Continued growth. 8.SE.3

4 Discuss the consequences of identity theft. (CYSEC) 8.SE.4

**Responsible Use:
Respect and dignity in
virtual and physical
communities.** 8.RU

1 Continued growth. 8.RU.1

2 Identify strategies to prevent and stop cyberbullying. 8.RU.2

3 Continued growth. 8.RU.3

4 Understand the purpose of and comply with Acceptable Use Policies. 8.RU.4

**Digital Identity: The
responsibilities and
opportunities that come
with living, learning,
and working in an
interconnected digital
world.** 8.DI

1 Continued growth. 8.DI.1