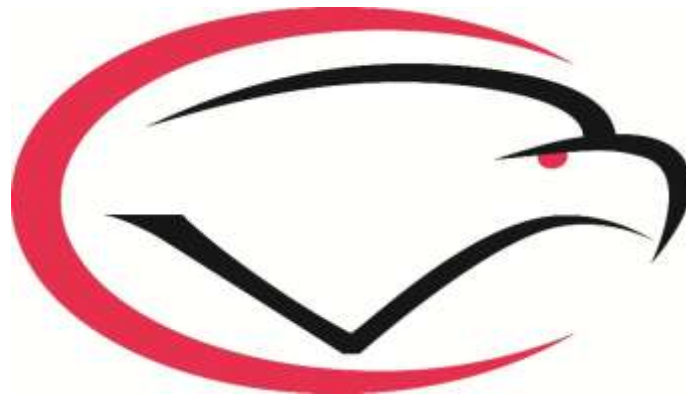


Elementary Curriculum Maps



Cumberland Valley
School District

Soaring to Greatness, Committed to
Excellence

Elementary Explorations

CVSD Curriculum Map ~ Explorations Grades 1-2 (ISTE 2)

ISTE Standard	
<p>ISTE 2 - Digital Citizen</p> <p>Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act in ways that are safe, legal and ethical.</p> <p>2.a. Students practice responsible use of technology through teacher-guided online activities and interactions to understand how the digital space impacts their life.</p> <p>2.b. With guidance from an educator, students understand how to be careful when using devices and how to be safe online, follow safety rules when using the internet and collaborate with others.</p> <p>2.c. With guidance from an educator, students learn about ownership and sharing of information, and how to respect the work of others.</p> <p>2.d. With guidance from an educator, students demonstrate an understanding that technology is all around them and the importance of keeping their information private.</p>	
Taught in Unit(s)	
Coding	
Explanation/Example of Standard	
Students are empowered to think critically, behave safely, and participate responsibly in our digital world.	
Big Idea(s)	Essential Question(s)
<ul style="list-style-type: none"> ● While utilizing online resources it is important to engage a trusted adult if dealing with unsafe materials, contact, or cyberbullying. 	<ul style="list-style-type: none"> ● What is the difference between private and public information? ● How do I practice positive, safe, and kind behavior when using technology?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● cyberbullying ● online ● digital footprint ● private ● public 	<ul style="list-style-type: none"> ● Understand that being safe when they visit websites is similar to staying safe in real life. ● Learn to recognize websites that are safe and recognize if they should ask an adult before visiting a website. ● Explain how to deal with a cyberbullying situation.
I Can Statements	
<ul style="list-style-type: none"> ● I can ask an adult for help when I deal with cyberbullying. ● I can stay safe on the internet by recognizing safe websites and managing my digital footprint. 	

CVSD Curriculum Map ~ Explorations Grades 3-5 (ISTE 2)

ISTE Standard	
<p>ISTE 2 - Digital Citizen</p> <p>Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act in ways that are safe, legal and ethical.</p> <p>2.a. Students demonstrate an understanding of the role an online identity plays in the digital world and learn the permanence of their decisions when interacting online.</p> <p>2.b. Students practice and encourage others in safe, legal and ethical behavior when using technology and interacting online, with guidance from an educator.</p> <p>2.c. Students learn about, demonstrate and encourage respect for intellectual property with both print and digital media when using and sharing the work of others.</p> <p>2.d. Students demonstrate an understanding of what personal data is, how to keep it private and how it might be shared online.</p>	
Taught in Unit(s)	
Coding	
Explanation/Example of Standard	
Students are empowered to think critically, behave safely, and participate responsibly in our digital world.	
Big Idea(s)	Essential Question(s)
<ul style="list-style-type: none"> ● There are benefits and risks to online sharing 	<ul style="list-style-type: none"> ● What is the difference between private and public information? ● How do I practice positive, safe, and kind behavior when using technology?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● cyberbully ● online ● digital footprint ● private ● public ● identity theft ● digital citizen 	<ul style="list-style-type: none"> ● Understand that being safe when they visit websites is similar to staying safe in real life. ● Learn to recognize websites that are safe and recognize if they should ask an adult before visiting a website. ● Explain how to deal with a cyberbullying situation.
I Can Statements	
<ul style="list-style-type: none"> ● I can ask an adult for help when I deal with cyberbullying. ● I can stay safe on the internet by recognizing safe websites and managing my digital footprint. 	

CVSD Curriculum Map ~ Explorations Grades 1-2 (ISTE 4)

ISTE Standard	
<p>ISTE 4 - Innovative Designer</p> <p>Students use a variety of technologies within a design process to solve problems by creating new, useful or imaginative solutions.</p> <p>4.a. With guidance from an educator, students ask questions, suggest solutions, test ideas to solve problems and share their learning.</p> <p>4.b. Students use age-appropriate digital and nondigital tools to design something and are aware of the step-by-step process of designing.</p> <p>4.c. Students use a design process to develop ideas or creations, and they test their design and redesign if necessary.</p> <p>4.d. Students demonstrate perseverance when working to complete a challenging task.</p>	
Taught in Unit(s)	
Design Thinking & Makerspace Units	
Explanation/Example of Standard	
Student will use a design process for active, hands-on learning and to tackle complex problems or projects in dynamic ways.	
Big Idea(s)	Essential Question(s)
Design thinking boosts creativity and brings out the maker in every student.	<ul style="list-style-type: none"> ● What is the LAUNCH cycle? ● How does the LAUNCH cycle help me to solve design problems?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● LAUNCH cycle ● Structure ● Engineering ● Simple Machines ● Prototype ● FAIL ● Perseverance 	<ul style="list-style-type: none"> ● Follow step-by-step process of designing ● Use design process to develop ideas or creations ● Test designs & redesign if necessary
I Can Statements	
<ul style="list-style-type: none"> ● I can use the design process to solve design problems and create new or imaginative solutions. ● I can persevere when working to complete a challenging task. 	

CVSD Curriculum Map ~ Explorations Grades 3-5 (ISTE 4)

ISTE Standard	
<p>ISTE 4 - Innovative Designer</p> <p>Students use a variety of technologies within a design process to solve problems by creating new, useful or imaginative solutions.</p> <p>4.a. Students explore and practice how a design process works to generate ideas, consider solutions, plan to solve a problem or create innovative products that are shared with others.</p> <p>4.b. Students use digital and nondigital tools to plan and manage a design process.</p> <p>4.c. Students engage in a cyclical design process to develop prototypes and reflect on the role that trial and error plays.</p> <p>4.d. Students demonstrate perseverance when working with open-ended problems.</p>	
Taught in Unit(s)	
Design Thinking & Makerspace Units	
Explanation/Example of Standard	
Student will use a design process for active, hands-on learning and to tackle complex problems or projects in dynamic ways.	
Big Idea(s)	Essential Question(s)
Design thinking boosts creativity and brings out the maker in every student.	<ul style="list-style-type: none"> ● What is the LAUNCH cycle? ● How does the LAUNCH cycle help me to solve design problems?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● LAUNCH cycle ● Structure ● Prototype ● FAIL ● Trial and Error ● Perseverance ● Innovation 	<ul style="list-style-type: none"> ● Explore and practice how a design process works to generate ideas, consider solutions, plan to solve a problem or create innovative products that are shared with other. ● Engage in a cyclical design process to develop prototypes ● Test designs & redesign if necessary
I Can Statements	
<ul style="list-style-type: none"> ● I can use the design process to solve design problems and develop prototypes. ● I can persevere when working to complete a challenging task. 	

CVSD Curriculum Map ~ Explorations Grades 1-2 (ISTE 5)

ISTE Standard	
<p>ISTE 5 - Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. 5.a. With guidance from an educator, students identify a problem and select appropriate technology tools to explore and find solutions. 5.c. With guidance from an educator, students break a problem into parts and identify ways to solve the problem. 5.d. Students understand how technology is used to make a task easier or repeatable and can identify real-world examples.</p>	
Taught in Unit(s)	
Coding Unit	
Explanation/Example of the Standard	
<p>While this standard typically refers to coding and programming, at its core it's about problem-solving. This standard does not imply that all teachers should become IT teachers and teach coding but that all students need to have access to opportunities (online or offline) that allow them to develop a tinkering mindset. This can mean integrating space for "making" and STEAM activities whenever possible. It also means designing opportunities for students to collect data, analyze it, and respond to the findings. This standard engages students in manipulating data digitally and physically to conceptualize a problem and make connections to the real world.</p>	
Big Idea(s)	Essential Question(s)
Students use algorithmic thinking to develop, analyze, and redesign computer code to create new programs and solve problems.	What is computer code? How can I write computer code? What do I do when computer code is written incorrectly? Why is sequence important in coding?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● Patterns ● Sequence ● Algorithm ● Problem Solving ● Program ● Debugging 	<ul style="list-style-type: none"> ● Identify and solve problems using appropriate technology. ● Decompose large activities into a series of smaller events ● Arrange sequential events into their logical order ● Translate an algorithm into a program ● Decode and run a program created by someone else.
I Can Statements	
<ul style="list-style-type: none"> ● I can solve problems using technology. ● I can arrange events into sequential order. ● I can decode and run a program. 	

CVSD Curriculum Map ~ Explorations Grades 3-5 (ISTE 5)

ISTE Standard	
<p>ISTE 5 - Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.</p> <p>5.a. Students explore or solve problems by selecting technology for data analysis, modeling and algorithmic thinking, with guidance from an educator.</p> <p>5.c. Students break down problems into smaller parts, identify key information and propose solutions.</p> <p>5.d. Students understand and explore basic concepts related to automation, patterns and algorithmic thinking.</p>	
Taught in Unit(s)	
Coding Unit	
Explanation/Example of the Standard	
<p>While this standard typically refers to coding and programming, at its core it's about problem-solving. This standard does not imply that all teachers should become IT teachers and teach coding but that all students need to have access to opportunities (online or offline) that allow them to develop a tinkering mindset. This can mean integrating space for "making" and STEAM activities whenever possible. It also means designing opportunities for students to collect data, analyze it, and respond to the findings. This standard engages students in manipulating data digitally and physically to conceptualize a problem and make connections to the real world.</p>	
Big Idea(s)	Essential Question(s)
Students use algorithmic thinking to develop, analyze, and redesign computer code to create new programs and solve problems.	What is computer code? How can I compose a computer code or algorithm? How do I debug computer code? Why is sequence important in coding?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● Algorithm ● Program ● Debugging ● Conditionals ● Binary ● Function ● Variable ● For Loop ● Parameters 	<ul style="list-style-type: none"> ● Translate an algorithm into a program ● Decode and run a program created by someone else. ● Practice communicating ideas through codes and symbols ● Determine whether a conditional is met based on criteria ● Reproduce an image based on binary code ● Describe how functions can make programs easier to write ● Create situation that require the use of variables ● Use variables to change value inside of a loop ● Determine starting value, stopping value and interval of "for loop" ● Modify functions to accept parameters
I Can Statements	
<ul style="list-style-type: none"> ● I can solve problems using technology. I can collect, analyze, and respond to data. ● I can arrange computer code into sequential order. ● I can debug and run computer code. 	

CVSD Curriculum Map ~ Explorations Grades 1-2 (ISTE 6)

ISTE Standard	
<p>ISTE 6 - Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.</p> <p>6.a. With guidance from an educator, students choose different tools for creating something new or for communicating with others.</p> <p>6.b. Students use digital tools to create original works.</p> <p>6.c. With guidance from an educator, students share ideas in multiple ways—visual, audio, etc.</p> <p>6.d. With guidance from an educator, students select technology to share their ideas with different people.</p>	
Taught in Unit(s)	
Movie Production Design Thinking Makerspace 4 Cs	
Explanation/Example of the Standard	
Students are afforded opportunities to present knowledge based on information they have customized for a specific audience. It's time to go beyond speaking over a PowerPoint. Becoming a creative communicator is not only about selecting the style and format of the message; students need to focus on developing creativity and creating "original work". The students are expected to use visuals, models, and simulations to grow a sense of audience and authorship.	
Big Idea(s)	Essential Question(s)
Effective communication skills are essential for success in today's knowledge-based society.	What does effective communication look like? Why should I communicate with peers? How do I communicate my ideas visually, verbally, or digitally? How can I communicate with others using online resources?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● Inform ● Persuade ● Listening ● Communication 	<ul style="list-style-type: none"> ● Communicate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts ● Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions ● Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade) ● Utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact
I Can Statements	
<ul style="list-style-type: none"> ● I can communicate my ideas visually. ● I can contribute my ideas to a class project. ● I can effectively and safely communicate online. 	

CVSD Curriculum Map ~ Explorations Grades 3-5 (ISTE 6)

ISTE Standard	
<p>ISTE 6 - Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.</p> <p>6.a. Students recognize and utilize the features and functions of a variety of creation or communication tools. 6.b. Student create original works and learn strategies for remixing or repurposing to create new artifacts. 6.c. Students create digital artifacts to communicate ideas visually and graphically. 6.d. Students learn about audience and consider their expected audience when creating digital artifacts and presentations.</p>	
Taught in Unit(s)	
Movie Making Design Thinking Makerspace 4 Cs	
Explanation/Example of the Standard	
Students are afforded opportunities to present knowledge based on information they have customized for a specific audience. It's time to go beyond speaking over a PowerPoint. Becoming a creative communicator is not only about selecting the style and format of the message; students need to focus on developing creativity and creating "original work". The students are expected to use visuals, models, and simulations to grow a sense of audience and authorship.	
Big Idea(s)	Essential Question(s)
Effective communication skills are essential for success in today's knowledge-based society.	What does effective communication look like? Why should I communicate with peers? How do I communicate my ideas visually, verbally, or digitally? How can I communicate with others using online resources?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● Inform ● Persuade ● Listening ● Communication ● Social Media 	<ul style="list-style-type: none"> ● Communicate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts ● Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions ● Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade) ● Utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact
I Can Statements	
<ul style="list-style-type: none"> ● I can use effective interpersonal skills to build positive relationships. ● I can use effective interpersonal skills to promote collaborative learning. ● I can use effective interpersonal skills to express thoughts clearly. ● I can communicate ideas through the creation of authentic products. 	

CVSD Curriculum Map ~ Explorations Grades 1-2 (ISTE 7)

ISTE Standard	
<p>ISTE 7 - Global Collaborator Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.</p> <p>7.a. With guidance from an educator, students use technology tools to work with friends and with people outside their neighborhood, city and beyond. 7.b. With guidance from an educator, students use technology to communicate with others and to look at problems from different perspectives. 7.c. With guidance from an educator, students take on different team roles and use age-appropriate technologies to complete projects. 7.d. With guidance from an educator, students use age-appropriate technologies to work together to understand problems and suggest solutions.</p>	
Taught in Unit(s)	
All Units: 4 Cs, Coding, Design Thinking, Makerspace & Movie Production	
Explanation/Example of the Standard	
Students work collaboratively and contribute constructively to produce products they can share with classmates and learners from other backgrounds. This standard encourages the creation of more opportunities for all learners to broaden their intercultural understanding and to genuinely experience interactions with others.	
Big Idea(s)	Essential Question(s)
Collaboration is the act of working together for a common goal.	How can I work with a team to solve a problem? Why should I work with others to find a solution?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● interpersonal communication; ● conflict resolution ● task management ● collaboration ● compromise 	<ul style="list-style-type: none"> ● Demonstrate ability to work effectively and respectfully with diverse teams ● Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal ● Assume shared responsibility for collaborative work, and value the individual contributions made by each team member ● Participate in collaborative conversation with diverse partners
I Can Statements	
I can collaborate with a team to solve a problem. I can make necessary compromises to accomplish a goal. I can be responsible for my contributions to a group. I can resolve conflicts respectfully.	

CVSD Curriculum Map ~ Explorations Grades 3-5 (ISTE 7)

ISTE Standard	
<p>ISTE 7 - Global Collaborator Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.</p> <p>7.a. Students use digital tools to work with friends and people from different backgrounds or cultures. 7.b. Students use collaborative technologies to connect with others, including peers, experts and community members, to explore different points of view on various topics. 7.c. Students perform a variety of roles within a team using age-appropriate technology to complete a project or solve a problem. 7.d. Students work with others using collaborative technologies to explore local and global issues.</p>	
Taught in Unit(s)	
All Units: 4 Cs, Coding, Design Thinking, Makerspace & Movie Production	
Explanation/Example of the Standard	
Students work collaboratively and contribute constructively to produce products they can share with classmates and learners from other backgrounds. In the course of developing a more empathetic approach to problem-solving, students learn to view a challenge from a perspective other than their own. This standard encourages the creation of more opportunities for all learners to broaden their intercultural understanding and to genuinely experience interactions with others.	
Big Idea(s)	Essential Question(s)
The world runs on projects...Collaborating on projects is an essential life skill, learning skill and career skill.	<ul style="list-style-type: none"> ● How can I work with a team to solve a problem? ● Why should I work with others to find a solution?
Concepts (what students need to know)	Skills (what students must be able to do)
<ul style="list-style-type: none"> ● interpersonal communication; ● conflict resolution ● task management ● “Norms” ● collaboration ● compromise 	<ul style="list-style-type: none"> ● Demonstrate ability to work effectively and respectfully with diverse teams ● Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal ● Assume shared responsibility for collaborative work, and value the individual contributions made by each team member ● Participate in collaborative conversation with diverse partners
I Can Statements	
<ul style="list-style-type: none"> ● I can collaborate with a team to solve a problem. ● I can make necessary compromises to accomplish a goal. ● I can be responsible for my contributions to a group. ● I can resolve conflicts respectfully. 	