NORTH DAKOTA CENTER FOR DISTANCE EDUCATION



Computer Science & Cybersecurity INTEGRATION PLAN

Prepared by

Alyssa Martin, Ph.D. Jessica Enderson Kirstin Girard Kaitlyn Allen Prepared in response to requirements in NDCC 15.1-21-01 (2) and 15.1-21-02 (2)(b) related to developing a computer science and cybersecurity integration plan to provide students with an introduction to computer science and cybersecurity knowledge.

Presented to

The North Dakota Department of Public Instruction & The North Dakota Board of Public School Education

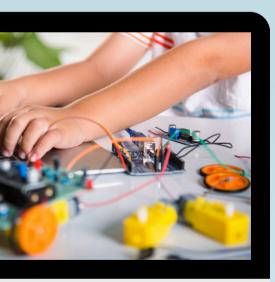
OVERVIEW

In compliance with NDCC Ch. 15.1-21, the North Dakota Center for Distance Education has analyzed its K-12 curriculum to evaluate the extent to which it incorporates state computer science and cybersecurity standards in all statutorily required courses. Through this review, NDCDE has concluded that of over 275* unique North Dakota computer science and cybersecurity standards, NDCDE addresses over 80% of them in our K-12 curriculum, often multiple times. Based on this analysis, we have developed a plan to respond to curricular gaps and established graduation criteria for NDCDE diploma students who intend to learn computer science and cybersecurity concepts through curricular integration in lieu of standalone courses in these areas. More information on the content of this plan is included below. // Update the rule with the ne \$this->_sql->update('acl_rule

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*NDCDE generally excluded "continued growth" standards in this count.



Report Contents

The following pages contain our findings resulting from our review of state computer science and cybersecurity standards in relation to our curriculum. They have implications for curricular improvements, a new course offering, and changes to our graduation requirements, which are all explained in detail.

Appendices

<u>Appendix A</u> provides an overview of how each cybersecurity and computer science concept has been integrated into our curriculum; <u>Appendix B</u> contains a complete curricular map showing the specific course and module in which each standard is addressed; and <u>Appendix C</u> outlines our new virtual onboarding course, including the digital citizenship standards covered.

VALUATION

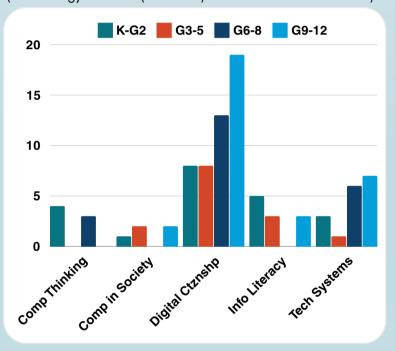
Curricular Gaps & Solutions

The tables below highlight missing computer science and cybersecurity standards in the NDCDE K-12 curriculum by grade bands and the number of standards missing by concept area and grade band. This information reveals two areas of needed targeted improvement: increasing cybersecurity and computer science standard integration at the K-2 level and devising a strategy for better integration of digital citizenship standards across the curriculum. Response strategies are also included in this section.



Percentage of Missing Standards by Grade Bands (Technology Courses Included)

Number of Missing Standards by Concept Area (Technology Courses (Electives) Excluded for Grades 6-12)



In response to these findings, NDCDE will have its elementary teachers complete a deeper review of content in first grade (the grade in which the highest number of elementary standards were missing) to determine if more integration is possible. Across the curriculum, to address the digital citizenship gap, NDCDE is finalizing a student onboarding course, which all learners in grades 6-12 who are new to NDCDE will complete and which incorporates several of the digital citizenship standards. An outline of this course, which will be launched in the fall of 2024, and the digital citizenship standards it covers are mapped in <u>Appendix C</u>.

While NDCDE seeks to fill the above curricular standards gaps, it simultaneously touts the <u>strong alignment</u> <u>between its curriculum and the state cybersecurity and computer science standards</u>. With over 80% of these standards covered in the curriculum, often multiple times, students will be exposed to computer science and cybersecurity concepts, whether taking a core course or a technology-specific course at NDCDE.

We encourage schools to consider this strong computer science and cybersecurity curricular alignment at NDCDE when determining whether a high school student has fulfilled the requirements under local integration plans for graduation purposes.

Page 03

High School Graduation Integration Plan

NDCDE offers a diploma program and has a policy outlining high school graduation requirements. This policy will be updated to incorporate the cybersecurity and computer science integration requirements now that NDCDE has a complete understanding of how it covers these standards. The proposed modifications to our graduation requirements policy are explained below. First, we provide context on our diploma students--another critical consideration in this policy updates.



Our Diploma Students

Students who enter our diploma program have unique and diverse backgrounds, often with a patchwork of high school credits from schools across the country and/or from homeschooling. As a result, NDCDE has difficulty verifying these students' level of exposure to cybersecurity and computer science concepts. Furthermore, NDCDE rarely educates these students over a traditional four-year cycle. There is no pattern to their time of entry into our program, with some beginning as freshmen and others starting late in their high school studies.

New Graduation Requirements



Based on the unique profiles of our diploma program students, NDCDE will strongly encourage them to complete one credit of cybersecurity or computer science coursework to fulfill new graduation standards beginning in 2025. Diploma students who forgo this recommendation and pursue meeting new cybersecurity and computer science requirements through the NDCDE integration plan will be required to have exposure to at least 30 of the cybersecurity and computer science standards in our courses outlined in our curricular map (see **Appendix B**).

Page 04



Conclusion

Based on our review, the NDCDE curriculum closely aligns with new state cybersecurity and computer science standards. Since NDCDE primarily serves as a supplementary educational provider to North Dakota schools, we have completed this integration review with the hope that it can be used by schools to help reinforce local efforts to incorporate the new standards into their curricula. <u>Appendix A</u> was developed as a resource to help schools quickly evaluate in which NDCDE courses students will be exposed to these standards.

WE'VE ALSO USED THIS REVIEW TO:

Determine ways of further integrating the standards into our curriculum

We did so with the understanding of the value of equipping students with knowledge and skills in cybersecurity and computer science concepts to assist them with becoming proficient at technology use--essential now and undoubtedly necessary for their future. This has resulted in the development of a new student onboarding course (see <u>Appendix C</u>).

Devise New Graduation Requirements

We have developed criteria for our diploma students to fulfill cybersecurity and computer science standards without taking standalone courses. These criteria take into account the unique nature of students in this program and aim to balance adequate exposure to these important concepts with the need not to delay these students' time to completion.



In conclusion, this integration review and plan aims to reinforce local efforts to educate students in cybersecurity and computer science, further embed these new standards into the NDCDE curriculum, and ultimately strengthen student technology proficiency statewide.



Page 05

APPENDIX A:

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CYBERSECURITY & COMPUTER SCIENCE INTEGRATION PLAN

Grade Band	Technology Systems	Computational Thinking	Information Literacy	Computing in Society	Digital Citizenship
К-2	K-2, Tech Course All K-2 Courses ("Getting started" module)	K-2 Math K-1, Social Studies K-2, Science K-2, Tech Course	K-1, Tech Course G1, Social Studies G2, ELA	K-2, Tech Course G1, Social Studies G2, ELA	K-2, Tech Course
3-5	G3-5, Tech Course All K-2 Courses ("Getting started" module)	G3-5, Tech Course G3-5, Math G3-5, ELA G3-5, Social Studies G3-5, Science	G3-5, Tech Course G3-5, ELA G3-5. Social Studies G4-5, Science	G3-5, Tech G5, ELA G4-5, Social Studies G4-5, Science	G3-5, Tech Course G4-5, ELA G4, Social Studies
6-8	G6-8, ELA G6-8, Math All MS History Courses All MS Science Courses All MS Tech Courses	G6-8, ELA G6-8, Math All MS History Courses All MS Science Courses All MS Tech Courses	G6-8, ELA All MS History Courses All MS Science Courses All MS Tech Courses	G6-8, ELA All MS History Courses All MS Science Courses All MS Tech Courses	G6-8, ELA All MS History Courses All MS Science Courses All MS Tech Courses
9-12	G9-12, ELA Chemistry, Biology, Physics, Phy Science All HS Tech Courses	G9-12, ELA Algebra I-Pre-Cal Chemistry, Biology, Physics, Phy Science U.S. History, World History, U.S. Gov., Economics All HS Tech Courses	G9-12, ELA Chemistry, Biology, Physics, Phy Science World History, U.S. Gov., Economics All HS Tech Courses	U.S. Gov. & Economics All HS Tech Courses	All HS Tech Courses



Center for Distance Education

APPENDIX B:

CYBERSECURITY & COMPUTER SCIENCE CURRICULAR MAP

KINDERGARTEN					
Category	Standard	Course Covered	Module Covered		
Technology Systems	K.NI.1 Recognize that computing devices can be connected together.	K, Tech	Module 01: Talk It Out (KT)		
Technology Systems	K.HS.1 Follow directions to use computing devices to perform a variety of appropriate tasks.	All courses K, Tech	Getting Started: Online Learning - What Do I Need? (AC) Online Practice activities across all modules. (AC) Module 02: My Digital World (KT)		
Technology Systems	K.T.1 Understand technology systems might not work as expected.				
Computational Thinking	K.PSA.1 With guidance, determine if a program works.				
Computational Thinking	K.PSA.2 Use trial and error in attempt to solve a problem.	K, Science, Semester 1 K, Tech	Module 15: Grow a Bean Seed Assignment (KSCS1) Module 04: Task Attack (K, Tech)		
Computational Thinking	K.DCA.1 With guidance, draw conclusions and make predictions based on picture graphs or patterns with or without a computing device.	K, Math, Semester 1 & 2 K, SS, Semester 1 & 2 K, Science, semester 1 & 2	 Module 9: Picture Graphs, Picture Graphs Assignment. (KMS1) Module 24: Circle Graphs, Picture Graphs (KMS2) Module 13: Make a Room Map, My Dream Room Assignment(KSSS1) Module 15: The U.S. Map, My Map, My Country Assignment (KSSS1) Module 21: Puzzle Design Assignment (KSSS2) Module 28: Map Skills Assignment (KSSS2) Module 4: Making a Weather Chart(KScS1) Module 14: Forces Observation Chart Assignment (KSCS1) Module 26: Rainbows and Evaporation Assignment (KScS2) 		

			Module 31: Evening Stars and Constellations Assignment (KScS2)
Computational Thinking	K.DD.1 With guidance, create programs to follow a sequence.	K, Tech	Module 04: Task Attack (K, Tech)
Information Literacy	K.A.1 With guidance, use a keyword search with a teacher selected online resource.	K, Tech	Module 02: My Digital World (K, Tech)
Information Literacy	K.E.1 Name various information sources	K, Tech	Module 02: My Digital World (K, Tech)
Information Literacy	K.C.1 With guidance, create a digital product.		
Information Literacy	K.IP.1 Discuss that creative works have owners (copyright).	K, Tech	Module 03: Super Digital Citizen (K, Tech)
Information Literacy	K.IP.2 Understand that credit should be given to the creator of creative work.	K, Tech	Module 03: Super Digital Citizen (K, Tech)
Computing in Society	K.IC.1 List different ways in which technologies are used in daily life.	K, Tech	Module 01: Talk It Out (K, Tech) Module 02: My Digital World (K, Tech)
Computing in Society	K.SI.1 With guidance, use technology to share thinking with teachers or adults.	All courses	Participation: End of Course Survey.

Digital Citizenship	K.SE.1 With guidance, use technology in safe and correct ways. (CYSEC)	K, Tech	Module 03: Super Digital Citizen (K, Tech)
Digital Citizenship	K.SE.2 With guidance, use authentication methods to access technology. (CYSEC)		
Digital Citizenship	K.RU.1 Discuss positive and negative behaviors when using electronic communication. (CYSEC)	K, Tech	Module 03: Super Digital Citizen (K, Tech)
Digital Citizenship	K.RU.2 With guidance, identify appropriate manners while participating in an online community.	K, Tech	Module 03: Super Digital Citizen (K, Tech)
Digital Citizenship	K.RU.4 Comply with Acceptable Use Policies.	K, Tech	Module 03: Super Digital Citizen (K, Tech)

Category	Standard	Course Covered	Module Covered
Technology Systems	1.NI.1 Recognize that connecting computing devices allows information sharing.	G1, Tech	Module 01: Digital Decisions (G1T)
Technology Systems	1.HS.1 Use appropriate terminology to identify common computing devices and components	G1, Tech	Module 02: Tech Detective (G1T)
Technology Systems	1.HS.2 With guidance, use a computing device to perform a variety of tasks.	All courses G1, Tech	Getting started Module 01: Digital Decisions (G1T)
Technology Systems	1.HS.3 Recognize users have different technology needs.		
Technology Systems	1.T.1 Understand technology systems might not work as expected and with guidance, use appropriate terminology to describe a problem.		
Computational Thinking	1.PSA.1 Solve a problem through trial and error using given materials/resources.	G1, Math, Semester 1 & 2 G1, SS, Semester 1 G1, Science, Semester 1 & 2 G1, Tech	Module 4: Logic Puzzles (G1MS1) Module 15: Logical Order (G1MS1) Module 33-34: Logic Puzzles (G1MS2) Module 1: My Rules Assignment (G1SSS1) Module 4: Make a Map and a Model (G1SSS1) Module 1: Think Like a Scientist Assignment (G1ScS1) Module 3: Observing and Classifying Nature Assignment (G1ScS1) Module 23: Planting a Tomato Assignment (G1ScS2) Module 01: Digital Decisions (G1T)
Computational Thinking	1.PSA.2 Follow a set of instructions (algorithms) in order to complete a task.	G1, Science, Semester 1 & 2	Module 4: The Role of Seeds Assignment (G1SCS1) Module 23: Planting a Tomato Assignment (G1ScS2)
Computational Thinking	1.PSA.3 Define debug.		
Computational Thinking	1.PSA.4 Identify and practice debugging strategies including 'Go back to when it worked'.		

Computational Thinking	1.DCA.1 With guidance, identify and interpret data from a chart or graph in order to make a prediction with or without a computing device.	G1, Math, Semester 1 & 2 G1, SS, Semester 1 G1, Science, Semester 1	Module 7: Tally Charts (G1MS1) Module 14: Tally Charts, Venn Diagrams (G1MS1) Module 22: Picture Graphs (G1MS2) Module 31: Picture Graphs (G1MS2) Module 2: Maps and Their Uses (G1SSS1) Module 2: Seasons and Daylight Exploration Assignment (G1ScS1)
Computational Thinking	1.DD.1 With guidance, create programs to accomplish tasks that includes sequencing or looping.		
Information Literacy	1.A.1 Use a keyword search with a teacherselected online resource		
Information Literacy	1.E.1 With guidance, evaluate information for research purposes.		
Information Literacy	1.C.1 Independently or with guidance, create a digital product.	G1, SS, Semester 1 & 2	Module 4: Make a Map and a Model (G1SSS1) Module 22: Pocahontas: An American Heroine Assignment (G1SSS2)
Information Literacy	1.IP.1 Understand that creative works have owners.	G1, Tech	Module 01: Digital Decisions (G1T)
Information Literacy	1.IP.2 With guidance, give credit to the creator of a creative work.		
Computing in Society	1.IC.1 Identify how technologies are used in and out of school.	G1, SS, Semester 1 & 2 G1, Tech	Module 2: For Further Study: The GPS (G1SSS1) Module 3: For Further Study: Map Making (G1SSS1) Module 22: For Further Study: Native American Relationships (G1SSS2) Module 02: Tech Detective(G1T)
Computing in Society	1.SI.1 With guidance, use technology to share thinking with peers.		
Digital Citizenship	1.SE.1 Identify how to use technology in safe and correct ways. (CYSEC)	G1, Tech	Module 01: Digital Decisions (G1T)

Digital Citizenship	1.SE.2 Understand the differences between a username and authentication methods and independently use them to access technology. (CYSEC)		
Digital Citizenship	1.RU.1 Identify positive and negative behaviors when using electronic communication. (CYSEC)	G1, Tech	Module 01: Digital Decisions (G1T)
Digital Citizenship	1.RU.2 Discuss reporting inappropriate electronic content. (CYSEC)		
Digital Citizenship	1.RU.4 Comply with Acceptable Use Policies.		
Digital Citizenship	1.DI.1 Recognize that you have a digital identity.	G1, Tech	Module 01: Digital Decisions (G1T)

Category	Standard	Course Covered	Module Covered
Technology Systems	2.NI.1 Explain that connecting computing devices allows information sharing.	G2, Tech	Module 01: Tech Smart (G2T)
Technology Systems	2.HS.1 Identify the components and basic functions of a computer system.	G2, Tech	Module 01: Tech Smart (G2T)
Technology Systems	2.HS.2 Independently use a computing device to perform a variety of tasks.	All courses G2, Tech	Getting started module Module 01: Tech Smart (G2T)
Technology Systems	2.HS.3 Recognize users have different technology needs and preferences.		
Technology Systems	2.T.1 Understand technology systems might not work as expected and independently use appropriate terminology to describe a problem.	G2, Tech	Module 02: Digital Dilemmas
Computational Thinking	2.PSA.1 Use problem solving steps: understanding the task, considering various strategies, isolate and debug.	G2, Math, Semester 1 & 2 G2, Tech	Module 6: Problem-Solving Strategy: Reasoning (G2MS1) Module 26: Problem Solving: Finding a Pattern (G2MS2) Module 9: Experiments with Plants (G2ScS1) Module 02: Digital Dilemmas (G2, Tech)
Computational Thinking	2.PSA.2 Break a task into smaller steps to identify patterns or solve the problem.	G2, Math, Semester 1 & 3 G2, Science, Semester 1 G2, Tech	Module 6: Problem-Solving Strategy: Reasoning (G2MS1) Module 26: Problem Solving: Finding a Pattern (G2MS2) Module 9: Experiments with Plants (G2ScS1) Module 01: Tech Smart (G2T)
Computational Thinking	2.PSA.3 Define algorithms.	G2, Tech	Module 01: Tech Smart (G2T)
Computational Thinking	2.DCA.1 With guidance, construct and interpret data and present it in a chart or graph in order to make a prediction with or without a computing device.	G2, Math, Semester 2	Module 32: Data (G2MS2)

Computational Thinking Information Literacy Information Literacy	 2.DD.1 Independently or collaboratively create programs to accomplish tasks that include sequencing or looping. 2.A.1 Continued growth in using a keyword search with a teacher selected online resource 2.E.1 With guidance, 	G2, Tech	Module 01: Tech Smart (G2T)
	determine whether the purpose of content is to inform or to influence actions.		
Information Literacy	2.C.1 Independently or collaboratively, create a digital product.	G2, ELA, Semester 1 & 2 G2, Tech	Story Recording activities in each module (G2LAS1-2) Module 01: Tech Smart (G2T)
Information Literacy	2.IP.1 Understand that students own their creative works.	G2, Tech	Module 01: Tech Smart (G2T)
Information Literacy	2.IP.2 Continued growth in give credit to the creator of a creative work.		
Computing in Society	2.IC.1 Identify how technologies are used in the workforce.	G2, Tech	Module 01: Tech Smart (G2T)
Computing in Society	2.SI.1 With guidance, use technology to communicate with others outside of the classroom.	G2, ELA, Semester 1 & 2	Story Recording activities in each module (G2LAS1-2)
Digital Citizenship	2.SE.1 Explain how to use technology in safe and correct ways. (CYSEC)	G2, Tech	Module 01: Tech Smart (G2T)
Digital Citizenship	2.SE.2 Identify strategies for protecting authentication methods. (CYSEC)		
Digital Citizenship	2.SE.3 Recognize the risks of interacting online with others. (CYSEC)	G2, Tech	Module 01: Tech Smart (G2T)
Digital Citizenship	2.RU.1 Explain positive and negative behaviors when using electronic communication. (CYSEC)		

Digital Citizenship	2.RU.2 Know and identify how to report concerns regarding online content and behaviors. (CYSEC)		
Digital Citizenship	2.RU.3 Develop a code of conduct, explain, and practice appropriate behavior and responsibilities while participating in an online community.	G2, Tech	Module 01: Tech Smart (G2T)
Digital Citizenship	2.RU.4 Comply with Acceptable Use Policies.	G2, Tech	Module 01: Tech Smart (G2T)
Digital Citizenship	2.DI.1 Define digital identity.		

Category	Standard	Course Covered	Module Covered
Technology Systems	3.NI.1 Recognize that information is sent and received over physical or wireless paths.	G3, Tech	Module 01: Our Tech World (G3T)
Technology Systems	3.HS.1 Identify the components and the basic functions of a computer system including peripherals and external storage features.	G3, Tech	Module 01: Our Tech World (G3T)
Technology Systems	3.HS.2 Independently use a computing device to perform a variety of tasks.	All courses	Getting started
Technology Systems	3.HS.3 Recognize users have different technology needs and preferences.	G3, Tech	Module 01: Our Tech World (G3T)
Technology Systems	3.T.1 With guidance, apply basic troubleshooting strategies.	G3, Tech	Module 02: Solve It (G3T)

Computational Thinking	3.PSA.1 Solve a task by breaking it into smaller pieces.	G3, ELA, Semester 1 & 2 G3, Math, Semester 1 & 2 G3, Science, Semester 1 & 2 G3, Social Studies, Semester 1 & 2 G3, Tech	Module 5: Myths (G3ELAS1) Module 6: Why Tales (G3ELAS1) Module 9: Inventions (G3ELAS1) Module 10: Pond Animals (G3ELAS1) Module 25: Vacation Days (G3ELAS2) Module 30: Athletes (G3ELAS2) Module 31: Rolling Objects(G3ELAS2) Module 32: Electricity (G3MS1) Module 23: Measuring Time (G3MS2) Module 33: Place Value (G23MS2) Module 33: Place Value (G23MS2) Module 3: Water Cycle: Condensation (G3ScS1) Module 4: Cloud Formation (G3ScS1) Module 7: Cycle of Seasons (G3ScS2) Module 8: Investigation in Root Formation (G3ScS2) Module 2: Map Scale (G3SSS1) Module 10: Budgeting (G3SSS2) Module 8: The Purpose and Nature of Government (G3SSS2) Module 02: Solve It (G3T)
Computational Thinking	3.PSA.2 Debug a program that includes sequencing.	G3, Tech	Module 02: Solve It (G3T)
Computational Thinking	3.DCA.1 Collect and organize data in various visual formats.	G3, ELA, Semester 1 & 2 G3, Math, Semester 2 G3, Science, Semester 1 & 2 G3, Social Studies, Semester 1 & 2	Module 10: Pond Animals (G3ELAS1) Module 27: Measuring Data (GS3MS2) Module 28: Line Plots and Graphs (GS3MS2) Module 1: Introduction (G3ScS1) Module 3: Basics of Weather and Weather Patterns (G3ScS1) Module 7: Cycle of Seasons (G3ScS2) Module 2: Map Scale (G3SSS1) Module 3: Physical Characteristics (G3SSS1) Module 4: The United States Landscape (G3SSS1) Module 7: The Need for Laws and Government (G3SSS2) Module 8: The Purpose and Nature of Government Module 8: The Purpose and Nature of

			Covernment (C2SSS2)
			Government (G3SSS2) Module 10: Budgeting (G3SSS2)
			Module 10. Budgeling (635552)
Computational Thinking	3.DD.1 Independently	G3, Tech	Module 02: Solve It (G3T)
	or collaboratively		
	create programs that		
	use sequencing and		
	looping.		
Computational Thinking	3.DD.2 Convert an	G3, Tech	Module 02: Solve It (G3T)
	algorithm into code.		
Information Literacy	3.A.1 Use basic search	G3, Social Studies,	Module 8: The Purpose and Nature of
	strategies with	Semester 2	Government (G3SSS2)
	teacher-selected		
	online sources.		
Information Literacy	3.E.1 With guidance,	G3, ELA, Semesters	Module 9: Inventions (G3ELAS1)
	compare and contrast	1&2	Module 28: Artists (G3ELAS2)
	resources based on		
	content and the		
	author's purpose.		
Information Literacy	3.C.1 Independently or	G3, Social Studies,	Module 2: Map Scale (G3SSS1)
	collaboratively, create	Semester 1	Module 01: Our Tech World (G3, Tech)
	a digital product.	G3, Tech	
Information Literacy	3.IP.1 Define copyright.		
Information Literacy	3.IP.2 With guidance,		
	identify the elements of		
	a citation.		
Information Literacy	3.IP.3 Explain piracy		
	and plagiarism		
Computing in Society	3.IC.1 Identify	G3, ELA, Semester 1	Module 9: Inventions (G3ELAS1)
	technologies that have	& 2	Module 32: Electricity (G3ELAS2)
	changed the world.	G3, Science,	Module 3: Devices to Tell Time (G3ScS1)
	U	Semester 1	Module 01: Our Tech World (G3T)
		G3, Tech	
Computing in Society	3.SI.1 Recognize that		
computing in Society	there are various		
	collaborative		
	technologies.		
Computing in Society	3.SI.2 With guidance,	G3, Tech	Module 01: Our Tech World (G3T)
computing in Society	use collaborative		
	technology to seek out		
	diverse perspectives.		
	uiverse perspectives.		

Category	Standard	Course Covered	Module Covered
Technology Systems	4.NI.1 Recognize that computing devices can be connected in a variety of ways to share information.	G4, Tech	Module 01: Digital Footprints (G4T)
Technology Systems	4.HS.1 Explain the difference between hardware and software.	G4, Tech	Module 01: Digital Footprints (G4T)
Technology Systems	4.HS.2 Continued growth in independently use a computing device to perform a variety of tasks.	All courses	Getting started
Technology Systems	4.HS.3 Continued growth in recognizing users have different technology needs and preferences.	G4, Tech	Module 01: Digital Footprints (G4T)
Computational Thinking	4.PSA.1 Decompose (break down) a large task into smaller, manageable subtasks.	G4, ELA, Semester 1 & 2 G4, Math, Semester 1 & 2 G4, Science, Semester 1 & 2 G4, Social Studies, Semester 1 & 2 G4, Tech	Module 5: Conflict (G4ELAS1) Module 31: Planning a Research Project (G4ELAS2) Module 1: Writing Multiplication (G4MS1) Module 7: Fraction Multiplication (G4MS2) Module 1: Using Scientific Methods (G4ScS1) Module 1: Sound (G4ScS2) Module 1: Native Americans (G4SSS1) Module 27: Problem Solving for Me (G4SSS2) Module 02: Cyber Safety (G4T)
Computational Thinking	4.PSA.2 Debug a program that includes sequencing or loops.	G4, Tech	Module 02: Cyber Safety (G4T)
Computational Thinking	4.PSA.3 Identify multiple solutions to a task.	G4, Math, Semester 1 & 2 G4, Science, Semester 2 G4, Social Studies, Semester 1 & 2 G4, Tech	Module 1: Writing Multiplication (G4MS1) Module 7: Fraction Multiplication (G4MS2) Module 2: Science & Technology (G4ScS2) Module 2: European Settlers (G4SSS1) Module 27: Problem Solving for Me (G4SSS2) Module 02: Cyber Safety (G4T)

Computational Thinking	4.DCA.1 Organize and present collected data visually to highlight comparisons.	G4, ELA, Semester 2 G4, Math, Semester 1 & 2 G4, Science, Semester 1 & 2 G4, Social Studies, Semester 1 & 2	Module 28: Multimedia Information (G4ELAS2) Module 5: Dividing Number Lines (G4MS1) Module 10: Line Plots (G4MS2) Module 5: Measurements and Instruments (G4ScS1) Module 6: The Web of Life (G4ScS2) Module 10: State Map (G4SSS1) Module 32: Primary and Secondary Sources (G4SSS2)
Computational Thinking	4.DD.1 Independently and collaboratively create programs that use sequencing, loops, and conditionals.	G4, Tech	Module 02: Cyber Safety (G4T)
Informational Literacy	4.A.1 Use multiple teacher-selected online resources to locate information.	G4, ELA, Semester 2 G4, Science, Semester 1 G4, Social Studies, Semester 1 & 2	Module 31: Planning a Research Project (G4ELAS2) Module 3: The Atmosphere and Air (G4ScS1) Module 8: My State (G4SSS1) Module 33: Famous American Scientists (G4SSS2)
informational Literacy	4.E.1 With guidance, use a strategy to evaluate information for research purposes.	G4, ELA, Semester 1 & 2 G4, Science, Semester 1 & 2 G4, Social Studies, Semester 1 & 2	Module 17: Mythology (G4ELAS1) Module 31: Planning a Research Project (G4ELAS2) Module 1: Using Scientific Methods (G4ScS1) Module 3: Animal and Plant Cells (G4ScS2) Module 13: Federal Government (G4SSS1) Module 32: Primary and Secondary Sources (G4SSS2)
Informational Literacy	4.C.1 Continued growth in independently or collaboratively, create a digital product.	G4, ELA, Semester 1 & 2 G4, Science, Semester 1 & 2 G4, Social Studies, Semester 1 & 2 G4, Tech	Module 15: Forms of Media (G4ELAS1) Module 36: Presenting Information (G4ELAS2) Module 1: Using Scientific Methods (G4ScS1) Module 2: Science & Technology (G4ScS2) Module 13: Federal Government (G4SSS1) Module 35: Social Studies Vocabulary (G4SSS2) Module 02: Cyber Safety (G4T)
Informational Literacy	4.IP.1 Demonstrate an understanding of copyright and fair use.	G4, ELA, Semester 1 & 2 G4, Tech	Module 15: Forms of Media (G4ELAS1) Module 27: Informational Reports (G4ELAS2) Module 01: Digital Footprints (G4T)
Informational Literacy	4.IP.2 With guidance, create a citation.	G4, ELA, Semester 1 & 2	Module 17: Mythology (G4ELAS1) Module 27: Informational Reports (G4ELAS2)

Informational Literacy	4.IP.3 With guidance, use strategies to avoid piracy and plagiarism.	G4, ELA, Semester 1 & 2	Module 15: Forms of Media (G4ELAS1) Module 27: Informational Reports (G4ELAS2)
Computing in Society	4.IC.1 Give examples of technologies that influence society today.	G4, Science, Semester 1 & 2 G4, Social Studies, Semester 2 G4, Tech	Module 4: Galaxies and Stars (G4ScS1) Module 2: Science & Technology (G4ScS2) Module 33: Famous American Scientists (G4SSS2) Module 01: Digital Footprints (G4T)
Computing in Society	4.SI.1 With guidance, use collaborative technology to interpret diverse perspectives.		
Digital Citizenship	4.SE.1 Identify and explain issues related to responsible use of technology and information and describe personal consequences of inappropriate use. (CYSEC)	G4, ELA, Semester 2 G4, Tech	Module 30: Writing Information (G4ELAS2) Module 01: Digital Footprints (G4T) Module 02: Cyber Security (G4T)
Digital Citizenship	4.SE.2 Create secure authentication to insure privacy. (CYSEC)	G4, Tech	Module 01: Digital Footprints (G4T)
Digital Citizenship	4.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online. (CYSEC)	G4, Tech	Module 01: Digital Footprints (G4T)
Digital Citizenship	4.SE.4 Recognize when it is safe to share private information online. (CYSEC)	G4, Tech	Module 01: Digital Footprints (G4T)
Digital Citizenship	4.RU.1 Discuss basic issues related to the appropriate use of technology and information, and the consequences of inappropriate use.	G4, ELA, Semester 1 & 2 G4, Social Studies, Semester 1 & 2 G4, Tech	Module 15: Forms of Media (G4ELAS1) Module 30: Writing Information (G4ELAS2) Module 18: Citizenship (G4SSS1) Module 27: Problem Solving for Me (G4SSS2) Module 01: Digital Footprints (G4T)
Digital Citizenship	4.RU.2 Identify strategies for dealing responsibly with cyberbullying and reporting inappropriate behavior.		
Digital Citizenship	4.RU.3 Continued growth in developing a code of conduct, explain, and practice appropriate behavior	G4, Social Studies, Semester 1 G4, Tech	Module 18: Citizenship (G4SSS1) Module 01: Digital Footprints (G4T)

	and responsibilities while participating in an online community.		
Digital Citizenship	4.RU.4 Comply with Acceptable Use Policies.		
Digital Citizenship	4.DI.1 Explain the importance of your digital identity.	G4, Tech	Module 01: Digital Footprints (G4T)

FIFTH GRADE					
Category	Standard	Course Covered	Module Covered		
Technology Systems	5.NI.1 Understand that information is sent and received across physical or wireless paths.	G5, Tech	Module 02: Communication Zone (G5T)		
Technology Systems	5.HS.1 Compare and contrast physical and virtual systems.	G5, Tech	Module 01: Robot Exploration (G5T)		
Technology Systems	5.HS.2 Continued growth in Independently using a computing device to perform a variety of tasks.	All Courses	Getting Started		
Technology Systems	5.HS.3 Continued growth in recognizing users have different technology needs and preferences.	G5, Tech	Module 01: Robot Exploration (G5T)		
Technology Systems	5.T.1 Continued growth in applying basic troubleshooting strategies.				
Computational Thinking	5.PSA.1 Create a sequence of instructions from a previous decomposed task.	G5, ELA, Semester 1 & 2 G5, Math, Semester 1 & 2 G5, Science, Semester 1 & 2 G5, Social Studies, Semester 1 & 2 G5, Tech	Module 3: Points of View (G5ELAS1) Module 10: Building Arguments (G5ELAS2) Module 1: Mathematical Operations (G5MS1) Module 7: Fractions (G5MS2) Module 3: Forces and Motion (G5scS1) Module 7: Earth's Ecosystems (G5ScS2) Module 2: The New World and Hard Times (G5SSS1) Module 2: People of America (G5SSS2) Module 02: Communication Zone (G5T)		
Computational Thinking	5.PSA.2 Debug a program that includes sequencing, loops, or conditionals.	G5, Tech	Module 02: Communication Zone (G5T)		

Computational Thinking	5.PSA.3 Work collaboratively to explore multiple solutions to a task.	G5, ELA, Semester 1 & 2G5, Math, Semester 1 & 2G5,Science, Semester 1 & 2G5, Social Studies, Semester 1 & 2G5, Tech	Module 2: Conflict (G5ELAS1)Module 11: Peer Review (G5ELAS2)Module 1: Mathematical Operations (G5MS2)Module 8: Multiplying Fractions (G5MS2)Module 6: Earth's Spheres and Food Chain (G5ScS1)Module 8: More of Earth's Ecosystems (G5ScS2)Module 2: The New World and Hard Times (G5SSS1)Module 2: People of America (G5SSS2)Module 01: Robot Exploration (G5T)
Computational Thinking	5.DCA.1 Organize and present collected data to highlight comparisons and support a claim.	G5, ELA, Semester 1 & 2 G5, Math, Semester 1 & 2 G5, Science, Semester 1 & 2 G5, Social Studies, semester 2	Module 1: A Story's Structure (G5ELAS1) Module 7: Reading Information (G5ELAS2) Module 1: Mathematical Operations (G5MS2) Module 10: Measurements and Volume (G5MS2) Module 6: Earth's Spheres and Food Chain (G5ScS1) Module 8: More of Earth's Ecosystems (G5ScS2) Module 2: People of America (G5SSS2)
Computational Thinking	5.DD.1 Continued growth in Independently or collaboratively create programs that use sequencing and looping.	G5, Tech	Module 02: Communication Zone (G5T)
Computational Thinking	5.DD.2 Create solutions to problems using a design method.	G5, ELA, Semester 1 & 2G5, Math, Semester 1 & 2G5,Science, Semester 1 & 2G5, Social Studies, Semester 2G5, Tech	Module 5: Writing Opinions (G5ELAS1)Module 12: Speak Up (G5ELAS2)Module 5: Money and Decimal Operations (G5MS1)Module 9: Dividing Fractions (G5MS2)Module 3: Forces and Motion (G5ScS1)Module 12: Cells, Reproduction, and Scientific Thinking (G5ScS2)Module 3: Exploring Your Own State (G5SSS2)Module 01: Robot Exploration (G5T)
Informational Literacy	5.A.1 Refine your keyword search to improve your results.	G5, ELA, Semester 2 G5, Tech	Module 7: Finding Answers (G5ELAS2) Module 02: Communication Zone (G5T)

Informational Literacy	5.E.1 Continued growth in compare and contrast resources based on content and the author's purpose.	G5, ELA, Semester 1 & 2 G5, Social Studies, Semester 1 & 2 G5, Tech	Module 1: A Story's Structure (G5ELAS1) Module 7: Reading Information (G5ELAS2) Module 2: The New World and Hard Times (G5SSS1) Module 2: People of America (G5SSS2) Module 02: Communication Zone (G5T)
Informational Literacy	5.C.1 Independently or collaboratively, create a digital product using two or more tools.	G5, ELA, Semester 1 & 2 G5,Science, Semester 1 & 2 G5, Social Studies, Semester 1 & 2 G5, Tech	Module 4: Multimedia (G5ELAS1) Module 12: Make It Zing (G5ELAS2) Module 1: Our Solar System and Beyond (G5ScS1) Module 9: Introduction to Plants (G5ScS2) Module 6: Daniel Boone and Moving West (G5SSS1) Module 6: Planning Your Trip (G5SSS2) Module 01: Robot Exploration (G5T)
Informational Literacy	5.IP.1 With guidance, demonstrate an understanding of ethical issues in copyright and fair use.	G5, ELA, Semester 1	Module 1: Introduction Lesson (G5ELAS1)
Informational Literacy	5.IP.2 Continued growth in creating a citation	G5, ELA, Semester 1 & 2	Module 5: Writing Opinions (G5ELAS1) Module 11: Proof and Edit (G5ELAS2)
Informational Literacy	5.IP.3 Continued growth in using strategies to avoid piracy and plagiarism	G5, ELA, Semester 1 & 2 G5, Tech	Module 1: Introduction Lesson (G5ELAS1) Module 11: Proof and Edit (G5ELAS2) Module 01: Robot Exploration (G5T)
Computing in Society	5.IC.1 Explain how technologies can change the future.	G5, Tech	Module 01: Robot Exploration (G5T)
Computing in Society	5.SI.1 With guidance, use collaborative technology to compare and contrast diverse perspectives.	G5, ELA, Semester 1 & 2 G5, Science, Semester 2 G5, Social Studies, Semester 1 & 2 G5, Tech	Module 2: Conflict (G5ELAS1) Module 11: Peer Review (G5ELAS2) Module 8: More of Earth's Ecosystems (G5ScS2) Module 2: The New World and Hard Times (G5SSS1) Module 2: People of America (G5SSS2) Module 1: Robot Explosion (G5T)
Computing in Society	5.SE.1 Recognize that there are real-world cybersecurity problems (i.e., hacking) wheninteracting online. (CYSEC)	G5, Tech	Module 02: Communication Zone (G5T)
Digital Citizenship	5.SE.2 Continued growth in creating a	G5, Tech	Module 01: Robot Exploration (G5T)

	secure authentication to insure privacy.		
Digital Citizenship	5.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online. (CYSEC)"	G5, Tech	Module 02: Communication Zone (G5T)
Digital Citizenship	5.SE.4 Apply strategies to keep your private information safe online. (CYSEC)	G5, Tech	Module 01: Robot Exploration (G5T)
Digital Citizenship	5.RU.1 Demonstrate an understanding of the appropriate use of technology and information and the consequences of inappropriate use.	G5, ELA, Semester 1 & 2 G5, Tech	Module 1: Introduction Lesson (G5ELAS1) Module 11: Peer Review (G5ELAS2) Module 01: Robot Exploration (G5T)
Digital Citizenship	5.RU.2 Use strategies that prevent and deal responsibly with cyberbullying and inappropriate behavior.	G5, Tech	Module 02: Communication Zone (G5T)
Digital Citizenship	5.RU.3 Continued growth in developing a code of conduct, explain, and practice appropriate behavior and responsibilities while participating in an online community.	G5, ELA, Semester 1 & 2 G5, Tech	Module 2: Conflict (G5ELAS1) Module 11: Peer Review (G5ELAS2) Module 02: Communication Zone (G5T)
Digital Citizenship	5.RU.4 Comply with Acceptable Use Policies.	G5, Tech	Module 01: Robot Exploration (G5T)
Digital Citizenship	5.DI.1 Continued growth in explaining the importance of your digital identity.	G5, Tech	Module 01: Robot Exploration (G5T)

Category	Standard	6th Grade ELA	7th Grade ELA	8th Grade
Technology Systems	7.NI.1 Model how data is sent from one computer to another across networks.			ELA
Technology Systems	7.HS.1 Compare and contrast hardware and/or software options to complete a task.		Module 02: Immersed in Information - Responsible Research	
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.		Module 02: Immersed in Information - Researching and Organizing Information Module 04: Fighting Fair - Practice Makes Perfect	
Technology Systems	7.HS.3 Organize, store, and retrieve digital information with minimal guidance.		Module 02: Immersed in Information - Researching and Organizing Information	
Technology Systems	7.HS.4 Describe threats to technology systems. (CYSEC)			
Technology Systems	7.HS.5 Explain how security measures protect technology systems. (CYSEC)			
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.			

Technology Systems	8.NI.1 Investigate how data is sent from one computer to another across networks.		
Technology Systems	8.HS.1 Choose appropriate device/hardware/software to complete a task.		Module 01: Get the Facts - Getting Research Ready
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.		Module 02: Get the Facts - Getting Research Ready Module 04: Convincing Claims - Ready Set Argue
Technology Systems	8.HS.3 Organize, store, and retrieve digital information efficiently.		Module 02: Get the Facts - Getting Research Ready
Technology Systems	8.HS.4 Describe ways to protect against threats to technology systems. (CYSEC)		
Technology Systems	8.HS.5 Compare and contrast security measures used to protect technology systems. (CYSEC)		
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.		
Technology Systems	6.NI.1 Explain how data is sent across networks.		
Technology Systems	6.HS.1 Use hardware and/or software to complete a task.	02.09 Publish and Polish Your Work 04.08 Perfect Your Final Draft	

Technology Systems	6.HS.2 Use software features to accomplish a goal.	02.01 Organize Ideas in Informational Writing 02.09 Publish and Polish Your Work 04.03 Organize and Introduce Your Argument 04.08 Perfect Your Final Draft	
Technology Systems	6.HS.3 Organize, store, and retrieve digital information with guidance.	02.01 Organize Ideas in Informational Writing 02.02 Gather and Check Your Information 04.03 Organize and Introduce Your Argument	
Technology Systems	6.HS.4 Identify threats to technology systems. (CYSEC)		
Technology Systems	6.HS.5 Identify security measures to protect technology systems. (CYSEC)		
Technology Systems	6.T.1 Apply basic troubleshooting strategies.		
Computational Thinking	6.PSA.1 Identify and test an algorithm to solve a problem.		
Computational Thinking	6.PSA.2 Debug a program that includes sequencing, loops, or conditionals.		
Computational Thinking	6.PSA.3 Compare and contrast the efficiencies of multiple solutions to a task.		

Computational Thinking	6.DCA.1 Collect and analyze data to support a claim.	01.06 Implicit or Explicit Evidence 04.01 Making Arguments That Matter 04.05 Show Some Support		
Computational Thinking	6.DD.1 Use programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.			
Computational Thinking	7.PSA.1 Modify and test an algorithm to solve a problem.			
Computational Thinking	7-8.PSA.2 Continued growth in debugging a program that includes sequencing, loops, or conditions.			
Computational Thinking	7.DCA.1 Represent data, in more than one way, to defend your claim.		Module 02: Immersed in Information - Show Some Support	
Computational Thinking	7.DD.1 Modify programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.			

Computational Thinking	8.PSA.1 Create and test an algorithm to solve a problem across disciplines.		
Computational Thinking	7-8.PSA.2 Continued growth in debugging a program that includes sequencing, loops, or conditions.		
Computational Thinking	8.DCA.1 Represent data from multiple sources in order to defend or refute a claim.		Module 04: Convincing Claims - Support Does a Body Good
Computational Thinking	8.DD.1 Create programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.		
Information Literacy	6.A.1 Use a variety of strategies to refine and revise search results.	02.02 Gather and Check Your Information 04.01 Making Arguments That Matter 04.08 Perfect Your Final Draft	
Information Literacy	6.E.1 Evaluate information and its sources	02.02 Gather and Check Your Information 04.01 Making Arguments That Matter 04.05 Show Some Support	

Information Literacy	6.C.1 Repurpose or remix original works following fair use guidelines.	02.09 Publish and Polish Your Work		
Information Literacy	6.IP.1 With guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	02.03 Cite Your Sources 04.08 Perfect Your Final Draft		
Information Literacy	6.IP.2 Cite a variety of sources using the appropriate format.	02.03 Cite Your Sources 04.05 Show Some Support		
Information Literacy	6.IP.3 Describe negative consequences of piracy and plagiarism.			
Information Literacy	7.A.1 Continued growth in using a variety of strategies to refine and revise search results.		Module 02: Immersed in Information - Responsible Research	
Information Literacy	7-8.E.1 Independently, evaluate information and its sources using student selected processes and strategies.		Module 02: Immersed in Information - Reading Informational Texts Module 02: Immersed in Information - Responsible Research	
Information Literacy	7-8.C.1 Continued growth in repurposing or remixing original works following fair use guidelines.		Module 04: Fighting Fair - Practice Makes Perfect	

Information Literacy	7.IP.1 With minimal guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	Module 02: Immersed in Information - Responsible Research	
Information Literacy	7-8.IP.2 Continued growth in citing a variety of sources using the appropriate format.	Module 02: Immersed in Information - Responsible Research Module 02: Immersed in Information - Show Some Support	
Information Literacy	7.IP.3 Identify strategies to avoid personal works and the works of others from being pirated and plagiarized. (CYSEC)	Module 02: Immersed in Information - Responsible Research	
Information Literacy	8.A.1 Use advanced search strategies to locate information online.		Module 02: Get the Facts - Getting Research Ready
Information Literacy	7-8.E.1 Independently, evaluate information and its sources using student selected processes and strategies.		Module 02: Get the Facts - Getting Research ReadyModule 04: Convincing Claims - Changing Perspectives

Information Literacy	7-8.C.1 Continued growth in repurposing or remixing original works following fair use guidelines.		Module 06: Tell Me a Story - Planning Your Narrative
Information Literacy	8.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.		Module 02: Get the Facts - Cite Your Sources
Information Literacy	7-8.IP.2 Continued growth in citing a variety of sources using the appropriate format.		Module 02: Get the Facts - Cite Your Sources Module 04: Convincing Claims - Support Does a Body Good
Information Literacy	8.IP.3 Debate the risks and benefits of sharing personal works online (CYSEC)		
Computing in Society	6.IC.1 Identify the positive and negative impacts of past, present, and future technology, including bias and accessibility.	01.03 Making Connections 03.06 The Appeal of Rhetoric 03.07 Recognizing Rhetoric	
Computing in Society	6.SI.1 Use collaborative technology	01.08 Discussion- Based Assessment02.08 Discussion- Based Assessment03.08 Discussion- Based Assessment04.07 Artful Argumentation Discussion- Based Assessment	

Computing in Society	6.Sl.2 Identify how social interactions can impact a person's self-image.	03.02 Multiple Views 04.02 Misguided Arguments		
Computing in Society	7.IC.1 Compare and contrast the impacts of technology, including bias and accessibility.		Module 04: Fighting Fair - Recognizing Rhetoric Module 04: Fighting Fair - Rhetoric in Action	
Computing in Society	7.SI.1 Use collaborative technology to gather and share information.		Module 02: Immersed in Information - Immersed in Information Discussion-Based Assessment Module 04: Fighting Fair - Fighting Fair Discussion-Based Assessment	
Computing in Society	7-8.SI.2 Continued growth in identifying how social interactions can impact a person's self image.		Module 04: Fighting Fair - Recognizing Rhetoric	
Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.			Module 04: Convincing Claims - Changing Perspectives Module 04: Convincing Claims - Rhetoric Rundown

Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.		Module 04: Convincing Claims - Changing Perspectives
Computing in Society	7-8.SI.2 Continued growth in identifying how social interactions can impact a person's self image.		
Digital Citizenship	6.SE.1 Identify steps for responding to uncomfortable situations when interacting online. (CYSEC)		
Digital Citizenship	6.SE.2 Identify basic methods to maintain digital privacy and security. (CYSEC)		
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online.		
Digital Citizenship	6.SE.3 Recognize that data-collection technology can be used to track navigation online. (CYSEC)		
Digital Citizenship	6.SE.4 Identify threats to personal cybersecurity. (CYSEC)		
Digital Citizenship	6.RU.1 Identify different forms of cyberbullying.		
Digital Citizenship	6.RU.2 Identify strategies to stop cyberbullying.		

Digital Citizenship	6.RU.3 Use appropriate digital etiquette in a variety of situations.	03.08 Discussion- Based Assessment 04.07 Artful Argumentation Discussion- Based Assessment	
Digital Citizenship	6.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	6.DI.1 Describe personal online usage and determine how it affects identity on- and offline.	03.02 Multiple Views 03.04 Figuring Out Figurative Language	
Digital Citizenship	7-8.SE.1 Continued growth identifying steps for responding to comfortable situations when interacting online.		
Digital Citizenship	7.SE.2 Identify a variety of methods to maintain digital privacy and security. (CYSEC)		
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online.		
Digital Citizenship	7.SE.4 Describe how to respond to threats to personal cybersecurity.		

Digital Citizenship	7-8.RU.1 Describe different forms of cyberbullying and the effects on all parties involved.		
Digital Citizenship	7.RU.2 Identify strategies to prevent and stop cyberbullying.		
Digital Citizenship	7-8.RU.3 Continued growth in using appropriate digital etiquette in a variety of situations.	Module 02: Immersed in Information - Immersed in Information Discussion-Based AssessmentModule 04: Fighting Fair - Fighting Fair Discussion-Based Assessment	
Digital Citizenship	7.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	7-8.DI.1 Evaluate how digital identity can impact a person now and in the future.		
Digital Citizenship	7-8.SE.1 Continued growth identifying steps for responding to comfortable situations when interacting online.		
Digital Citizenship	8.SE.2 Identify advanced methods to maintain digital privacy and security. (CYSEC)		

Digital Citizenship	8.SE.4 Discuss the consequences of identity theft. (CYSEC)		
Digital Citizenship	7-8.RU.1 Describe different forms of cyberbullying and the effects on all parties involved.		
Digital Citizenship	8.RU.2 Identify strategies to prevent and stop cyberbullying.		
Digital Citizenship	7-8.RU.3 Continued growth in using appropriate digital etiquette in a variety of situations.		Module 04: Convincing Claims - Convincing Claims Discussion- Based Assessment
Digital Citizenship	8.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	7-8.DI.1 Evaluate how digital identity can impact a person now and in the future.		

Category	Standard	6th Math Module/Unit Covered	7th Math Module/Unit Covered	8th Math Module/Uni Covered
Technology Systems	7.NI.1 Model how data is sent from one computer to another across networks.			
Technology Systems	7.HS.1 Compare and contrast hardware and/or software options to complete a task.			
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.		Coursewide	Coursewide
Technology Systems	7.HS.3 Organize, store, and retrieve digital information with minimal guidance.		Coursewide	Coursewide
Technology Systems	7.HS.4 Describe threats to technology systems. (CYSEC)			
Technology Systems	7.HS.5 Explain how security measures protect technology systems. (CYSEC)			
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.			
Technology Systems	8.NI.1 Investigate how data is sent from one computer to another across networks.			
Technology Systems	8.HS.1 Choose appropriate device/hardware/software to complete a task.			
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.			
Technology Systems	8.HS.3 Organize, store, and retrieve digital information efficiently.		Coursewide	Coursewide
Technology Systems	8.HS.4 Describe ways to protect against threats to technology systems. (CYSEC)			

Technology Systems	8.HS.5 Compare and contrast security measures used to protect technology systems. (CYSEC)			
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.			
Technology Systems	6.NI.1 Explain how data is sent across networks.			
Technology Systems	6.HS.1 Use hardware and/or software to complete a task.	Coursewide	Coursewide	Coursewide
Technology Systems	6.HS.2 Use software features to accomplish a goal.	Coursewide	Coursewide	Module 5: Linear Relationships
Technology Systems	6.HS.3 Organize, store, and retrieve digital information with guidance.	Coursewide	Coursewide	Coursewide
Technology Systems	6.HS.4 Identify threats to technology systems. (CYSEC)			
Technology Systems	6.HS.5 Identify security measures to protect technology systems. (CYSEC)			
Technology Systems	6.T.1 Apply basic troubleshooting strategies.			
Computational Thinking	6.PSA.1 Identify and test an algorithm to solve a problem.	Unit 7: Relationships on the Coordinate Plane	Module 03: Equations and Inequalities	Module 07: Linear Equations
Computational Thinking	6.PSA.2 Debug a program that includes sequencing, loops, or conditionals.			
Computational Thinking	6.PSA.3 Compare and contrast the efficiencies of multiple solutions to a task.	Unit 7: Relationships on the Coordinate Plane	Module 04: Proportions	Module 07: Linear Equations
Computational Thinking	6.DCA.1 Collect and analyze data to support a claim.	Unit 7: Relationships on the Coordinate Plane	Module 08: Statistics	Module 6: Patterns of Association

Computational	6.DD.1 Use programs that			
Thinking	utilize combinations of			
	loops, conditionals, and			
	the manipulation of			
	variables representing			
	different data types.			
Computational	7.PSA.1 Modify and test		Module 03:	Module 07: Linear Equations
Thinking	an algorithm to solve a		Equations and	
	problem.		Inequalities	
Computational	7-8.PSA.2 Continued			
Thinking	growth in debugging a			
	program that includes sequencing, loops, or			
	conditions.			
Computational	7.DCA.1 Represent data,		Module 08:	Module 06: Patterns of
Thinking	in more than one way, to		Statistics	Association
	defend your claim.			
Computational	7.DD.1 Modify programs			
Thinking	that utilize combinations			
	of loops, conditionals,			
	and the manipulation of			
	variables representing different data types.			
Computational	8.PSA.1 Create and test		Module 03:	Module 07: Linear Equations
Thinking	an algorithm to solve a problem across		Equations and Inequalities	
	disciplines.		mequatties	
Computational	7-8.PSA.2 Continued			
Thinking	growth in debugging a			
	program that includes			
	sequencing, loops, or			
O a manufacti a mal	conditions.		Madula 00	Madula 00: Dattaura af
Computational Thinking	8.DCA.1 Represent data from multiple sources in		Module 08: Statistics	Module 06: Patterns of Association
THINKING	order to defend or refute a		Statistics	Association
	claim.			
Computational	8.DD.1 Create programs			
Thinking	that utilize combinations			
	of loops, conditionals,			
	and the manipulation of			
	variables representing different data types.			
Information Literacy	6.A.1 Use a variety of stratogies to refine and			
	strategies to refine and revise search results.			
Information Literacy	6.E.1 Evaluate			
mormation Literacy	information and its			
	sources			
Information Literacy	6.C.1 Repurpose or remix			
	original works following			
	fair use guidelines.			

Information Literacy	6.IP.1 With guidance,
	properly use copyrighted
	works, works in the
	creative commons, and
	works in the public
	domain.
Information Literacy	6.IP.2 Cite a variety of
	sources using the
	appropriate format.
Information Literacy	6.IP.3 Describe negative
	consequences of piracy
	and plagiarism.
Information Literacy	7.A.1 Continued growth in
	using a variety of
	strategies to refine and
	revise search results.
Information Literacy	7-8.E.1 Independently,
	evaluate information and
	its sources using student
	selected processes and
	strategies.
Information Literacy	7-8.C.1 Continued growth
	in repurposing or remixing
	original works following
	fair use guidelines.
Information Literacy	7.IP.1 With minimal
	guidance, properly use
	copyrighted works, works
	in the creative commons,
	and works in the public
	domain.
Information Literacy	7-8.IP.2 Continued growth
·····,	in citing a variety of
	sources using the
	appropriate format.
Information Literacy	7.IP.3 Identify strategies
	to avoid personal works
	and the works of others
	from being pirated and
	plagiarized. (CYSEC)
Information Literacy	8.A.1 Use advanced
information Eleracy	search strategies to
	locate information online.
Information Literature	
Information Literacy	7-8.E.1 Independently, evaluate information and
	its sources using student
	selected processes and
	strategies.

Information Literacy	7-8.C.1 Continued growth in repurposing or remixing original works following
	fair use guidelines.
Information Literacy	8.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.
Information Literacy	7-8.IP.2 Continued growth in citing a variety of sources using the appropriate format.
Information Literacy	8.IP.3 Debate the risks and benefits of sharing personal works online (CYSEC)
Computing in Society	6.IC.1 Identify the positive and negative impacts of past, present, and future technology, including bias and accessibility.
Computing in Society	6.SI.1 Use collaborative technology
Computing in Society	6.SI.2 Identify how social interactions can impact a person's self-image.
Computing in Society	7.IC.1 Compare and contrast the impacts of technology, including bias and accessibility.
Computing in Society	7.SI.1 Use collaborative technology to gather and share information.
Computing in Society	7-8.SI.2 Continued growth in identifying how SoCal interactions can impact a person's self image
Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.
Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.

Computing in Society	7-8.SI.2 Continued growth in identifying how social interactions can impact a		
	person's self image.		
Digital Citizenship	6.SE.1 Identify steps for responding to		
	uncomfortable situations when interacting online.		
	(CYSEC)		
Digital Citizenship	6.SE.2 Identify basic		
	methods to maintain		
	digital privacy and security. (CYSEC)		
Digital Citizenship	6.SE.3 Recognize that		
	data-collection		
	technology can be used to		
	track navigation online.		
Digital Citizenship	(CYSEC) 6.SE.4 Identify threats to		
Digital Offizenship	personal cybersecurity.		
	(CYSEC)		
Digital Citizenship	6.RU.1 Identify different		
DiBitat officiality	forms of cyberbullying.		
Digital Citizenship	6.RU.2 Identify strategies		
	to stop cyberbullying.		
Digital Citizenship	6.RU.3 Use appropriate		
	digital etiquette in a		
	variety of situations.		
Digital Citizenship	6.RU.4 Understand the		
	purpose of and comply		
	with Acceptable Use		
Digital Citizenship	Policies. 6.DI.1 Describe personal		
Digitat Offizenship	online usage and		
	determine how it affects		
	identity on- and offline.		
Digital Citizenship	7-8.SE.1 Continued		
	growth identifying steps		
	for responding to		
	comfortable situations		
	when interacting online.		
Digital Citizenship	7.SE.2 Identify a variety of		
	methods to maintain		
	digital privacy and		
Digital Citizanshin	security. (CYSEC)		
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that		
	data-collection		
	technology can be used to		
	track navigation online.		
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Digital Citizenship	7.SE.4 Describe how to			
	respond to threats to			
	personal cybersecurity.			
Digital Citizenship	7-8.RU.1 Describe			
	different forms of			
	cyberbullying and the			
	effects on all parties involved.			
Digital Citizenship	7.RU.2 Identify strategies			
Digital Gitizenship	to prevent and stop			
	cyberbullying.			
Digital Citizenship	7-8.RU.3 Continued			
DiBitat Ottizonomp	growth in using			
	appropriate digital			
	etiquette in a variety of			
	situations.			
Digital Citizenship	7.RU.4 Understand the			
	purpose of and comply			
	with Acceptable Use			
	Policies.			
Digital Citizenship	7-8.DI.1 Evaluate how			
	digital identity can impact			
	a person now and in the			
	future.			
Digital Citizenship	7-8.SE.1 Continued			
	growth identifying steps			
	for responding to			
	comfortable situations			
	when interacting online.			
Digital Citizenship	8.SE.2 Identify advanced			
	methods to maintain			
	digital privacy and			
Digital Citizenship	security. (CYSEC) 8.SE.4 Discuss the			
Digital Onizenship	consequences of identity			
	theft. (CYSEC)			
Digital Citizenship	7-8.RU.1 Describe			
	different forms of			
	cyberbullying and the			
	effects on all parties			
	involved.			
Digital Citizenship	8.RU.2 Identify strategies			
	to prevent and stop			
	cyberbullying.			
Digital Citizenship	7-8.RU.3 Continued			
	growth in using			
	appropriate digital			
	etiquette in a variety of			
	situations.			
Digital Citizenship	8.RU.4 Understand the			
	purpose of and comply			

	with Acceptable Use Policies.	
Digital Citizenship	7-8.DI.1 Evaluate howdigital identity can impacta person now and in thefuture.	
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data-collection technology can be used to 	

MIDDLE SCHOOL SCIENCE

Category	Standard	Middle School Earth and Space Science Module/Unit Covered	Middle School Life Science	Middle School Physical Science
Technology Systems	7.NI.1 Model how data is sent from one computer to another across networks.			
Technology Systems	7.HS.1 Compare and contrast hardware and/or software options to complete a task.			
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Designing an Experiment)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment)
Technology Systems	7.HS.3 Organize, store, and retrieve digital information with minimal guidance.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Designing an Experiment)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment)
Technology Systems	7.HS.4 Describe threats to technology systems. (CYSEC)			
Technology Systems	7.HS.5 Explain how security measures protect technology systems. (CYSEC)			
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Designing an Experiment)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment)
Technology Systems	8.NI.1 Investigate how data is sent from one computer to another across networks.			
Technology Systems	8.HS.1 Choose appropriate device/hardware/software to complete a task.			
Technology Systems	8.HS.3 Organize, store, and retrieve digital information efficiently.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment)
Technology Systems	8.HS.4 Describe ways to protect against threats to			

	technology systems. (CYSEC)			
Technology Systems	8.HS.5 Compare and contrast security measures used to protect technology systems. (CYSEC)			
Technology Systems	6.NI.1 Explain how data is sent across networks.			
Technology Systems	6.HS.1 Use hardware and/or software to complete a task.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment) Electricity (Measuring Electricity Assignment)
Technology Systems	6.HS.2 Use software features to accomplish a goal.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment) Electricity (Measuring Electricity Assignment)
Technology Systems	6.HS.3 Organize, store, and retrieve digital information with guidance.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment)
Technology Systems	6.HS.4 Identify threats to technology systems. (CYSEC)			
Technology Systems	6.HS.5 Identify security measures to protect technology systems. (CYSEC)			
Technology Systems	6.T.1 Apply basic troubleshooting strategies.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (Measuring Distance, Area, and Volume Assignment)
Computational Thinking	6.PSA.1 Identify and test an algorithm to solve a problem.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Scientific Thinking, Forming a Hypothesis, Designing an Experiment)	Basics of Physical Science (The Scientific Method, The Scientific Method Experiment Assignment)
Computational Thinking	6.PSA.2 Debug a program that includes sequencing, loops, or conditionals.			

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Computational Thinking	6.PSA.3 Compare and contrast the efficiencies of multiple solutions to a task.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Scientific Thinking, Designing an Experiment)	Basics of Physical Science (The Scientific Method, The Scientific Method Experiment Assignment)
Computational Thinking	6.DCA.1 Collect and analyze data to support a claim.	Module 1: Scientific Thinking (Data Collection in Science, Analyzing Data)	Module 1: The Basics of Life (Data Collection in Science, Analyzing Data) Module 6: Discovering the Cell (Cells, Cell Structure and Function)	Basics of Physical Science (Studying Science, The Scientific Method, Measuring Distance, Area, and Volume Assignment) Electricity (Measuring Electricity Assignment)
Computational Thinking	6.DD.1 Use programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.			
Computational Thinking	7.PSA.1 Modify and test an algorithm to solve a problem.			
Computational Thinking	7-8.PSA.2 Continued growth in debugging a program that includes sequencing, loops, or conditions.			
Computational Thinking	7.DCA.1 Represent data, in more than one way, to defend your claim.	Module 1: Scientific Thinking (Data Collection in Science, Analyzing Data) Module 9: The Atmosphere (Earth's Atmosphere and Cycles Assignment)	Module 1: The Basics of Life (Data Collection in Science, Analyzing Data) Module 6: Discovering the Cell (Cells, Cell Structure and Function)	Basics of Physical Science (Studying Science, The Scientific Method, Measuring Distance, Area, and Volume Assignment) Electricity (Measuring Electricity Assignment)
Computational Thinking	7.DD.1 Modify programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.			
Computational Thinking	8.PSA.1 Create and test an algorithm to solve a problem across disciplines.			

Computational Thinking	8.DCA.1 Represent data from multiple sources in order to defend or refute a claim.	Module 1: Scientific Thinking (Data Collection in Science, Analyzing Data) Module 9: The Atmosphere (Earth's Atmosphere and Cycles Assignment)	Module 1: The Basics of Life (Data Collection in Science, Analyzing Data) Module 6: Discovering the Cell (Cells, Cell Structure and Function)	Basics of Physical Science (Studying Science, The Scientific Method, Measuring Distance, Area, and Volume Assignment) Electricity (Measuring Electricity Assignment)
Computational Thinking	8.DD.1 Create programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.			
Information Literacy	6.A.1 Use a variety of strategies to refine and revise search results.	All Units	All Units	All Units
Information Literacy	6.E.1 Evaluate information and its sources		Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (Studying Science, The Scientific Method)
Information Literacy	6.C.1 Repurpose or remix original works following fair use guidelines.			
Information Literacy	6.IP.1 With guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (The Scientific Method)
Information Literacy	6.IP.2 Cite a variety of sources using the appropriate format.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (The Scientific Method)
Information Literacy	6.IP.3 Describe negative consequences of piracy and plagiarism.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (The Scientific Method)
Information Literacy	7.A.1 Continued growth in using a variety of strategies to refine and revise search results.			
Information Literacy	7-8.E.1 Independently, evaluate information and its sources using student selected processes and strategies.			

Information Literacy	7-8.C.1 Continued growth in repurposing or remixing original works following fair use guidelines.			
Information Literacy	7.IP.1 With minimal guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (The Scientific Method)
Information Literacy	7-8.IP.2 Continued growth in citing a variety of sources using the appropriate format.	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (The Scientific Method)
Information Literacy	7.IP.3 Identify strategies to avoid personal works and the works of others from being pirated and plagiarized. (CYSEC)	Module 1: Scientific Thinking (Designing an Experiment)	Module 1: The Basics of Life (Al and You Discussion)	Basics of Physical Science (The Scientific Method)
Information Literacy	8.A.1 Use advanced search strategies to locate information online.			
Information Literacy	8.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.			
Information Literacy	8.IP.3 Debate the risks and benefits of sharing personal works online (CYSEC)			
Computing in Society	6.IC.1 Identify the positive and negative impacts of past, present, and future technology, including bias and accessibility.	Module 6: Humans and Earth (Science and Technology)	Module 1: The Basics of Life (Al and You Discussion)	The Environment (Technology Design Project, Science and Technology)
Computing in Society	6.SI.1 Use collaborative technology	All Units	All Units	All Units
Computing in Society	6.SI.2 Identify how social interactions can impact a person's self-image.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)Module 7: Heredity and Adaptation (Gene Therapy Discussion)	Basics of Physical Science (History of Physical Science - The Renaissance)Modern Machines (Bernoulli's Principle and Lift Discussion)
Computing in Society	7.IC.1 Compare and contrast the impacts of technology, including bias and accessibility.	Module 6: Humans and Earth (Science and Technology)	Module 1: The Basics of Life (Al and You Discussion)	The Environment (Technology Design Project, Science and Technology)

Computing in Society	7.SI.1 Use collaborative technology to gather and share information.	All Units	Throughout various modules with collaborative assignments and projects.	Throughout various modules with collaborative assignments and projects.
Computing in Society	7-8.SI.2 Continued growth in identifying how social interactions can impact a person's self image.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion) Module 7: Heredity and Adaptation (Gene Therapy Discussion)	Basics of Physical Science (History of Physical Science - The Renaissance) Modern Machines (Bernoulli's Principle and Lift Discussion)
Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.	Module 6: Humans and Earth (Science and Technology)	Module 1: The Basics of Life (Al and You Discussion)	The Environment (Technology Design Project, Science and Technology)
Digital Citizenship	7-8.SE.1 Continued growth identifying steps for responding to comfortable situations when interacting online.			
Digital Citizenship	7.SE.2 Identify a variety of methods to maintain digital privacy and security. (CYSEC)			
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online.			
Digital Citizenship	7.SE.4 Describe how to respond to threats to personal cybersecurity.			
Digital Citizenship	7-8.RU.1 Describe different forms of cyberbullying and the effects on all parties involved.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	7.RU.2 Identify strategies to prevent and stop cyberbullying.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	7-8.RU.3 Continued growth in using appropriate digital etiquette in a variety of situations.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)

Digital Citizenship	7.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	7-8.DI.1 Evaluate how digital identity can impact a person now and in the future.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	8.SE.2 Identify advanced methods to maintain digital privacy and security. (CYSEC)			
Digital Citizenship	8.SE.4 Discuss the consequences of identity theft. (CYSEC)			
Digital Citizenship	8.RU.2 Identify strategies to prevent and stop cyberbullying.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	8.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online.			
Digital Citizenship	6.SE.1 Identify steps for responding to uncomfortable situations when interacting online. (CYSEC)			
Digital Citizenship	6.SE.2 Identify basic methods to maintain digital privacy and security. (CYSEC)			
Digital Citizenship	6.SE.3 Recognize that data-collection technology can be used to track navigation online. (CYSEC)			
Digital Citizenship	6.SE.4 Identify threats to personal cybersecurity. (CYSEC)			
Digital Citizenship	6.RU.1 Identify different forms of cyberbullying.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)

Digital Citizenship	6.RU.2 Identify strategies to stop cyberbullying.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	6.RU.3 Use appropriate digital etiquette in a variety of situations.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	6.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (Al and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)
Digital Citizenship	6.DI.1 Describe personal online usage and determine how it affects identity on- and offline.	Module 6: Humans and Earth (Sharing a Discovery Discussion)	Module 1: The Basics of Life (AI and You Discussion)	Modern Machines (Bernoulli's Principle and Lift Discussion)

MIDDLE SCHOOL SOCIAL STUDIES

Category	Standard	MS Civics Module/Unit Covered	ND Studies Module/Unit Covered	Middle School US History	MS World History
Technology Systems	7.NI.1 Model how data is sent from one computer to another across networks.				
Technology Systems	7.HS.1 Compare and contrast hardware and/or software options to complete a task.				
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.	Unit 01: Citizenship; Unit 03: Sharing Power	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	7.HS.3 Organize, store, and retrieve digital information with minimal guidance.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	7.HS.4 Describe threats to technology systems. (CYSEC)				
Technology Systems	7.HS.5 Explain how security measures protect technology systems. (CYSEC)				
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.	Unit 03: Sharing Power	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	8.NI.1 Investigate how data is sent from one computer to another across networks.				
Technology Systems	8.HS.1 Choose appropriate device/hardware/software to complete a task.				

Technology Systems	8.HS.3 Organize, store, and retrieve digital information efficiently.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	8.HS.4 Describe ways to protect against threats to technology systems. (CYSEC)			
Technology Systems	8.HS.5 Compare and contrast security measures used to protect technology systems. (CYSEC)			
Technology Systems	6.NI.1 Explain how data is sent across networks.			
Technology Systems	6.HS.1 Use hardware and/or software to complete a task.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	6.HS.2 Use software features to accomplish a goal.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	6.HS.3 Organize, store, and retrieve digital information with guidance.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Technology Systems	6.HS.4 Identify threats to technology systems. (CYSEC)			
Technology Systems	6.HS.5 Identify security measures to protect technology systems. (CYSEC)			
Technology Systems	6.T.1 Apply basic troubleshooting strategies.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)

Computational Thinking	6.PSA.1 Identify and test an algorithm to solve a problem.	Unit 1: Citizenship, Unit 03: Sharing Power	Unit I: Back through Time (Building Communities) Unit II: A Time of Transformation (Building Communities) Unit III: Waves of Development (Building Communities) Unit IV: Modern North Dakota (Building Communities)	Module 01: Settlement (The Historian's Clues) Module 04: Growth (We Can Make a Difference!)	Module 02: Ancient River Civilizations (Mesopotamia - Development of Agriculture) Module 04: Ancient Greece (Democratic Government in Athens)
Computational Thinking	6.PSA.2 Debug a program that includes sequencing, loops, or conditionals.				
Computational Thinking	6.PSA.3 Compare and contrast the efficiencies of multiple solutions to a task.	Unit 01: Citizenship; Unit 03: Sharing Power	Unit I: Back through Time (Building Communities)Unit II: A Time of Transformation (Building Communities)Unit III: Waves of Development (Building Communities)Unit IV: Modern North Dakota (Building Communities)	Module 01: Settlement (The Historian's Clues)Module 04: Growth (We Can Make a Difference!)	Module 02: Ancient River Civilizations (Mesopotamia - Development of Agriculture)Module 04: Ancient Greece (Democratic Government in Athens)

Computational Thinking	6.DCA.1 Collect and analyze data to support a claim.	Unit 01: Citizenship; Unit 04: Active Citizens	Unit I: Back through Time (Changing Landscapes) Unit II: A Time of Transformation (Changing Landscapes) Unit III: Waves of Development (Changing Landscapes) Unit IV: Modern North Dakota (Changing Landscapes)	Module 01: Settlement (America's Geography) Module 06: Advances (Growing Cities!)	Module 02: Ancient River Civilizations (Ancient Egypt River Civilizations) Module 06: Ancient India (India's Vedic Age)
Computational Thinking	6.DD.1 Use programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.				
Computational Thinking	7.PSA.1 Modify and test an algorithm to solve a problem.				
Computational Thinking	7-8.PSA.2 Continued growth in debugging a program that includes sequencing, loops, or conditions.				
Computational Thinking	7.DCA.1 Represent data, in more than one way, to defend your claim.	Unit 05: Going Global; Unit 06: American Money	Unit II: A Time of Transformation (Changing Landscapes) Unit V: Energy (Introduction to North Dakota Energy)	Module 06: Advances (Growing Cities!) Module 07: Ideas (Inside Slavery)	Module 06: Ancient India (India's Vedic Age) Module 07: Ancient China (Chinese Dynasties)

Computational Thinking Computational	7.DD.1 Modify programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types. 8.PSA.1 Create and test				
Thinking	an algorithm to solve a problem across disciplines.				
Computational Thinking	8.DCA.1 Represent data from multiple sources in order to defend or refute a claim.	Unit 05: Going Global; Unit 06: American Money	Unit II: A Time of Transformation (Changing Landscapes) Unit V: Energy (Introduction to North Dakota Energy)	Module 06: Advances (Growing Cities!) Module 07: Ideas (Inside Slavery)	Module 06: Ancient India (India's Vedic Age) Module 07: Ancient China (Chinese Dynasties)
Computational Thinking	8.DD.1 Create programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.				
Information Literacy	6.A.1 Use a variety of strategies to refine and revise search results.	All Units	Throughout various units with research assignments.	All Units	All Units
Information Literacy	6.E.1 Evaluate information and its sources		Unit I: Back through Time (Changing Landscapes) Unit II: A Time of Transformation (Changing Landscapes) Unit III: Waves of Development (Changing Landscapes) Unit IV: Modern	Module 01: Settlement (America's Geography)Module 01: Settlement (America's Geography) Module 06: Advances (Growing Cities!)	Module 02: Ancient River Civilizations (Ancient Egypt River Civilizations) Module 06: Ancient India (India's Vedic Age)

		North Dakota (Changing Landscapes)		
Information Literacy	6.C.1 Repurpose or remix original works following fair use guidelines.			
Information Literacy	6.IP.1 With guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Information Literacy	6.IP.2 Cite a variety of sources using the appropriate format.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	
Information Literacy	6.IP.3 Describe negative consequences of piracy and plagiarism.	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Information Literacy	7.A.1 Continued growth in using a variety of strategies to refine and revise search results.			
Information Literacy	7-8.E.1 Independently, evaluate information and its sources using student selected processes and strategies.			

Information Literacy	7-8.C.1 Continued growth in repurposing or remixing original works following fair use guidelines.				
Information Literacy	7.IP.1 With minimal guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	Unit 01: Citizenship; Unit 02: Foundations	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Information Literacy	7-8.IP.2 Continued growth in citing a variety of sources using the appropriate format.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Information Literacy	7.IP.3 Identify strategies to avoid personal works and the works of others from being pirated and plagiarized. (CYSEC)	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (The Historian's Clues)	Module 02: Ancient River Civilizations (Near Eastern River Civilizations)
Information Literacy	8.A.1 Use advanced search strategies to locate information online.				
Information Literacy	8.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.				
Information Literacy	8.IP.3 Debate the risks and benefits of sharing personal works online (CYSEC)				
Computing in Society	6.IC.1 Identify the positive and negative impacts of past, present, and future technology, including bias and accessibility.		Unit I: Back through Time (Changing Landscapes) Unit V: Energy (Introduction to North Dakota Energy)	All Units	Module 05: Ancient Rome (The Contributions of Rome)

Computing in Society	6.SI.1 Use collaborative technology		Throughout various units with collaborative assignments and projects.		All Units
Computing in Society	6.SI.2 Identify how social interactions can impact a person's self-image.		Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)
Computing in Society	7.IC.1 Compare and contrast the impacts of technology, including bias and accessibility.	Unit 05: Going Global	Unit V: Energy (Introduction to North Dakota Energy)	Module 06: Advances (Innovations)	Module 05: Ancient Rome (The Contributions of Rome)
Computing in Society	7.SI.1 Use collaborative technology to gather and share information.	Unit 01: Citizenship	Throughout various units with collaborative assignments and projects.	All Units	Throughout various modules with collaborative assignments and projects.
Computing in Society	7-8.SI.2 Continued growth in identifying how social interactions can impact a person's self image.		Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)
Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.	Unit 05: Going Global	Unit V: Energy (Introduction to North Dakota Energy)	Module 06: Advances (Innovations)	Module 05: Ancient Rome (The Contributions of Rome)
Digital Citizenship	7-8.SE.1 Continued growth identifying steps for responding to comfortable situations when interacting online.	Unit 01: Citizenship			
Digital Citizenship	7.SE.2 Identify a variety of methods to maintain digital privacy and security. (CYSEC)				

Digital Citizenship	7-8.SE.3 Continued				
	growth in recognizing that				
	data-collection technology can be used to				
	track navigation online.				
Digital Citizenship	7.SE.4 Describe how to				
	respond to threats to				
	personal cybersecurity.				
Digital Citizenship	7-8.RU.1 Describe	Unit 01: Citizenship	Unit I: Back through	Module 01:	Module 04: Ancient Greece (Greek
	different forms of		Time (Building Communities)	Settlement (Colonial	Gods and Culture)
	cyberbullying and the effects on all parties		Communities)	Regions)	
	involved.				
Digital Citizenship	7.RU.2 Identify strategies	Unit 01: Citizenship	Unit I: Back through	Module 01:	Module 04: Ancient Greece (Greek
	to prevent and stop		Time (Building	Settlement (Colonial	Gods and Culture)
	cyberbullying.		Communities)	Regions)	
Digital Citizenship	7-8.RU.3 Continued	Unit 01: Citizenship	Unit I: Back through	Module 01:	Module 04: Ancient Greece (Greek
	growth in using		Time (Building	Settlement (Colonial	Gods and Culture)
	appropriate digital		Communities)	Regions)	
	etiquette in a variety of situations.				
Digital Citizenship	7.RU.4 Understand the	Unit 01: Citizenship	Unit I: Back through	Module 01:	Module 04: Ancient Greece (Greek
8	purpose of and comply	••••••	Time (Building	Settlement (Colonial	Gods and Culture)
	with Acceptable Use		Communities)	Regions)	
	Policies.				
Digital Citizenship	7-8.DI.1 Evaluate how	Unit 01: Citizenship	Unit I: Back through	Module 01:	Module 04: Ancient Greece (Greek
	digital identity can impact		Time (Building	Settlement (Colonial	Gods and Culture)
	a person now and in the future.		Communities)	Regions)	
Digital Citizenship	8.SE.2 Identify advanced				
Digital Onizonship	methods to maintain				
	digital privacy and				
	security. (CYSEC)				
Digital Citizenship	8.SE.4 Discuss the				
	consequences of identity				
	theft. (CYSEC)				

Digital Citizenship	8.RU.2 Identify strategies to prevent and stop cyberbullying.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)
Digital Citizenship	8.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data-collection technology can be used to track navigation online.				
Digital Citizenship	6.SE.1 Identify steps for responding to uncomfortable situations when interacting online. (CYSEC)	Unit 01: Citizenship; Unit 04: Active Citizens			
Digital Citizenship	6.SE.2 Identify basic methods to maintain digital privacy and security. (CYSEC)				
Digital Citizenship	6.SE.3 Recognize that data-collection technology can be used to track navigation online. (CYSEC)				
Digital Citizenship	6.SE.4 Identify threats to personal cybersecurity. (CYSEC)				
Digital Citizenship	6.RU.1 Identify different forms of cyberbullying.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)
Digital Citizenship	6.RU.2 Identify strategies to stop cyberbullying.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)

Digital Citizenship	6.RU.3 Use appropriate digital etiquette in a variety of situations.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)		Module 04: Ancient Greece (Greek Gods and Culture)
Digital Citizenship	6.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)
Digital Citizenship	6.DI.1 Describe personal online usage and determine how it affects identity on- and offline.	Unit 01: Citizenship	Unit I: Back through Time (Building Communities)	Module 01: Settlement (Colonial Regions)	Module 04: Ancient Greece (Greek Gods and Culture)

MIDDLE SCHOOL TECHNOLOGY

Category	Standard	Middle School Coding 1a: Introduction Module/Unit Covered	Middle School Learning in a Digital World: Digital Citizenship Module/Unit Covered
Technology Systems	6.HS.1 Use hardware and/or software to complete a task.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 1: Digital Citizenship (Lesson 3: Tracking Online Activity)
Technology Systems	6.HS.2 Use software features to accomplish a goal.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 1: Digital Citizenship (Lesson 3: Tracking Online Activity)
Technology Systems	6.HS.3 Organize, store, and retrieve digital information with guidance.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 1: Digital Citizenship (Lesson 3: Tracking Online Activity)
Technology Systems	6.HS.4 Identify threats to technology systems. (CYSEC)	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 2: Online Safety (Lesson 3: Online Threats)
Technology Systems	6.HS.5 Identify security measures to protect technology systems. (CYSEC)	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 2: Online Safety (Lesson 3: Online Threats)
Technology Systems	6.NI.1 Explain how data is sent across networks.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 1: Digital Citizenship (Lesson 3: Tracking Online Activity)
Technology Systems	6.T.1 Apply basic troubleshooting strategies.	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 1: Digital Citizenship (Lesson 4: Using Technology for Learning)
Technology Systems	7.HS.1 Compare and contrast hardware and/or software options to complete a task.		
Technology Systems	7.HS.3 Organize, store, and retrieve digital information with minimal guidance.		
Technology Systems	7.HS.4 Describe threats to technology systems. (CYSEC)		

Technology Systems	7.HS.5 Explain how security measures protect technology systems. (CYSEC)		
Technology Systems	7.NI.1 Model how data is sent from one computer to another across networks.		
Technology Systems	7-8.HS.2 Continued growth in using software features to accomplish a goal.		
Technology Systems	7-8.T.1 Continued growth in applying basic troubleshooting strategies.		
Technology Systems	8.HS.1 Choose appropriate device/hardware/software to complete a task.		
Technology Systems	8.HS.3 Organize, store, and retrieve digital information efficiently.		
Technology Systems	8.HS.4 Describe ways to protect against threats to technology systems. (CYSEC)		
Technology Systems	8.HS.5 Compare and contrast security measures used to protect technology systems. (CYSEC)		
Technology Systems	8.NI.1 Investigate how data is sent from one computer to another across networks.		
Computational Thinking	6.DCA.1 Collect and analyze data to support a claim.	Unit 1: Crack the Code! (Lesson 4: Programming Basics, Lesson 5: The Human Touch)	
Computational Thinking	6.DD.1 Use programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.	Unit 3: Let's Play! (Lesson 4: You're Acting a Bit Loopy!)	
Computational Thinking	6.PSA.1 Identify and test an algorithm to solve a problem.	Unit 1: Crack the Code! (Lesson 2: Fun with Algorithms, Lesson 4: Programming Basics)Unit 3: Let's Play! (Lesson 4: You're Acting a Bit Loopy!)	Unit 1: Digital Citizenship (Lesson 2: Digital Access)Unit 4: Digital Literacy (Lesson 2: Online Searches)
Computational Thinking	6.PSA.2 Debug a program that includes sequencing, loops, or conditionals.	Unit 3: Let's Play! (Lesson 5: Programmer by Day, Exterminator by Night!)	

Computational Thinking	6.PSA.3 Compare and contrast the efficiencies of multiple solutions to a task.	Unit 1: Crack the Code! (Lesson 2: Fun with Algorithms, Lesson 4: Programming Basics)	Unit 4: Digital Literacy (Lesson 2: Online Searches, Lesson 4: Putting It All Together)
Computational Thinking	7.DCA.1 Represent data, in more than one way, to defend your claim.		
Computational Thinking	7.DD.1 Modify programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.		
Computational Thinking	7.PSA.1 Modify and test an algorithm to solve a problem.		
Computational Thinking	7-8.PSA.2 Continued growth in debugging a program that includes sequencing, loops, or conditions.		
Computational Thinking	8.DCA.1 Represent data from multiple sources in order to defend or refute a claim.		
Computational Thinking	8.DD.1 Create programs that utilize combinations of loops, conditionals, and the manipulation of variables representing different data types.		
Computational Thinking	8.PSA.1 Create and test an algorithm to solve a problem across disciplines.		
Information Literacy	6.A.1 Use a variety of strategies to refine and revise search results.	All Units	Unit 4: Digital Literacy (Lesson 2: Online Searches)
Information Literacy	6.C.1 Repurpose or remix original works following fair use guidelines.	Unit 4: It's All Greek to Me! (Lesson 3: Language Design Approaches)	Unit 6: Content and Copyright (Lesson 3: Appropriately Using Others' Work)
Information Literacy	6.E.1 Evaluate information and its sources	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?) Unit 2: There's Nothing "Soft" about Software! (Lesson 1: A Crash Course on Software)	Unit 4: Digital Literacy (Lesson 2: Online Searches, Lesson 3: Selecting Information)
Information Literacy	6.IP.1 With guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.	Unit 4: It's All Greek to Me! (Lesson 3: Language Design Approaches)	Unit 6: Content and Copyright (Lesson 3: Appropriately Using Others' Work)

Information Literature	CID 2 Cito o veriety of	Linit de It's All Orsalita	Lipit C: Contont and
Information Literacy	6.IP.2 Cite a variety of sources using the appropriate format.	Unit 4: It's All Greek to Me! (Lesson 3: Language Design Approaches)	Unit 6: Content and Copyright (Lesson 2: Giving Credit Where Credit Is Due)
Information Literacy	6.IP.3 Describe negative consequences of piracy and plagiarism.	Unit 4: It's All Greek to Me! (Lesson 3: Language Design Approaches)	Unit 6: Content and Copyright (Lesson 3: Appropriately Using Others' Work)
Information Literacy	7.A.1 Continued growth in using a variety of strategies to refine and revise search results.		
Information Literacy	7.IP.1 With minimal guidance, properly use copyrighted works, works in the creative commons, and works in the public domain.		
Information Literacy	7.IP.3 Identify strategies to avoid personal works and the works of others from being pirated and plagiarized. (CYSEC)		
Information Literacy	7-8.C.1 Continued growth in repurposing or remixing original works following fair use guidelines.		
Information Literacy	7-8.E.1 Independently, evaluate information and its sources using student selected processes and strategies.		
Information Literacy	7-8.IP.2 Continued growth in citing a variety of sources using the appropriate format.		
Information Literacy	8.A.1 Use advanced search strategies to locate information online.		
Information Literacy	8.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.		
Information Literacy	8.IP.3 Debate the risks and benefits of sharing personal works online (CYSEC)		
Computing in Society	6.IC.1 Identify the positive and negative impacts of past, present, and future technology, including bias and accessibility.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 1: Digital Citizenship (Lesson 3: Tracking Online Activity, Lesson 4: Using Technology for Learning)

Computing in Society	6.SI.1 Use collaborative technology	Throughout various units with collaborative assignments and projects.	All Units
Computing in Society	6.SI.2 Identify how social interactions can impact a person's self-image.	Unit 3: Let's Play! (Lesson 3: To Be, or Not to Be?)	Unit 3: Communication and Collaboration (Lesson 4: Using Netiquette, Lesson 5: You've Got Mail)
Computing in Society	7.IC.1 Compare and contrast the impacts of technology, including bias and accessibility.		
Computing in Society	7.SI.1 Use collaborative technology to gather and share information.		
Computing in Society	7-8.SI.2 Continued growth in identifying how social interactions can impact a person's self image.		
Computing in Society	8.IC.1 Explore and create solutions for the negative impacts of technology, including bias and accessibility.		
Digital Citizenship	6.DI.1 Describe personal online usage and determine how it affects identity on- and offline.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 2: Online Safety (Lesson 4: Who Are You Online?)
Digital Citizenship	6.RU.1 Identify different forms of cyberbullying.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 2: Online Safety (Lesson 3: Online Threats)
Digital Citizenship	6.RU.2 Identify strategies to stop cyberbullying.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 2: Online Safety (Lesson 3: Online Threats)
Digital Citizenship	6.RU.3 Use appropriate digital etiquette in a variety of situations.	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 3: Communication and Collaboration (Lesson 4: Using Netiquette)
Digital Citizenship	6.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 1: Crack the Code! (Lesson 3: What in the World is Code?)	Unit 1: Digital Citizenship (Lesson 4: Using Technology for Learning)
Digital Citizenship	6.SE.1 Identify steps for responding to uncomfortable situations when interacting online. (CYSEC)	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 2: Online Safety (Lesson 3: Online Threats)
Digital Citizenship	6.SE.2 Identify basic methods to maintain digital privacy and security. (CYSEC)	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 2: Online Safety (Lesson 1: Protect Your Identity, Lesson 2: Guard Your Information)

Digital Citizenship	6.SE.3 Recognize that data- collection technology can be used to track navigation online. (CYSEC)	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 1: Digital Citizenship (Lesson 3: Tracking Online Activity)
Digital Citizenship	6.SE.4 Identify threats to personal cybersecurity. (CYSEC)	Unit 2: There's Nothing "Soft" about Software! (Lesson 3: Mind Your Business Using Apps!)	Unit 2: Online Safety (Lesson 3: Online Threats)
Digital Citizenship	7.RU.2 Identify strategies to prevent and stop cyberbullying.		
Digital Citizenship	7.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	7.SE.2 Identify a variety of methods to maintain digital privacy and security. (CYSEC)		
Digital Citizenship	7.SE.4 Describe how to respond to threats to personal cybersecurity.		
Digital Citizenship	7-8.DI.1 Evaluate how digital identity can impact a person now and in the future.		
Digital Citizenship	7-8.RU.1 Describe different forms of cyberbullying and the effects on all parties involved.		
Digital Citizenship	7-8.RU.3 Continued growth in using appropriate digital etiquette in a variety of situations.		
Digital Citizenship	7-8.SE.1 Continued growth identifying steps for responding to comfortable situations when interacting online.		
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data- collection technology can be used to track navigation online.		
Digital Citizenship	7-8.SE.3 Continued growth in recognizing that data- collection technology can be used to track navigation online.		
Digital Citizenship	8.RU.2 Identify strategies to prevent and stop cyberbullying.		

Digital Citizenship	8.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	
Digital Citizenship	8.SE.2 Identify advanced methods to maintain digital privacy and security. (CYSEC)	
Digital Citizenship	8.SE.4 Discuss the consequences of identity theft. (CYSEC)	

Category	Standard	LA 9 Module Covered	LA 10 Module Covered	LA 11 Module Covered	LA 12 Module Covered
Technology Systems	9.NI.1 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).				
Technology Systems	9.NI.2 Understand the implications of accessing publicly available Internet connections. (CYSEC)				
Technology Systems	10.NI.1 Identify and define different network connection types (e.g., Wi-Fi, mobile data, Ethernet).				
Technology Systems	10.NI.2 Identify networkable devices.				
Technology Systems	11.NI.1 Compare and contrast different network connection types (e.g., Wi-Fi, mobile data, ethernet).				
Technology Systems	11.NI.2 Understand the global impact of networkable devices.				
Technology Systems	12.NI.1 Choose an appropriate network connection given a scenario or situation.				
Technology Systems	12.NI.2 Compare and contrast the benefits and security risks of networkable devices.				
Technology Systems	9.HS.1 Compare and contrast appropriate device/hardware/softwar e to complete a task.	Module 04: Relying on Facts - Powerful Presentation S	Module 06: Coming of Age - Organization is Key	Module 01: Rugged Americans- Writing a Narrative	Module 02: Carousel of Progress - Tools for Informative/Explanator y Writing
Technology Systems	9.HS.2 Define software and security patches/update. (CYSEC)				
Technology Systems	9.HS.3 Explain why a backup is necessary. (CYSEC)				

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Technology	10.HS.2 Recognize the			
Systems	importance of and			
	effectively perform software and security			
	patches/updates.			
	(CYSEC)			
Technology	10.HS.3 Identify			
Systems	important data or			
	systems that need redundancy. (CYSEC)			
Technology	11.HS.2 Identify and			
Systems	choose hardware and			
oystems	software to help protect			
	a system. (CYSEC)			
Technology	11.HS.3 Identify different			
Systems	options for redundancy			
Cyclonia	(e.g., cloud storage,			
	external, duplicate			
	devices). (CYSEC)			
Technology	12.HS.3 Implement			
Systems	redundancy. (CYSEC)			
Technology	9.T.1 Describe basic			
Systems	hardware and software			
	problems using			
	appropriate and			
	accurate terminology.			
Technology	10.T.1 Follow			
Systems	appropriate guidelines			
	that convey systematic troubleshooting			
	techniques to identify			
	and fix errors.			
Technology	12.T.1 Implement			
Systems	systematic			
	troubleshooting			
	strategies to identify and			
	fix errors.			
Computation	9.PSA.1 Identify,	Module 06: A	Module 02:	Module 01: Forces of
al Thinking	recognize, and use an	Narrative of	Storytime -	Nature - Concept
	algorithm to solve a	Epic	Storytime	Synthesis: Exploring
	complex problem across	Proportions -	Discussion- Based	the Hero
	disciplines.	A Narrative of Epic	Assessment	
		Proportions	732331110111	
		Discussion-		
		Based		
		Assessment		
Computation	10.PSA.1 Create and test			
al Thinking	an algorithm to solve a			
	complex problem across			
	disciplines.			
				<u> </u>

Computation	11.PSA.1 Demonstrate			Module 07:	
al Thinking	ways a given algorithm applies to problems across disciplines and explain the benefits and drawbacks of choices made.			Beyond Realism- Analytical Essay Assignment	
Computation al Thinking	12.PSA.1 Use and adapt common algorithms to solve computational problems.				
Computation al Thinking	9.DCA.1 Collect and analyze complex data.	Module 04: Relying on Facts - Synthesizing Information Module 04: Relying on Facts - Proper Support	Module 04: Strong Argumentatio n - Staking Your Claim	Module 11: The Final Analysis- Synthesizing Texts Assignment	Module 04: Proof or Satire - Analyzing an Argument
Computation al Thinking	10.DCA.1 Represent complex data in more than one way to support a claim.	Module 04: Relying on Facts - Proper Support	Module 06: Coming of Age - Show Your Evidence	Module 09: The New Fiction- Tracking Themes Assignment	Module 04: Proof or Satire - Outlining Your Argument
Computation al Thinking	11.DCA.1 Represent complex data in multiple ways to defend a student-generated claim.	Module 04: Relying on Facts - Tying It All Together	Module 06: Coming of Age - Sharing Your Work	Module 07: Beyond Realism- Analytical Essay Assignment	Module 04: Proof or Satire - Preparing Your Argument
Computation al Thinking	12.DCA.1 Represent complex data using interactive data visualizations or computational models.				
Information Literacy	9.A.1 Plan and employ effective research strategies to locate information.	Module 04: Relying on Facts - Synthesizing Information	Module 03: Writing About Literature - Research and Citations	Module 12: Expert Opinions- Research Plan	Module 02: Carousel of Progress - Fact Finding
Information Literacy	10.A.1 Curate relevant information from digital resources using a variety of tools and methods.	Module 04: Relying on Facts - Synthesizing Information	Module 03: Writing About Literature - Research and Citations	Module 12: Expert OpinionsGatherin g and Analyzing Sources	Module 02: Carousel of Progress - Fact Finding
Information Literacy	11.A.1 Devise new search strategies based on information gaps and new understanding.			Module 12: Expert OpinionsGatherin g and Analyzing Sources	

Information Literacy	12.A.1 Build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.			Module 12: Expert OpinionsGatherin g and Analyzing Sources	
Information Literacy	9.E.1 Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.	Module 04: Relying on Facts - Synthesizing Information	Module 03: Writing About Literature - Research and Citations	Module 12: Expert OpinionsGatherin g and Analyzing Sources	Module 02: Carousel of Progress - Fact Finding
Information Literacy	10.E.1 Gather accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.	Module 04: Relying on Facts - Synthesizing Information	Module 04: Strong Argumentatio n - Staking Your Claim	Module 12: Expert OpinionsGatherin g and Analyzing Sources	Module 04: Proof or Satire - Reading an Argument
Information Literacy	11.E.1 Use accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.		Module 04: Strong Argumentatio n - Crafting a Winning Argument	Module 12: Expert Opinions- Research Report	Module 04: Proof or Satire - Preparing Your Argument
Information Literacy	12.E.1 Explain source selection based on accuracy, perspective, credibility, and relevance of information, media, data, or other resources.			Module 12: Expert Opinions- Research Report	Module 04: Proof or Satire - Preparing Your Argument
Information Literacy	9.C.1 Create original works or responsibly repurpose or remix digital resources into new creations to communicate an idea.	Module 02: Writing with Style - A Way with Words Module 06: A Narrative of Epic Proportions - A Journey's Start	Module 01: Fundamental s of Fiction - All About Words Module 06: Coming of Age - Sharing Your Work	Module 01: Rugged Americans- Writing a Narrative Writing Poetry	Module 01: Forces of Nature - Writing Your Narrative Module 03: Expressions - Poetry Slam
Information Literacy	10.C.1 Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.			Module 10: Under Construction- Multimedia Literature	Proof or Satire - Publishing Your Argument
Information Literacy	11.C.1 Publish or present content that customizes the message and medium for their		Module 04: Strong Argumentatio n -	Module 10: Under Construction- Multimedia Literature	Proof or Satire - Publishing Your Argument

	intended audiences to		Presentation		
	communicate their idea.				
	communicate their idea.		Prowess		
Information	12.C.1 Exhibit			Module 10: Under	
Literacy	perseverance, a			Construction-	
	tolerance for ambiguity,			Multimedia	
	and the capacity to work			Literature	
	with open-ended				
	problems in the design				
Information	and creation process.	Madula 0.4	Madula 00	Madula 10. Evenant	Madula 00: Oarayaal
	9.IP.1 Properly use	Module 04:	Module 03:	Module 12: Expert	Module 02: Carousel
Literacy	copyrighted works,	Relying on	Writing About	Opinions-	of Progress - Prepping
	works in the creative	Facts -	Literature -	Research Plan	Your Sources
	commons, and works in	Synthesizing	Research and		
	the public domain.	Information	Citations		
Information	9.IP.2 Cite sources in a	Module 04:	Module 03:		Module 02: Carousel
Literacy	standard format to	Relying on	Writing About		of Progress - Prepping
	ethically reference the	Facts -	Literature -		Your Sources
	intellectual property of	Proper	Research and		
	others.	Support	Citations		
Information	9.IP.3 Engage in positive,	Module 04:	Module 03:		
Literacy	safe, legal, and ethical	Relying on	Writing About		
	behavior when using	Facts -	Literature -		
	technology.	Synthesizing	Research and		
	teennotegy.	Information	Citations		
Information	10.IP.1 Demonstrate an	internation	Oltationio		
Literacy	understanding of and				
Literacy	respect for the rights and				
	obligations of using and				
	sharing intellectual				
	property				
Information	11.IP.1 Explain the				
Literacy	beneficial and harmful				
	effects that intellectual				
	property laws can have				
	on innovation, creativity,				
	and collaboration.				
Information	11.IP.3 Evaluate the				
Literacy	social and economic				
	implications of piracy				
	and plagiarism in the				
	context of safety, law, or				
	ethics.				
Information	12.IP.1 Debate laws and				
Literacy	regulations that impact				
Literacy	the development and				
	use of software.				

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Computing in Society	9.IC.1 Evaluate how technology has impacted			
coolog	the workforce positively			
	and negatively.			
Computing in	9.SI.1 Identify how			
Society	technology has affected			
	our means of communication.			
Computing in	10.IC.1 Evaluate the			
Society	social, personal, and			
	economic implications			
	technology has on			
	society and the economy.			
Computing in	10.SI.1 Evaluate the			
Society	impacts of technology on			
	social interactions.			
Computing in	11.IC.1 Explain how			
Society	computing may change cultural aspects of			
	society			
Computing in	11.SI.1 Investigate ways			
Society	to maximize the benefits			
	and minimize the harmful effects			
	technology can have on			
	society.			
Computing in	12.IC.1 Predict how			
Society	computing may impact the workplace and			
	personal lives.			
Computing in	12.SI.1 Evaluate the			
Society	impact of equity, bias,			
	access, and influence on the availability of			
	computing resources in			
	a global society.			
Digital	9.SE.1 Recognize the			
Citizenship	effects sharing information online can			
	have on others' privacy.			
	(CYSEC)			
Digital	9.SE.2 Know how to			
Citizenship	modify account settings to protect privacy and			
	security. (CYSEC)			
Digital	9.SE.3 Recognize that			
Citizenship	data collection			
	technology can be used			
	to track navigation online. (CYSEC)			

Digital	9.SE.4 Describe ways to		
Citizenship	prevent identity theft.		
	(CYSEC)		
Digital	10.SE.1 Implement best		
Citizenship	practices to secure		
Giuzensnip	•		
	personal information.		
	(CYSEC)		
Digital	10.SE.2 Recognize the		
Citizenship	importance of		
	monitoring your private		
	data. (CYSEC)		
Digital	10.SE.3 Manage		
Citizenship	personal data to		
Giuzensnip	•		
	maintain digital privacy		
	and security and are		
	aware of data collection		
	technology used to track		
	online behaviors.		
	(CYSEC)		
Digital	10.SE.4 Identify if their		
Citizenship	private data has been		
	altered and can react		
	appropriately. (CYSEC)		
Digital	11.SE.1 Understand		
Citizenship	encryption and how it is		
	used to protect data.		
	(CYSEC)		
Digital	11.SE.2 Explain the		
Citizenship	privacy concerns related		
	to the collection and		
	generation of data		
	through automated		
	<u> </u>		
District	processes. (CYSEC)		
Digital	11.SE.4 Develop a plan		
Citizenship	to recover from an		
	incident that was tied to		
	unauthorized access.		
	(CYSEC)		
Digital	12.SE.2 Illustrate how		
Citizenship	sensitive data can be		
	affected by malware and		
	other attacks. (CYSEC)		
	, , , , , , , , , , , , , , , , , , ,		
Digital	9.RU.1 Apply		
Citizenship	cyberbullying prevention		
	strategies.		
Digital	9.RU.2 Apply safe and		
Citizenship	ethical behaviors to		
	personal electronic		
	communication and		
	interaction. (CYSEC)		

Digital Citizenship	9.RU.4 Understand the purpose of and comply with Acceptable Use Policies.
Digital Citizenship	10.RU.4 Understand the purpose of and comply with Acceptable Use Policies.
Digital Citizenship	11.RU.4 Understand the purpose of and comply with Acceptable Use Policies.
Digital Citizenship	12.RU.4 Understand the purpose of and comply with Acceptable Use Policies.
Digital Citizenship	9.DI.1 Manage a digital identity and be aware of the permanence of actions in the digital

Category	Standard	Algebra 1 Module/Unit Covered	Algebra 2 Module/Unit Covered	Geometry Module/Unit Covered	Precalculus Module/Unit Covered
Technology Systems	9.NI.1 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).				
Technology Systems	9.NI.2 Understand the implications of accessing publicly available Internet connections. (CYSEC)				
Technology Systems	10.NI.1 Identify and define different network connection types (e.g., Wi-Fi, mobile data, Ethernet).				
Technology Systems	10.NI.2 Identify networkable devices.				
Technology Systems	11.NI.1 Compare and contrast different network connection types (e.g., Wi-Fi, mobile data, ethernet).				
Technology Systems	11.NI.2 Understand the global impact of networkable devices.				
Technology Systems	12.NI.1 Choose an appropriate network connection given a scenario or situation.				

Technology Systems Technology Systems	12.NI.2 Compare and contrast the benefits and security risks of networkable devices. 9.HS.1 Compare and contrast appropriate device/hardware/software to complete a task.		
Technology Systems	9.HS.2 Define software and security patches/update. (CYSEC)		
Technology Systems	9.HS.3 Explain why a backup is necessary. (CYSEC)		
Technology Systems	10.HS.2 Recognize the importance of and effectively perform software and security patches/updates. (CYSEC)		
Technology Systems	10.HS.3 Identify important data or systems that need redundancy. (CYSEC)		
Technology Systems	11.HS.2 Identify and choose hardware and software to help protect a system. (CYSEC)		
Technology Systems	11.HS.3 Identify different options for redundancy (e.g., cloud storage, external, duplicate devices). (CYSEC)		

Technology Systems	12.HS.3 Implement redundancy. (CYSEC)				
Technology Systems	9.T.1 Describe basic hardware and software problems using appropriate and accurate terminology.				
Technology Systems	10.T.1 Follow appropriate guidelines that convey systematic troubleshooting techniques to identify and fix errors.				
Technology Systems	12.T.1 Implement systematic troubleshooting strategies to identify and fix errors.				
Computational Thinking	9.PSA.1 Identify, recognize, and use an algorithm to solve a complex problem across disciplines.	Module: Writing and Solving Equations in Two Variables	Module 01: Radical and Polynomial Operations	Module 01: Geometry Foundations	Unit 1: Linear Functions
Computational Thinking	10.PSA.1 Create and test an algorithm to solve a complex problem across disciplines.	Module: Writing and Graphing Equations in Two Variables	Module 04: Rational Equations	Module 05: Right Triangles and Trigonometry	Unit 2: Quadratic Functions
Computational Thinking	11.PSA.1 Demonstrate ways a given algorithm applies to problems across disciplines and explain the benefits and drawbacks of choices made.				

Computational Thinking	12.PSA.1 Use and adapt common algorithms to solve computational problems.				
Computational Thinking	9.DCA.1 Collect and analyze complex data.				
Computational Thinking	10.DCA.1 Represent complex data in more than one way to support a claim.	Module: Introduction to Functions	Module 05: Exponential and Logarithmic Functions	Module 04: Coordinate Geometry	Unit 4: Rational Functions
Computational Thinking	11.DCA.1 Represent complex data in multiple ways to defend a student- generated claim.				
Computational Thinking	12.DCA.1 Represent complex data using interactive data visualizations or computational models.				
Information Literacy	9.A.1 Plan and employ effective research strategies to locate information.				
Information Literacy	10.A.1 Curate relevant information from digital resources using a variety of tools and methods.				
Information Literacy	11.A.1 Devise new search strategies based on information gaps and new understanding.				

Information Literacy	12.A.1 Build knowledge by actively exploring real- world issues and problems, developing ideas and theories, and pursuing answers and solutions.		
Information Literacy	9.E.1 Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.		
Information Literacy	10.E.1 Gather accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.		
Information Literacy	11.E.1 Use accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.		
Information Literacy	12.E.1 Explain source selection based on accuracy, perspective, credibility, and relevance of information, media, data, or other resources.		

Information Literacy	9.C.1 Create original works or responsibly repurpose or remix digital resources into new creations to communicate an idea.		
Information Literacy	10.C.1 Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.		
Information Literacy	11.C.1 Publish or present content that customizes the message and medium for their intended audiences to communicate their idea.		
Information Literacy	12.C.1 Exhibit perseverance, a tolerance for ambiguity, and the capacity to work with open-ended problems in the design and creation process.		
Information Literacy	9.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.		
Information Literacy	9.IP.2 Cite sources in a standard format to ethically reference the intellectual property of others.		

Information Literacy	9.IP.3 Engage in positive, safe, legal, and ethical behavior when using technology.		
Information Literacy	10.IP.1 Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property		
Information Literacy	11.IP.1 Explain the beneficial and harmful effects that intellectual property laws can have on innovation, creativity, and collaboration.		
Information Literacy	11.IP.3 Evaluate the social and economic implications of piracy and plagiarism in the context of safety, law, or ethics.		
Information Literacy	12.IP.1 Debate laws and regulations that impact the development and use of software.		
Computing in Society	9.IC.1 Evaluate how technology has impacted the workforce positively and negatively.		
Computing in Society	9.SI.1 Identify how technology has affected our means of communication.		

Computing in Society	10.IC.1 Evaluate the social, personal, and economic implications technology has on society and the economy.		
Computing in Society	10.Sl.1 Evaluate the impacts of technology on social interactions.		
Computing in Society	11.IC.1 Explain how computing may change cultural aspects of society		
Computing in Society	11.SI.1 Investigate ways to maximize the benefits and minimize the harmful effects technology can have on society.		
Computing in Society	12.IC.1 Predict how computing may impact the workplace and personal lives.		
Computing in Society	12.SI.1 Evaluate the impact of equity, bias, access, and influence on the availability of computing resources in a global society.		
Digital Citizenship	9.SE.1 Recognize the effects sharing information online can have on others' privacy. (CYSEC)		

Digital Citizenship Digital Citizenship	 9.SE.2 Know how to modify account settings to protect privacy and security. (CYSEC) 9.SE.3 Recognize that data collection technology can be used to track navigation online. (CYSEC) 		
Digital Citizenship	9.SE.4 Describe ways to prevent identity theft. (CYSEC)		
Digital Citizenship	10.SE.1 Implement best practices to secure personal information. (CYSEC)		
Digital Citizenship	10.SE.2 Recognize the importance of monitoring your private data. (CYSEC)		
Digital Citizenship	10.SE.3 Manage personal data to maintain digital privacy and security and are aware of data collection technology used to track online behaviors. (CYSEC)		
Digital Citizenship	10.SE.4 Identify if their private data has been altered and can react appropriately. (CYSEC)		

Digital Citizenship Digital Citizenship	11.SE.1 Understand encryption and how it is used to protect data. (CYSEC) 11.SE.2 Explain the privacy concerns related to the collection and generation of data through automated processes. (CYSEC)		
Digital Citizenship	11.SE.4 Develop a plan to recover from an incident that was tied to unauthorized access. (CYSEC)		
Digital Citizenship	12.SE.2 Illustrate how sensitive data can be affected by malware and other attacks. (CYSEC)		
Digital Citizenship	9.RU.1 Apply cyberbullying prevention strategies.		
Digital Citizenship	9.RU.2 Apply safe and ethical behaviors to personal electronic communication and interaction. (CYSEC)		
Digital Citizenship	9.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		

Digital Citizenship	10.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	11.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	12.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	9.DI.1 Manage a digital identity and be aware of the permanence of actions in the digital world. (CYSEC)		

Category	Standard	Chemistry	Biology	Physics	Physical Science
Technology Systems	9.NI.1 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).			Module 05: Telecommunications and Digital Information	
Technology Systems	9.NI.2 Understand the implications of accessing publicly available Internet connections. (CYSEC)			Module 05: Telecommunications and Digital Information	
Technology Systems	10.NI.1 Identify and define different network connection types (e.g., Wi-Fi, mobile data, Ethernet).			Module 05: Telecommunications and Digital Information	Module 02: Circuits
Technology Systems	10.NI.2 Identify networkable devices.			Module 05: Telecommunications and Digital Information	Module 02: Circuits
Technology Systems	11.NI.1 Compare and contrast different network connection types (e.g., Wi-Fi, mobile data, ethernet).			Module 05: Telecommunications and Digital Information	
Technology Systems	11.NI.2 Understand the global impact of networkable devices.			Module 05: Telecommunications and Digital Information	
Technology Systems	12.NI.1 Choose an appropriate network connection given a scenario or situation.			Module 05: Telecommunications and Digital Information	
Technology Systems	12.NI.2 Compare and contrast the benefits and security risks of networkable devices.			Module 05: Telecommunications and Digital Information	
Technology Systems	9.HS.1 Compare and contrast appropriate device/hardware/software to complete a task.	Module 01: Measuring Matter	Module 01: Exploring Life	Module 01: Studying Physics	Module 01: Scientific Inquiry

Technology Systems	9.HS.2 Define software and security patches/update. (CYSEC)				
Technology Systems	9.HS.3 Explain why a backup is necessary. (CYSEC)				
Technology Systems	10.HS.2 Recognize the importance of and effectively perform software and security patches/updates. (CYSEC)				
Technology Systems	10.HS.3 Identify important data or systems that need redundancy. (CYSEC)				
Technology Systems	11.HS.2 Identify and choose hardware and software to help protect a system. (CYSEC)				
Technology Systems	11.HS.3 Identify different options for redundancy (e.g., cloud storage, external, duplicate devices). (CYSEC)				
Technology Systems	12.HS.3 Implement redundancy. (CYSEC)				
Technology Systems	9.T.1 Describe basic hardware and software problems using appropriate and accurate terminology.	Module 01: Properties of Matter	Module 01: Chemistry of Life	Module 01: Studying Physics	Module 01: Describing Motion
Technology Systems	10.T.1 Follow appropriate guidelines that convey systematic troubleshooting techniques to identify and fix errors.	Module 01: Changes in Matter	Module 02: Cell Structure and Function	Module 02: Manipulating Equations	Module 02: Circuits
Technology Systems	12.T.1 Implement systematic troubleshooting strategies to identify and fix errors.	Module 06: Gas Laws Lab	Module 03: Mutations	Module 02: Newton's Laws Lab	Module 02: Electricity and Magnetism
Computational Thinking	9.PSA.1 Identify, recognize, and use an algorithm to solve a complex problem across disciplines.	Module 03: Valence Electrons	Module 02: Properties of Water	Module 03: Conservation of Energy	Module 01: Describing Motion
Computational Thinking	10.PSA.1 Create and test an algorithm to solve a complex problem across disciplines.	Module 06: Gas Laws	Module 02: Photosynthesis and Cellular Respiration	Module 05: Wave Phenomena	Module 01: Describing Motion

Computational Thinking	11.PSA.1 Demonstrate ways a given algorithm applies to problems across disciplines and explain the benefits and drawbacks of choices made.	Module 06: Phase Changes	Module 03: DNA Replication	Module 05: Wave Phenomena	Module 06: Chemical Reaction Systems
Computational Thinking	12.PSA.1 Use and adapt common algorithms to solve computational problems.	Module 05: Stoichiometry II	Module 05: Evolution	Module 05: Engineering Design II	Module 06: Chemical Reaction Systems
Computational Thinking	9.DCA.1 Collect and analyze complex data.	Module 05: Limiting Reactant	Module 04: Ecology	Module 02: Acceleration Lab	Module 01: Scientific Inquiry
Computational Thinking	10.DCA.1 Represent complex data in more than one way to support a claim.	Module 05: Percent Yield	Module 05: Evolutionary Relationships	Module 01: Graphing Data	Module 04: Properties of Matter
Computational Thinking	11.DCA.1 Represent complex data in multiple ways to defend a student- generated claim.	Module 05: Using the Mole	Module 05: Classification of Living Organisms	Module 01: Graphing Data	Module 04: Properties of Matter
Computational Thinking	12.DCA.1 Represent complex data using interactive data visualizations or computational models.	Module 07: Reaction Rates	Module 06: The Human Brain	Module 05: Wave Phenomena	Module 06: Chemical Reaction Systems
Information Literacy	9.A.1 Plan and employ effective research strategies to locate information.	Module 02: Contributions to Chemistry	Module 01: Exploring Life	Module 01: Studying Physics	Module 01: Scientific Inquiry
Information Literacy	10.A.1 Curate relevant information from digital resources using a variety of tools and methods.	Module 08: Properties of Water	Module 06: Environmental Resources	Module 01: Studying Physics	Module 01: Scientific Inquiry
Information Literacy	11.A.1 Devise new search strategies based on information gaps and new understanding.	Module 08: Molarity and Dilutions	Module 05: Primate Evolution	Module 01: Studying Physics	Module 01: Scientific Inquiry
Information Literacy	12.A.1 Build knowledge by actively exploring real- world issues and problems, developing ideas and theories, and pursuing answers and solutions.	Module 08: Acids and Bases	Module 06: Human Reproduction	Module 05: Engineering Design II	Module 02: Electricity and Magnetism
Information Literacy	9.E.1 Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.	Module 02: Contributions to Chemistry	Module 01: Exploring Life	Module 01: Studying Physics	Module 01: Scientific Inquiry

Information Literacy Information Literacy	 10.E.1 Gather accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives. 11.E.1 Use accurate, credible, and relevant sources of information, media, data, or other resources showing 	Module 08: Properties of Water Module 08: Molarity and Dilutions	Module 05: Classification of Living Organisms Module 05: Evolutionary Relationships	Module 01: Studying Physics Module 01: Studying Physics	Module 01: Scientific Inquiry Module 01: Scientific Inquiry
Information Literacy	different perspectives. 12.E.1 Explain source selection based on accuracy, perspective, credibility, and relevance of information, media, data, or other resources.	Module 08: Acids and Bases	Module 05: Evolution	Module 01: Studying Physics	Module 01: Scientific Inquiry
Information Literacy	9.C.1 Create original works or responsibly repurpose or remix digital resources into new creations to communicate an idea.	Module 01: Properties of Matter Lab	Module 01: Chemistry of Life	Module 05: Engineering Design II	Module 06: Chemical Reaction Systems
Information Literacy	10.C.1 Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	Module 06: Gas Laws Lab	Module 06: Health and the Immune System		Module 03: Using Electromagnetic Waves
Information Literacy	11.C.1 Publish or present content that customizes the message and medium for their intended audiences to communicate their idea.	Module 07: Enthalpy Values	Module 06: The Human Brain		Module 06: Chemical Reaction Systems
Information Literacy	12.C.1 Exhibit perseverance, a tolerance for ambiguity, and the capacity to work with open-ended problems in the design and creation process.	Module 07: Energy in Reactions	Module 06: Human Reproduction		Module 06: Chemical Reaction Systems
Information Literacy	9.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.	Module 01: Properties of Matter Lab	Module 01: Exploring Life		Module 01: Scientific Inquiry
Information Literacy	9.IP.2 Cite sources in a standard format to ethically reference the intellectual property of others.		Module 01: Exploring Life		Module 01: Scientific Inquiry

Information	9.IP.3 Engage in positive,	Module 01:	Module 01:
Literacy	safe, legal, and ethical	Exploring Life	Scientific
	behavior when using		Inquiry
	technology.		
Information	10.IP.1 Demonstrate an	Module 01:	Module 01:
Literacy	understanding of and	Exploring Life	Scientific
	respect for the rights and		Inquiry
	obligations of using and		
	sharing intellectual		
	property		
Information	11.IP.1 Explain the		
Literacy	beneficial and harmful		
	effects that intellectual		
	property laws can have on innovation, creativity, and		
	collaboration.		
Information	11.IP.3 Evaluate the		
Literacy	social and economic		
	implications of piracy and		
	plagiarism in the context		
	of safety, law, or ethics.		
Information	12.IP.1 Debate laws and		
Literacy	regulations that impact		
	the development and use		
	of software.		
Computing in	9.IC.1 Evaluate how		
Society	technology has impacted		
	the workforce positively		
	and negatively.		
Computing in	9.SI.1 Identify how		
Society	technology has affected		
	our means of		
	communication.		
Computing in	10.IC.1 Evaluate the		
Society	social, personal, and economic implications		
	technology has on society		
	and the economy.		
Computing in	10.SI.1 Evaluate the		
Society	impacts of technology on		
,	social interactions.		
Computing in	11.IC.1 Explain how		
Society	computing may change		
, ,	cultural aspects of society		
Computing in	11.SI.1 Investigate ways		
Society	to maximize the benefits		
Joonsty	and minimize the harmful		
	effects technology can		
	have on society.		
Computing in	12.IC.1 Predict how		
Society	computing may impact		
	·		

	the workplace and		
	the workplace and		
	personal lives.		
Computing in	12.SI.1 Evaluate the		
Society	impact of equity, bias,		
	access, and influence on		
	the availability of		
	computing resources in a		
	global society.		
Digital	9.SE.1 Recognize the		
Citizenship	effects sharing		
Onizoniship	information online can		
	have on others' privacy.		
	(CYSEC)		
Distal			
Digital	9.SE.2 Know how to		
Citizenship	modify account settings		
	to protect privacy and		
	security. (CYSEC)		
Digital	9.SE.3 Recognize that		
Citizenship	data collection		
	technology can be used to		
	track navigation online.		
	(CYSEC)		
Digital	9.SE.4 Describe ways to		
Citizenship	prevent identity theft.		
	(CYSEC)		
Digital	10.SE.1 Implement best		
Citizenship	practices to secure		
	personal information.		
	(CYSEC)		
Digital	10.SE.2 Recognize the		
Citizenship	importance of monitoring		
	your private data.		
	(CYSEC)		
Digital	10.SE.3 Manage personal		
Citizenship	data to maintain digital		
	privacy and security and		
	are aware of data		
	collection technology		
	used to track online		
	behaviors. (CYSEC)		
Digital	10.SE.4 Identify if their		
Citizenship	private data has been		
	altered and can react		
	appropriately. (CYSEC)		
Digital	11.SE.1 Understand	 	
Digital			
Citizenship	encryption and how it is		
	used to protect data.		
	(CYSEC)		

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Digital	11.SE.2 Explain the			
Citizenship	privacy concerns related			
	to the collection and			
	generation of data			
	through automated			
	processes. (CYSEC)			
Digital	11.SE.4 Develop a plan to			
Citizenship	recover from an incident			
onazonomp	that was tied to			
	unauthorized access.			
	(CYSEC)			
Digital	12.SE.2 Illustrate how			
Citizenship	sensitive data can be			
	affected by malware and			
	other attacks. (CYSEC)			
Digital	9.RU.1 Apply			
Citizenship	cyberbullying prevention			
	strategies.			
Digital	9.RU.2 Apply safe and			
Citizenship	ethical behaviors to			
·	personal electronic			
	communication and			
	interaction. (CYSEC)			
Digital	9.RU.4 Understand the			
Citizenship	purpose of and comply			
ontizensnip	with Acceptable Use			
	Policies.			
Digital	10.RU.4 Understand the			
Citizenship	purpose of and comply			
	with Acceptable Use			
	Policies.			
Digital	11.RU.4 Understand the			
Citizenship	purpose of and comply			
	with Acceptable Use			
	Policies.			
Digital	12.RU.4 Understand the			
Citizenship	purpose of and comply			
	with Acceptable Use			
	Policies.			
Digital	9.DI.1 Manage a digital	, 		
Citizenship	identity and be aware of			
	the permanence of			
	actions in the digital			
	world. (CYSEC)			

HIGH SCI	HIGH SCHOOL SOCIAL STUDIES					
Category	Standard	American History	World History	United States Government	Economics and Financial Literacy	
Technology Systems	 9.NI.1 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology). 					
Technology Systems	9.NI.2 Understand the implications of accessing publicly available Internet connections. (CYSEC)					
Technology Systems	10.NI.1 Identify and define different network connection types (e.g., Wi-Fi, mobile data, Ethernet).					
Technology Systems	10.NI.2 Identify networkable devices.					
Technology Systems	11.NI.1 Compare and contrast different network connection types (e.g., Wi-Fi, mobile data, ethernet).					
Technology Systems	11.NI.2 Understand the global impact of networkable devices.					
Technology Systems	12.NI.1 Choose an appropriate network connection given a scenario or situation.					
Technology Systems	12.NI.2 Compare and contrast the benefits and security risks of networkable devices.					
Technology Systems	9.HS.1 Compare and contrast appropriate device/hardware/software to complete a task.	The Power of Technology	Module 04: Age of Discovery - Worlds Collide	Module 02: What the Bureaucracy Does for You	Module 01: Smart Career Planning	
Technology Systems	9.HS.2 Define software and security patches/update. (CYSEC)					
Technology Systems	9.HS.3 Explain why a backup is necessary. (CYSEC)					
Technology Systems	10.HS.2 Recognize the importance of and effectively perform software and security					

	patches/updates.				
	(CYSEC)				
Technology Systems	10.HS.3 Identify important data or systems that need redundancy. (CYSEC)				
Technology	11.HS.2 Identify and				
Systems	choose hardware and software to help protect a system. (CYSEC)				
Technology Systems	11.HS.3 Identify different options for redundancy (e.g., cloud storage, external, duplicate devices). (CYSEC)				
Technology	12.HS.3 Implement				
Systems	redundancy. (CYSEC)				
Technology Systems	9.T.1 Describe basic hardware and software problems using appropriate and accurate terminology.				
Technology Systems	10.T.1 Follow appropriate guidelines that convey systematic troubleshooting techniques to identify and fix errors.				
Technology Systems	12.T.1 Implement systematic troubleshooting strategies to identify and fix errors.				
Computational Thinking	9.PSA.1 Identify, recognize, and use an algorithm to solve a complex problem across disciplines.	Emerging Technologies Comparison Assignment	Module 07: Dropping the Atomic Bomb	Module 03: Public Policy	Module 01: Smart Career Planning
Computational Thinking	10.PSA.1 Create and test an algorithm to solve a complex problem across disciplines.				
Computational Thinking	11.PSA.1 Demonstrate ways a given algorithm applies to problems across disciplines and explain the benefits and drawbacks of choices made.		Module 08: Invisible Warfare	Module 03: Policy Influencers	Module 02: Externalities
Computational Thinking	12.PSA.1 Use and adapt common algorithms to				

	solve computational problems.			
Computational Thinking	9.DCA.1 Collect and analyze complex data.	Module 01: Monotheistic Religions	Module 03: Voting and Elections	Module 03: Effects of Inflation
Computational Thinking	10.DCA.1 Represent complex data in more than one way to support a claim.	Module 06: Political and Economic Ideologies	Module 03: Voting and Elections	Module 03: Fiscal Policy
Computational Thinking	11.DCA.1 Represent complex data in multiple ways to defend a student- generated claim.	Module 06: Modern Reform	Module 03: Voting and Elections	Module 03: Broad Economic Goals
Computational Thinking	12.DCA.1 Represent complex data using interactive data visualizations or computational models.			
Information Literacy	9.A.1 Plan and employ effective research strategies to locate information.	Module 02: Comparative History: Eastern and Western	Module 01: The Declaration of Independence	Module 01: Save, Invest, or Spend
Information Literacy	10.A.1 Curate relevant information from digital resources using a variety of tools and methods.	Module 05: Fact Finding	Module 03: Inform Yourself	Module 02: Making Better Choices
Information Literacy	11.A.1 Devise new search strategies based on information gaps and new understanding.		Module 03: Inform Yourself	Module 02: Making Better Choices
Information Literacy	12.A.1 Build knowledge by actively exploring real- world issues and problems, developing ideas and theories, and pursuing answers and solutions.	Module 08: Globalization	Module 03: Inform Yourself	Module 03: Broad Economic Goals
Information Literacy	9.E.1 Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.	Module 07: Allies and Enemies World War I	Module 01: The Declaration of Independence	Module 01: Save, Invest, or Spend
Information Literacy	10.E.1 Gather accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.	Module 05: The Age of Enlightenment	Module 03: Inform Yourself	Module 02: Smart Consumerism

Information	11.E.1 Use accurate,	Module 08: The	Module 03:	Module 03: Free
Literacy	credible, and relevant	Iron Curtain	Inform Yourself	Trade and
	sources of information,	Comes Down		Barriers
	media, data, or other			
	resources showing			
	different perspectives.			
Information	12.E.1 Explain source	Module 08: The	Module 03:	Module 03: Free
Literacy	selection based on	Iron Curtain	Inform Yourself	Trade and
	accuracy, perspective,	Comes Down		Barriers
	credibility, and relevance			
	of information, media,			
	data, or other resources.			
Information	9.C.1 Create original	Module 01:	Module 01: The	Module 01: Save,
Literacy	works or responsibly	Byzantine Empire	Declaration of	Invest, or Spend
	repurpose or remix digital	Achievement and	Independence	
	resources into new	Expansion		
	creations to			
	communicate an idea.			
Information	10.C.1 Choose the	Module 07:	Module 03:	Module 02:
Literacy	appropriate platforms and	Genocide	Inform Yourself	Selling It
	tools for meeting the			0
	desired objectives of their			
	creation or			
	communication.			
Information	11.C.1 Publish or present	Module 08:	Module 03:	Module 02:
Literacy	content that customizes	Invisible Warfare	Inform Yourself	Selling It
,	the message and medium			
	for their intended			
	audiences to			
	communicate their idea.			
Information	12.C.1 Exhibit		Module 03:	Module 02:
Literacy	perseverance, a tolerance		Inform Yourself	Building a Better
	for ambiguity, and the			Business
	capacity to work with			
	open-ended problems in			
	the design and creation			
	process.			
Information	9.IP.1 Properly use	Module 06:	Module 01: The	Module 01: Save,
Literacy	copyrighted works, works	Modern Reform	Declaration of	Invest, or Spend
	in the creative commons,		Independence	
	and works in the public			
	domain.			
Information	9.IP.2 Cite sources in a	Module 05: Fact	Module 01: The	Module 01: Save,
Literacy	standard format to	Finding	Declaration of	Invest, or Spend
	ethically reference the		Independence	
	intellectual property of			
	others.			
Information	9.IP.3 Engage in positive,	Module 06:	Module 01: The	Module 01: Save,
Literacy	safe, legal, and ethical	Modern Reform	Declaration of	Invest, or Spend
Literacy	behavior when using		Independence	invest, or openu
	technology.		muchennence	
	teennotogy.			

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Information	10.IP.1 Demonstrate an		Module 01: The	
Literacy	understanding of and		Declaration of	
	respect for the rights and		ndependence	
	obligations of using and			
	sharing intellectual			
	property			
Information	11.IP.1 Explain the			
Literacy	beneficial and harmful			
	effects that intellectual			
	property laws can have on			
	innovation, creativity, and			
	collaboration.			
Information	11.IP.3 Evaluate the			
Literacy	social and economic			
Encludy	implications of piracy and			
	plagiarism in the context			
	of safety, law, or ethics.			
Information				
Information	12.IP.1 Debate laws and			
Literacy	regulations that impact			
	the development and use			
	of software.			
Computing in	9.IC.1 Evaluate how		Module 02:	Module 03: The
Society	technology has impacted		ederalism in the	Federal Reserve
	the workforce positively	F	Real World	
	and negatively.			
Computing in	9.SI.1 Identify how		Module 01: The	Module 03: The
Society	technology has affected		JS in the World	Federal Reserve
	our means of			
	communication.			
Computing in	10.IC.1 Evaluate the	N	Module 01: The	Module 03: The
Society	social, personal, and	L	JS in the World	Federal Reserve
	economic implications			
	technology has on society			
	and the economy.			
Computing in	10.SI.1 Evaluate the	N	Module 01: The	Module 03: The
Society	impacts of technology on	ι ι ι ι ι ι ι ι ι ι ι ι ι ι ι ι ι ι ι	JS in the World	Federal Reserve
	social interactions.			
Computing in	11.IC.1 Explain how	N	Module 01: The	Module 03: The
Society	computing may change		JS in the World	Federal Reserve
outery	cultural aspects of society			
0	· · ·			Madul 00 T
Computing in	11.SI.1 Investigate ways		Module 01: The	Module 03: The
Society	to maximize the benefits		JS in the World	Federal Reserve
	and minimize the harmful			
	effects technology can			
	have on society.		· · · · · · · ·	
Computing in	12.IC.1 Predict how		Module 01: The	
Society	computing may impact		JS in the World	
	the workplace and			
	personal lives.			
Computing in	12.SI.1 Evaluate the			
Society	impact of equity, bias,			
	access, and influence on			
		I		

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	the availability of			
	computing resources in a			
	global society.			
Digital	9.SE.1 Recognize the			
Citizenship	effects sharing			
Gitizensnip	C C			
	information online can			
	have on others' privacy.			
	(CYSEC)			
Digital	9.SE.2 Know how to			
Citizenship	modify account settings			
	to protect privacy and			
	security. (CYSEC)			
Digital	9.SE.3 Recognize that			
	data collection			
Citizenship				
	technology can be used to			
	track navigation online.			
	(CYSEC)	 		
Digital	9.SE.4 Describe ways to			
Citizenship	prevent identity theft.			
	(CYSEC)			
Digital	10.SE.1 Implement best			
Citizenship	practices to secure			
•	personal information.			
	(CYSEC)			
Digital	10.SE.2 Recognize the			
Citizenship	importance of monitoring			
onizensnip	your private data.			
	(CYSEC)			
Digital	10.SE.3 Manage personal			
Citizenship	data to maintain digital			
	privacy and security and			
	are aware of data			
	collection technology			
	used to track online			
	behaviors. (CYSEC)			
Digital	10.SE.4 Identify if their			
Citizenship	private data has been			
	altered and can react			
	appropriately. (CYSEC)			
Digital	11.SE.1 Understand			
Citizenship	encryption and how it is			
onizensnip	used to protect data.			
	-			
Digital	(CYSEC)			
Digital	11.SE.2 Explain the			
Citizenship	privacy concerns related			
	to the collection and			
	generation of data			
	through automated			
	processes. (CYSEC)			
Digital	11.SE.4 Develop a plan to			
Citizenship	recover from an incident			
	that was tied to			
		l	1	I

	unauthorized access. (CYSEC)		
	(01360)		
Digital Citizenship	12.SE.2 Illustrate how sensitive data can be affected by malware and		
Digital	other attacks. (CYSEC) 9.RU.1 Apply	 	
Citizenship	cyberbullying prevention strategies.		
Digital Citizenship	9.RU.2 Apply safe and ethical behaviors to personal electronic communication and interaction. (CYSEC)		
Digital Citizenship	9.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	10.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	11.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	12.RU.4 Understand the purpose of and comply with Acceptable Use Policies.		
Digital Citizenship	9.DI.1 Manage a digital identity and be aware of the permanence of actions in the digital world. (CYSEC)		

HIGH SCHOOL TECHNOLOGY

Category	Standard	Introduction to Cybersecurity 1a & 1b Module/Unit Covered	Introduction to Programming 1a & 1b Module/Unit Covered
Technology Systems	10.HS.2 Recognize the importance of and effectively perform software and security patches/updates. (CYSEC)		Unit 6: Legal and Ethical Computing
Technology Systems	10.HS.3 Identify important data or systems that need redundancy. (CYSEC)		
Technology Systems	10.NI.1 Identify and define different network connection types (e.g., Wi- Fi, mobile data, Ethernet).	Unit 1: Foundations & Threats	
Technology Systems	10.NI.2 Identify networkable devices.	Unit 1: Foundations & Threats	
Technology Systems	10.T.1 Follow appropriate guidelines that convey systematic troubleshooting techniques to identify and fix errors.		Unit 4: Quality Assurance
Technology Systems	11.HS.2 Identify and choose hardware and software to help protect a system. (CYSEC)		Unit 7: Safe and Secure
Technology Systems	11.HS.3 Identify different options for redundancy (e.g., cloud storage, external, duplicate devices). (CYSEC)		
Technology Systems	11.NI.1 Compare and contrast different network connection types (e.g., Wi-Fi, mobile data, ethernet).		
Technology Systems	11.NI.2 Understand the global impact of networkable devices.		
Technology Systems	12.HS.3 Implement redundancy. (CYSEC)		
Technology Systems	12.NI.1 Choose an appropriate network connection given a scenario or situation.		Unit 7: Safe and Secure
Technology Systems	12.NI.2 Compare and contrast the benefits and security risks of networkable devices.	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Technology Systems	12.T.1 Implement systematic troubleshooting strategies to identify and fix errors.		Unit 5: Running the Tests
Technology Systems	9.HS.1 Compare and contrast appropriate device/hardware/software to complete a task.	Unit 1: Foundations & Threats	Unit 1: Software Development 101

Technology Systems	9.HS.2 Define software and security patches/update. (CYSEC)	Unit 1: Foundations & Threats	Unit 6: Legal and Ethical Computing
Technology Systems	9.HS.3 Explain why a backup is necessary. (CYSEC)		Unit 7: Safe and Secure
Technology Systems	9.NI.1 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).		
Technology Systems	9.NI.2 Understand the implications of accessing publicly available Internet connections. (CYSEC)	Unit 6: Law and Ethics	
Technology Systems	9.T.1 Describe basic hardware and software problems using appropriate and accurate terminology.	Unit 1: Foundations & Threats	Unit 1: Software Development 101
Computational Thinking	10.DCA.1 Represent complex data in more than one way to support a claim.	Unit 7: Reconnaissance	Unit 4: A Deep Dive with Data
Computational Thinking	10.PSA.1 Create and test an algorithm to solve a complex problem across disciplines.	Unit 7: Reconnaissance	Unit 1: Designing Programs
Computational Thinking	11.DCA.1 Represent complex data in multiple ways to defend a student-generated claim.		Unit 4: A Deep Dive with Data
Computational Thinking	11.PSA.1 Demonstrate ways a given algorithm applies to problems across disciplines and explain the benefits and drawbacks of choices made.		Unit 3: Problems and Solutions
Computational Thinking	12.DCA.1 Represent complex data using interactive data visualizations or computational models.		Unit 4: A Deep Dive with Data
Computational Thinking	12.PSA.1 Use and adapt common algorithms to solve computational problems.		Unit 3: Problems and Solutions
Computational Thinking	9.DCA.1 Collect and analyze complex data.	Unit 7: Reconnaissance	Unit 4: A Deep Dive with Data
Computational Thinking	9.PSA.1 Identify, recognize, and use an algorithm to solve a complex problem across disciplines.	Unit 1: Foundations & Threats	Unit 5: All About Algorithms
Information Literacy	10.A.1 Curate relevant information from digital resources using a variety of tools and methods.	Unit 7: Reconnaissance	Unit 7: Safe and Secure
Information Literacy	10.C.1 Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing

Information Literacy	10.E.1 Gather accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	10.IP.1 Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	11.A.1 Devise new search strategies based on information gaps and new understanding.		Unit 7: Safe and Secure
Information Literacy	11.C.1 Publish or present content that customizes the message and medium for their intended audiences to communicate their idea.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	11.E.1 Use accurate, credible, and relevant sources of information, media, data, or other resources showing different perspectives.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	11.IP.1 Explain the beneficial and harmful effects that intellectual property laws can have on innovation, creativity, and collaboration.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	11.IP.3 Evaluate the social and economic implications of piracy and plagiarism in the context of safety, law, or ethics.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	12.A.1 Build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	12.C.1 Exhibit perseverance, a tolerance for ambiguity, and the capacity to work with open-ended problems in the design and creation process.		
Information Literacy	12.E.1 Explain source selection based on accuracy, perspective, credibility, and relevance of information, media, data, or other resources.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	12.IP.1 Debate laws and regulations that impact the development and use of software.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing

Information Literacy	9.A.1 Plan and employ effective research strategies to locate information.	Unit 7: Reconnaissance	Unit 7: Safe and Secure
Information Literacy	9.C.1 Create original works or responsibly repurpose or remix digital resources into new creations to communicate an idea.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	9.E.1 Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	9.IP.1 Properly use copyrighted works, works in the creative commons, and works in the public domain.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	9.IP.2 Cite sources in a standard format to ethically reference the intellectual property of others.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Information Literacy	9.IP.3 Engage in positive, safe, legal, and ethical behavior when using technology.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	10.IC.1 Evaluate the social, personal, and economic implications technology has on society and the economy.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	10.SI.1 Evaluate the impacts of technology on social interactions.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	11.IC.1 Explain how computing may change cultural aspects of society	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	11.SI.1 Investigate ways to maximize the benefits and minimize the harmful effects technology can have on society.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	12.IC.1 Predict how computing may impact the workplace and personal lives.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	12.SI.1 Evaluate the impact of equity, bias, access, and influence on the availability of computing resources in a global society.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	9.IC.1 Evaluate how technology has impacted the workforce positively and negatively.	Unit 6: Law and Ethics	Unit 6: Legal and Ethical Computing
Computing in Society	9.SI.1 Identify how technology has affected our means of communication.	Unit 1: Foundations & Threats	Unit 1: Software Development 101

Digital Citizenship	10.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 1: Foundations & Threats	Unit 6: Legal and Ethical Computing
Digital Citizenship	10.SE.1 Implement best practices to secure personal information. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	10.SE.2 Recognize the importance of monitoring your private data. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	10.SE.3 Manage personal data to maintain digital privacy and security and are aware of data collection technology used to track online behaviors. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	10.SE.4 Identify if their private data has been altered and can react appropriately. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	11.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 1: Foundations & Threats	Unit 6: Legal and Ethical Computing
Digital Citizenship	11.SE.1 Understand encryption and how it is used to protect data. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	11.SE.2 Explain the privacy concerns related to the collection and generation of data through automated processes. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	11.SE.4 Develop a plan to recover from an incident that was tied to unauthorized access. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	12.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 1: Foundations & Threats	Unit 6: Legal and Ethical Computing
Digital Citizenship	12.SE.2 Illustrate how sensitive data can be affected by malware and other attacks. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	9.DI.1 Manage a digital identity and be aware of the permanence of actions in the digital world. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	9.RU.1 Apply cyberbullying prevention strategies.	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	9.RU.2 Apply safe and ethical behaviors to personal electronic communication and interaction. (CYSEC)	Unit 1: Foundations & Threats	Unit 6: Legal and Ethical Computing
Digital Citizenship	9.RU.4 Understand the purpose of and comply with Acceptable Use Policies.	Unit 1: Foundations & Threats	Unit 6: Legal and Ethical Computing

Digital Citizenship	9.SE.1 Recognize the effects sharing information online can have on others' privacy. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	9.SE.2 Know how to modify account settings to protect privacy and security. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	9.SE.3 Recognize that data collection technology can be used to track navigation online. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure
Digital Citizenship	9.SE.4 Describe ways to prevent identity theft. (CYSEC)	Unit 1: Foundations & Threats	Unit 7: Safe and Secure

APPENDIX C:

Virtual Onboarding Course

Modules & Digital Citizenship Standards Covered

Modules & Digit	al Citizenship Sta	inualus covereu
Course Navigation	Organization & Time Management	Academic Integrity
General navigation tips for the course, including how to access various components.	Strategies to help students stay organized and manage their time effectively.	Teaching the importance of academic integrity in a virtual learning environment.
Standards covered: 6.SE.2 and 7.SE.2		Standards covered: 7 - 10.RU.4
Completing & Submitting Assignments	Using Google Documents & Office 365	Accessing & Understanding Feedback
Guidance on how to complete worksheets and submit assignments within the virtual learning environment.	Instructions on how to share Google documents in a manner that allows teacher access for viewing or editing:	Emphasizing the importance of students checking for and understanding feedback on completed or submitted work.
Standards Covered: 7 - 12.RU.4	Standards covered: 6,7,9.SE.2	
Navigating the Gradebook	Support & Communication	Cybersecurity
How to find retries and understand grading components.	Includes contacting IT and communicating effectively in an online environment.	Reviewing the importance of making safe choices online and in a virtual environment.
	Standards Covered: 6- 7.SE.4	Standards covered: 10- 11.SE.1, 6-12.SE.2, 9-10.SE.3, 6-9.SE.4.
	7.SE.4	11.SE.1, 6-12.SE.2, 9-10.SE.3
NDCDE Expectations	NORTH	
Covers netiquette, acceptable use, cyberbullying, privacy, and	Dakota	Center for

cyberbullying, privacy, and reporting and responding to violations. Standards Covered: 6-

10.SE.1, 6-12.SE.2, 6-10.SE.3, 6-11.SE.4, 6.RU.1 and 3, 6-9.RU.2, 6-12.RU.4

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