

TECHNOLOGY CURRICULUM

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Rationale

The attached curriculum represents the coursework to be completed in one school year for computer technology classes, grades K-6. Each grade level class meets once a week for a forty-minute period. Though the platform for teaching is computers, it is important to note that the content overlaps with major subject areas such as math, science, social studies, and language arts. The intent is for this new curriculum to allow students to dig deeper into concepts already addressed in other content areas.

Each grade level, with the exception of sixth grade, will be taught technology skills and applications over a course of four units, outlined below. Kindergarten through fifth grade will use software programs such as: Kid Pix, Kidspiration, Inspiration, various Internet browsers, and the Microsoft Office tools (Excel, PowerPoint, Publisher and Word). They will also be introduced to the many facets of Google Drive (Docs, Drawings, Forms, Presentations and Sheets). Sixth grade students will embark on a yearlong project of website development and design using Google Sites. Typing skills will be introduced and reinforced in grades two through six. Our students will develop a strong knowledge base of these programs in the hopes of becoming independent and proficient users of each by the time they enter middle school. Additionally, the foundation of technology skills students need to be successful as 21st century learners are incorporated into this proposed curriculum.

Education is in the midst of massive changes. The recent introduction of the Common Core State Standards (CCSS), and this year's transition to the new online standardized test (the PARCC assessment), have caused a shift in educational practices. The proposed technology curriculum addresses the rigor that both the new standards and method of assessment deem necessary in today's classroom. It is imperative that this curriculum transforms learning to foster critical thinking, creativity, and innovation, and to prepare students to thrive in the global economy.

Program Descriptions

In grades **K-2**, students are formally introduced to the basic features and functions of computers and demonstrate understanding that technology enables them to communicate beyond the classroom on a variety of topics. K-2 students are also exposed to elements of the design process, design systems, and a variety of technology resources, and understand the importance of safety when using technological tools.

In grades **3-4**, students understand the purpose of, and are able to use, various computer applications. They continue to develop information-literacy skills and increasingly use technology to communicate with others in support of learning, while also recognizing the need for cyber safety and acceptable use policies. Students in grades 3-4 also investigate the impact of technology systems, understand the design process, and use it for problem solving.

In grades **5-6**, students expand their capacity to use operations and applications, apply information-literacy skills, and select the appropriate tools and resources to accomplish a variety of tasks, as they develop digital citizenship. As students participate in online learning communities, collaborating in the design of products that address local and global issues across the curriculum, they build understanding of the perspectives of learners from other countries.

Themes and Key Concepts by Grade Levels

By Grade 2	By Grade 4	By Grade 6
Themes and Key Concepts: <ul style="list-style-type: none"> • Turning the computer on and off • Using correct care and use of computers • Using basic computer vocabulary • Introduction to home row of keys • Introduction to mouse • Using mouse to point, click, and drag • Using the mouse to pull down menus • Letter recognition • Opening and closing programs • Finding and opening programs using icons • Using the spacebar, return key, delete key and shift key • Moving the cursor • Number recognition • Primary word recognition • Changing fonts, colors, font size • Choosing graphics and moving them • Drawing and painting with the mouse • Using drawing tools to create lines, boxes, and circles • Opening and Closing the Network • Writing simple words, sentences, and stories • Highlighting text • Finding and opening programs using icons 	Themes and Key Concepts: <ul style="list-style-type: none"> • Using correct care and use of computers • Opening and closing programs • Using the spacebar, return key, delete key and shift key • Using correct spacing rules • Using the correct finger positioning on the home row • Using the top and bottom rows of the keyboard • Practicing proper keyboarding techniques for uppercase letters • Using appropriate computer vocabulary • Using the arrow keys • Using the punctuation and special symbol keys • Writing sentences, reports, and stories • Highlighting text in various programs • Changing fonts, font styles, colors, font size • Creating signs and cards • Changing the size of, reshaping and moving graphics • Using the alignment 	Themes and Key Concepts: <ul style="list-style-type: none"> • Using correct spacing rules • Using appropriate computer vocabulary • Rephrasing information from the Internet • Recognizing ethical implications of plagiarism • Using keyboarding skills to improve speed and accuracy • Evaluate web sites for accuracy and relevance • Using shortcut commands on the keyboard • Using the arrow keys • Writing sentences, stories, reports, and poems • Changing the size of and reshaping graphics • Using the alignment and justification tools • Changing margin size, columns and line spacing • Using and setting the tab key • Copying, cutting, and pasting • Creating graphs and charts • Creating multimedia presentations • Using spell check programs and using

<ul style="list-style-type: none"> • Using correct care and use of computers • Practicing proper keyboarding techniques for uppercase letters • Demonstrating correct finger placement for home row keys • Opening and closing programs • Using the spacebar, return key, delete key and shift key • Finding punctuation marks on the keyboard • Using basic computer vocabulary • Using Spell Check • Moving the cursor • Writing sentences, stories, and reports • Creating signs and cards • Highlighting text • Changing fonts, font styles, colors, font size • Choosing graphics and changing their size • Copying, cutting, and pasting • Creating graphs • Using the Internet for information and pictures 	<p>tool</p> <ul style="list-style-type: none"> • Copying, cutting, and pasting • Creating graphs and charts • Creating a multimedia presentation • Using spell check programs • Using the Internet for information and pictures • Discussing Internet safety • Saving work to the Network • Using appropriate computer vocabulary • Rephrasing information from the Internet • Recognizing ethical implications of plagiarism • Following screen prompts • Using correct spacing rules • Using the arrow keys • Writing poems • Using the justification tools • Changing margins • Setting and using the tab key • Using the line spacing tool • Using the thesaurus • Creating multimedia presentations 	<p>a thesaurus</p> <ul style="list-style-type: none"> • Using the Internet for research and pictures • Discussing Internet safety • Using keyword searches • Using correct care and use of computers • Using keyboarding skills to increase productivity and accuracy • Using correct spacing rules • Writing sentences, stories, reports, and poems • Changing the size of and reshaping graphics • Using the alignment and justification tools • Changing margins, columns, and spacing • Creating spreadsheet • Discussing Internet safety
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KINDERGARTEN

Unit #1	Unit #2
<p>Title: Basic Computer Skills and Keyboard Functions</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RF.K.1 Demonstrate understanding of the organization and basic features of print.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.1 Identify the basic features of a computer and explain how to use them effectively. 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to input text and data • an ability to use computer icons • an ability to discuss uses of technology at home and school <p>Essential questions: 1. How can I use technology to communicate my ideas?</p> <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix</p>	<p>Title: Introducing Kid Pix and Associated Tools</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RF.K.1 Demonstrate understanding of the organization and basic features of print.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to discuss uses of technology at home and school <p>Essential questions: 1. How can I use technology to communicate my ideas?</p> <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix</p>
<p style="text-align: center;">Unit #3</p> <p>Title: Number Recognition and Number Sentences (under 20)</p> <p>Common Core Standards referenced: Students will be able to: CCSS.MATH.CONTENT.K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20</p>	<p style="text-align: center;">Unit #4</p> <p>Title: Life Cycles</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RF.K.1 Demonstrate understanding of the organization and basic features of print.</p>

<p>(with 0 representing a count of no objects).</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.B.1 Illustrate and communicate original ideas and stories using digital tools and media-rich resources. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What do numbers convey? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix</p>	<p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.B.1 Illustrate and communicate original ideas and stories using digital tools and media-rich resources. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate. 5.3.2.D.2: Determine the characteristic changes that occur during the life cycle of plants and animals by examining a variety of species, and distinguish between growth and development.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What do plants and animals need to survive? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix</p>
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GRADE 1

GRADE 1	
<p style="text-align: center;">Unit #1</p> <p>Title: Fall</p> <p>Common Core Standards referenced: Students will be able to: <u>CCSS.ELA-LITERACY.RL.1.10</u> With prompting and support, read informational texts appropriately complex for grade 1.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. How does weather affect our daily activities? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Microsoft Word Kid Pix Kidspiration</p>	<p style="text-align: center;">Unit #2</p> <p>Title: Word Families/Sight Words</p> <p>Common Core Standards referenced: Students will be able to: <u>CCSS.ELA-LITERACY.RL.1.10</u> With prompting and support, read informational texts appropriately complex for grade 1. <u>CCSS.ELA-LITERACY.RE.1.3</u> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What are reading strategies to help me identify words? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix Kidspiration</p>
<p style="text-align: center;">Unit #3</p> <p>Title: Fact Families</p>	<p style="text-align: center;">Unit #4</p> <p>Title: Fairy Tales</p>

<p>Common Core Standards referenced: Students will be able to: CCSS.MATH.CONTENT.1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What do numbers convey? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix Kidspiration</p>	<p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.W.1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate. 8.1.2.B.1 Illustrate and communicate original ideas and stories using digital tools and media-rich resources.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to discuss uses of technology at home and school <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What are the major elements of story? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kid Pix</p>
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GRADE 2

Unit #1	Unit #2
<p>Title: Communities</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RI.2.4 Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i>.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate. 6.1.4.A.1 Explain how rules and laws created by community, state, and national governments protect the rights of people, help resolve conflicts, and promote the common good.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to use child-safe search engines to research new topics <p>Essential questions:</p> <ul style="list-style-type: none"> • How can I use technology to communicate my ideas? • How do people in a community help each other? • What makes up a community? • What are the different types of communities? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kidspiration</p>	<p>Title: Desert Plants and Animals</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RI.2.4 Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i>.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.A.2 Use technology terms in daily practice. 8.1.2.A.4 Create a document with text using a word processing program. 8.1.2.A.5 Demonstrate the ability to navigate in virtual environments that are developmentally appropriate. 5.3.4.A.2 Compare and contrast structures that have similar functions in various organisms, and explain how those functions may be carried out by structures that have different physical appearances.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to use child-safe search engines to research new topics <p>Essential questions:</p> <ul style="list-style-type: none"> • How can I use technology to communicate my ideas? • How do plants and animals survive in a specific environment? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Kidspiration Microsoft Word and/or PowerPoint</p>

<p>Kid Pix Microsoft Word</p>	
<p style="text-align: center;">Unit #3</p> <p>Title: Survey and Share Results via Video Conferencing</p> <p>Common Core Standards referenced: Students will be able to: CCSS.MATH.CONTENT.2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.B.1 Illustrate and communicate original ideas and stories using digital tools and media-rich resources. 8.1.2.C.1 Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to produce and interpret graphs and charts by entering data on a spreadsheet <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What can I learn about the global community by sharing ideas with students in other states/countries? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Microsoft Excel Skype Google Forms</p>	<p style="text-align: center;">Unit #4</p> <p>Title: Inventions and Biographies</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RI.2.4 Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i>.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.2.B.1 Illustrate and communicate original ideas and stories using digital tools and media-rich resources. 8.1.2.D.1 Model legal and ethical behaviors when using both print and non-print information by citing resources.</p> <p>Understandings desired: Students will be able to demonstrate . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to use child-safe search engines to research new topics <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What is a biography? 3. How do a person’s decisions affect their lives and the lives of others? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks</p> <p>Technology Software Programs Used: Inspiration Microsoft Word and/or PowerPoint</p>

GRADE 3

Unit #1	Unit #2
<p>Title: State Reports</p> <p>Common Core Standards referenced: Students will be able to: <u>CCSS.ELA-LITERACY.W.3.2</u> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.4.A.1 Demonstrate effective input of text and data using an input device 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program. 8.1.4.A.3 Create and present a multimedia presentation that includes graphics. 8.1.4.D.3 Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology.</p> <p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to practice safe internet usage • an ability to demonstrate an understanding of current and future technology impact on society • an ability to recognize, exhibit social, legal, and ethical behaviors when using information and technology and understands consequences of misuse • an ability to locate specific information by searching a database, evaluating the accuracy and relevance of that information • an ability to utilize and manipulate computer applications to independently or collaboratively solve problems 	<p>Title: Traditions</p> <p>Common Core Standards referenced: Students will be able to: <u>CCSS.ELA-LITERACY.W.3.2</u> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.4.A.1 Demonstrate effective input of text and data using an input device 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program. 8.1.4.A.3 Create and present a multimedia presentation that includes graphics. 6.1.4.A.15 Explain how and why it is important that people from diverse cultures collaborate to find solutions to community, state, national, and global challenges. 6.1.4.D.3 Evaluate the impact of voluntary and involuntary immigration on America’s growth as a nation, historically and today.</p> <p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to practice safe internet usage • an ability to demonstrate an understanding of current and future technology impact on society • an ability to recognize, exhibit social, legal, and ethical behaviors when using information and technology and understands consequences of misuse • an ability to locate specific information by searching a database, evaluating the accuracy and relevance of that information

<ul style="list-style-type: none"> • an ability to discuss common uses of technology • an ability to identify hardware problems and suggest solutions to solve them <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. How do writers use their craft to convey their thoughts? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks Google Drive</p> <p>Technology Software Programs Used: Kid Pix Microsoft PowerPoint Microsoft Word Kidspiration</p>	<ul style="list-style-type: none"> • an ability to utilize and manipulate computer applications to independently or collaboratively solve problems • an ability to discuss common uses of technology • an ability to identify hardware problems and suggest solutions to solve them <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What can we learn about different cultures by studying their traditions? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks Google Drive</p> <p>Technology Software Programs Used: Kid Pix Microsoft PowerPoint Microsoft Word Kidspiration</p>
<p style="text-align: center;">Unit #3</p> <p>Title: Exploring the Planets and Solar System</p> <p>Common Core Standards referenced: Students will be able to: <u>CCSS.ELA-LITERACY.W.3.2</u> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p><u>CCSS.ELA-LITERACY.RI.3.10</u> By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2-3 text complexity band independently and proficiently.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.4.A.1 Demonstrate effective input of text and data using an input device 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program. 8.1.4.A.3 Create and present a multimedia presentation that includes graphics. 8.1.4.E.2 Evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks. 5.4.4.A.4 Analyze and evaluate evidence in the form of data tables and photographs to categorize and relate solar system objects (e.g., planets, dwarf planets, moons, asteroids, and comets).</p>	<p style="text-align: center;">Unit #4</p> <p>Title: Weather</p> <p>Common Core Standards referenced: Students will be able to: <u>CCSS.ELA-LITERACY.W.3.2</u> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p><u>CCSS.ELA-LITERACY.RI.3.10</u> By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2-3 text complexity band independently and proficiently.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 8.1.4.A.1 Demonstrate effective input of text and data using an input device 8.1.4.A.2 Create a document with text formatting and graphics using a word processing program. 8.1.4.A.3 Create and present a multimedia presentation that includes graphics. 8.1.4.C.1 Engage in <u>online discussions</u> with learners in the United States or from other countries to understand their perspectives on a global problem or issue. 5.4.4.F.1 Identify patterns in data collected from basic weather instruments.</p> <p>Understandings desired:</p>

<p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to practice safe internet usage • an ability to demonstrate an understanding of current and future technology impact on society • an ability to recognize, exhibit social, legal, and ethical behaviors when using information and technology and understands consequences of misuse • an ability to locate specific information by searching a database, evaluating the accuracy and relevance of that information • an ability to utilize and manipulate computer applications to independently or collaboratively solve problems • an ability to discuss common uses of technology • an ability to identify hardware problems and suggest solutions to solve them <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What is Earth’s place in the solar system? 3. What are the parts of the solar system? 4. How has technology enhanced the study of space and our solar system? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks Google Drive</p> <p>Technology Software Programs Used: Kid Pix Microsoft PowerPoint Microsoft Word Kidspiration</p>	<p>Students will understand that . . .</p> <ul style="list-style-type: none"> • an ability to use technology vocabulary • an ability to understand and use features of an operating system an ability to input text and data • an ability to use computer icons • an ability to produce grade appropriate documents • an ability to create graphic organizers • an ability to discuss uses of technology at home and school • an ability to practice safe internet usage • an ability to demonstrate an understanding of current and future technology impact on society • an ability to recognize, exhibit social, legal, and ethical behaviors when using information and technology and understands consequences of misuse • an ability to locate specific information by searching a database, evaluating the accuracy and relevance of that information • an ability to utilize and manipulate computer applications to independently or collaboratively solve problems • an ability to discuss common uses of technology • an ability to identify hardware problems and suggest solutions to solve them <p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What are the different climates in our country? Around the world? 3. How are living things affected by weather? <p>Technology component: Teacher determined websites: bookmarked using ikeepbookmarks Google Drive</p> <p>Technology Software Programs Used: Kid Pix Microsoft PowerPoint Microsoft Word Kidspiration</p>
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GRADE 4

Unit 1

Title: Book Trailer in Windows Movie Maker

Common Core Standards referenced:

Students will be able to:

[RL.4.2](#): Determine a theme of a story, drama, or poem from details in the text; summarize the text.

[RL.4.3](#): Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

[L.4.1](#): Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

[L.4.2](#): Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

New Jersey Core Curriculum Standards referenced

Students will be able to:

8.1.4.A.1: Demonstrate effective input of text and data using an input device.

8.1.4.A.3: Create and present a [multimedia presentation](#) that includes graphics.

Understandings desired:

Students will understand that . . .

- introducing characters and plot are essential elements to a good summary
- digital story telling is media-rich way to present information
- music can support and embellish their retelling of the story
- pacing is an important aspect of their book trailer
- selecting content is important as to not overload the viewer with too many details
- authors can organize and present information in a multitude of ways

Essential questions:

1. How can I entice the audience to want to read the book I am portraying in my trailer?
2. What are the qualities of a good summary that will convince the audience to read my book?
3. What information about the characters and the plot are essential to my summary?
4. How can I use the digital tools available to inform others?

Technology component:

Websites Used:

www.roalddahl.com/

Unit 2

Title: Using Tables in Microsoft Word – Computer Buzz Word Dictionary

Common Core Standards referenced:

Students will be able to:

[RI.4.4](#): Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.

[RI.4.7](#): Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

[L.4.2](#): Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

New Jersey Core Curriculum Standards referenced:

Student will be able to:

8.1.4.A.1: Demonstrate effective input of text and data using an input device.

8.1.4.A.2: Create a document with text formatting and graphics using a word processing program.

Understandings desired:

Students will understand that . . .

- organizing information in a table is a helpful tool
- we can organize and present information in a multitude of ways
- the Internet is can be used as a research tool and must be used responsibly
- knowledge of computer vocabulary will make them a more effective 21st century learner

Essential questions:

1. How can familiarizing myself with technological vocabulary help me learn in the 21st century?
2. How do we use technology to convey our ideas?
3. What is the purpose of inserting a table into a Word document?
4. How can I use technology as a tool to show what I have learned?

Technology component:

Websites Used:

www.maran.com/dictionary/mgdiction2010a.html

www.dictionary.reference.com

www.wordle.net/create

<p>www.katedicamillo.com/ www.bobbieannmason.net/ Class wiki: www.wikispaces.com</p> <p>Technology Software Programs Used:</p> <ul style="list-style-type: none"> • Windows Movie Maker • Achieve 3000 • Skype – video conference with author, Dan Gutman 	<p>Class wiki: www.wikispaces.com</p> <p>Technology Software Programs Used:</p> <ul style="list-style-type: none"> • Microsoft Word • Achieve 3000
<p style="text-align: center;">Unit 3</p> <p>Title: Grade 4 Goes Green – Power Point and Inspiration</p> <p>Common Core Standards referenced: Students will be able to: RI.01 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. RI.02 Determine the main idea of a text and explain how it is supported by key details summarize the text. RI.09 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. RF.04.A Read on-level text with purpose and understanding. SL.01.A Come to discussions prepared having read or studied required material explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. W.02.D Use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>New Jersey Core Curriculum Standards referenced: Students will be able to: 8.1.4.A.1: Demonstrate effective input of text and data using an input device. 8.1.4.A.2: Create a document with text formatting and graphics using a word processing program. 8.1.4.A.3: Create and present a multimedia presentation that includes graphics. 8.1.4.A.5: Determine the benefits of a wide range of digital tools by using them to solve problems.</p> <p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • the Internet can be used as a research tool • “going green” is helpful to the environment • there are a variety of ways in which to “go green” • saving the environment is a global issue • technology can help scientists to make decisions about the environment 	<p style="text-align: center;">Unit 4</p> <p>Title: Planning a Hawaiian Vacation in Excel</p> <p>Common Cores Standards referenced: Students will be able to: 4.NBT.B.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm. 4.MD.A.2: Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p> <p>New Jersey Core Curriculum Standards referenced: Students will be able to: 8.1.4.A.1: Demonstrate effective input of text and data using an input device. 8.1.4.A.4: Create a simple spreadsheet, enter data, and interpret the information. 8.1.4.A.5: Determine the benefits of a wide range of digital tools by using them to solve problems. 8.1.4.D.3: Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology.</p> <p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • we can organize and present information in a multitude of ways • technology is always changing and we need to be lifelong learners • the Internet is can be used as a research tool and must be used responsibly • organizing information in a table is a helpful tool <p>Essential questions:</p> <ol style="list-style-type: none"> 1. What skills do I need to learn to be able to use Excel effectively? 2. How can a spreadsheet created with Microsoft Excel present accurate findings of collected data?

<ul style="list-style-type: none"> we can organize and present information learned in a multitude of ways <p>Essential questions:</p> <ol style="list-style-type: none"> 1. What technology skills do I need to be a 21st century learner? 2. How can we ensure that we are taking care of our planet properly? 3. What is the best plan for us to follow individually in order to save our planet? 4. What type of information should we gather in order to help inform others as to the condition of our planet? 5. How can I use the digital tools available in order to gather information that will help educate others about our planet? <p>Technology component Websites Used:</p> <p>At Home Research http://www.energyhog.org/childrens.htm http://www.goodhousekeeping.com/home/green-living/ways-to-go-green</p> <p>In School Research http://www.nrdc.org/greensquad/intro/intro_1.asp http://www.epa.gov/students/school.html</p> <p>In the Community Research http://www.treehugger.com/htgg/how-to-go-green-in-the-community.html http://www.sustainablebabysteps.com/ways-to-go-green.html</p> <p>Technology Software Programs Used: Achieve 3000 (Web-based program) – all students have logins and have taken level set to determine lexile. The articles are differentiated for varied lexile levels.</p> <p>Power Point – multimedia presentation tool Inspiration – graphic organizer creator</p> <p>Other Tech Tools: Padlet – This website is a virtual wall that allows students to share thoughts on a topic. http://padlet.com/wall/gh1p5b66a6mf At the end of each research day (Days 2, 3 and 4) students will post a comment to the wall about something they learned about going green</p>	<ol style="list-style-type: none"> 3. What decisions making process did I use to help budget my finances? 4. What do I need to do to be a responsible Internet user as I am researching for information? <p>Technology component: Websites Used: www.sunglasshut.com www.mauishirts.com www.swimoutlet.com www.beachstore.com</p> <p>Technology Software Programs Used: Microsoft Excel</p>
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GRADE 5

Unit #1

Title: Extra! Extra! Read All About It! Newsletter in Microsoft Publisher

Common Core Standards referenced:

Students will be able to:

[W.4.1](#): Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

[W.4.2.A](#): Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.

[L.4.1](#): Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

[L.4.2](#): Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

New Jersey Core Curriculum Standards referenced:

Student will be able to:

8.1.4.A.1: Demonstrate effective input of text and data using an input device.

8.1.4.A.2: Create a document with text formatting and graphics using a word processing program.

8.1.8.A.1: Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.

Understandings desired:

Students will understand that . . .

- we can organize and present information in a multitude of ways
- formatting a document will have a positive effect on the overall outcome of the publication
- the presentation of my publication must help to keep the audience informed and engaged

Essential questions:

1. How do we communicate ideas about a certain topic to an audience?
2. How do we use technology to convey our ideas?
3. How can I use the Publisher software to produce and create innovative ideas?
4. Why is the structure of written language and the ability to utilize this structure effectively necessary when using a word processor?

Unit #2

Title: Digital Citizenship and Identifying Valid Resources from the Internet

Common Core Standards referenced:

Students will be able to:

[RI.5.10](#): By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.

New Jersey Core Curriculum Standards referenced

Students will be able to:

8.1.4.D.1: Explain the need for individuals and members of the global community to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.

8.1.4.D.2: Analyze the need for and use of copyrights.

8.1.4.D.3: Explain the purpose of an Acceptable Use Policy (AUP) and the consequences of inappropriate use of technology.

8.1.8.D.1: Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.

Understandings desired:

Students will understand that . . .

- use the Internet as a resource for information
- use technology to solve problems, develop decision-making skills, and participate in project-based learning activities that support curriculum objectives.
- follow copyright laws and policies concerning acceptable use.

Essential questions:

1. How can I use technology to communicate my ideas?
2. What is a digital footprint and why is it important to learn?
3. What information should you share/not share with the online world?
4. What are the legal rights and restrictions governing technology use?
5. Why is it important to evaluate the source and validity of a website?

Technology component:

Websites Used:

Are these sites for real? <http://www.cwcboe.org/Page/1683>

<http://eduscapes.com/tap/topic32.htm>

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html>

<p>Technology component: Websites Used: www.inspirational-quotes.info www.voki.com www.tagxedo.com Class wiki: www.wikispaces.com</p> <p>Technology Software Programs Used:</p> <ul style="list-style-type: none"> • Microsoft Publisher • Achieve 3000 	<p>Technology Software Programs Used:</p> <ul style="list-style-type: none"> • Google Drive • Google Chrome • Achieve 3000
<p style="text-align: center;">Unit #3</p> <p>Title: 13 Colonies</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. CCSS.ELA-LITERACY.RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 6.1.8.A.2.a: Determine the roles of religious freedom and participatory government in various North American colonies. 6.1.8.A.2.c: Explain how race, gender, and status affected social, economic, and political opportunities during Colonial times. 6.1.8.B.2.a: Determine factors that impacted emigration, settlement patterns, and regional identities of the colonies. 6.1.8.C.2.a: Relate slavery and indentured servitude to Colonial labor systems. 8.1.8.A.1: Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program. 8.1.8.A.5: Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.</p> <p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • use the Internet as a resource for information • use technology to solve problems, develop decision-making skills, and participate in project-based learning activities that support curriculum objectives. • follow copyright laws and policies concerning acceptable use. 	<p style="text-align: center;">Unit #4</p> <p>Title: Government</p> <p>Common Core Standards referenced: Students will be able to: CCSS.ELA-LITERACY.RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. CCSS.ELA-LITERACY.RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). CCSS.ELA-LITERACY.RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</p> <p>New Jersey Core Curriculum Standards referenced Students will be able to: 6.1.8.A.3.b: Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time. 6.1.8.A.3.g: Evaluate the impact of the Constitution and Bill of Rights on current day issues. 8.1.8.A.1: Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program. 8.1.8.A.5: Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.</p> <p>Understandings desired: Students will understand that . . .</p> <ul style="list-style-type: none"> • Students will list and discuss key powers held by the legislative, judicial, and executive branches of government.

<p>Essential questions:</p> <ol style="list-style-type: none"> 1. How can I use technology to communicate my ideas? 2. What motivates people to leave their homeland and settle in a new place? 3. How were the early American colonies settled and how did they grow? <p>Technology component: Google Chrome – Internet browser for research Google Drive (docs, presentations) www.blogger.com and/or www.zunal.com</p> <p>Technology Software Programs Used: Achieve 3000 Google Chrome Google Drive</p>	<ul style="list-style-type: none"> • Students will explain how the system of checks and balances in the Constitution prevents any one branch of the federal government from becoming too powerful. • use the Internet as a resource for information • use technology to solve problems, develop decision-making skills, and participate in project-based learning activities that support curriculum objectives. • The strength of a democracy is equal to the strength of its citizens. <p>Essential questions: How can I use technology to communicate my ideas? What is power? How did the Constitution ensure that no branch of government became too powerful? How do the structures and functions of government interrelate? What does it mean to be an American citizen?</p> <p>Technology component: Websites used: http://www.trumanlibrary.org/whistlestop/teacher_lessons/3branches/front.htm http://www.congressforkids.net/ http://kids.usa.gov/ http://www.govspot.com/features/kids.htm</p> <p>Technology Software Programs Used: Achieve 3000 Google Chrome Google Drive</p>
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GRADE 6
(Website Creation using Google Sites)

Unit #1	Unit #2
Title: Research Information and Draft Writing Pieces	Title: Begin to Construct Website
Unit #3	Unit #4
Title: Continue Website Construction	Title: Share and Evaluate Each Other's Work (students create quiz using Google Forms for their classmates to complete using the information found on their website, optional quiz created in PowerPoint using hyperlinking)

For Units 1-4

Common Core Standards referenced:

Students will be able to:

[CCSS.ELA-LITERACY.RI.6.2](#)

Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

[CCSS.ELA-LITERACY.RI.6.10](#)

By the end of the year, read and comprehend literary nonfiction in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

[CCSS.ELA-LITERACY.W.6.2](#)

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

New Jersey Core Curriculum Standards referenced

Students will be able to:

8.1.8.A.2: Plan and create a simple database, define fields, input data, and produce a report using sort and query.

8.1.8.A.3: Create a multimedia presentation including sound and images.

8.1.8.A.4: Generate a spreadsheet to calculate, graph, and present information.

8.1.8.B.1: Synthesize and publish information about a local or global issue or event on a collaborative, web-based service

Understandings desired:

Students will understand . . .

- the internet is a resource for information
- how to build a successful, attractive, and informational website
- the role of Internet technologies in society and communication.
- that proficient use of computers that supports learning and productivity.
- how to demonstrate and practice safe, legal and responsible use of information and technology.

Essential questions:

How can I use technology to communicate my ideas?
How does technology affect society and communication?
What are the safe and legal responsibilities of being a good digital citizen?
What is the Web design process and what are the different site structures?
How does graphic design affect website design?
What are the technologies used to create websites?
How does effective page layout and consistent navigation lead to usability?

Technology component:

Various websites for research purposes (depending on student topic)
<http://webdesign.about.com/od/webdesignbasics/tp/aa112497.htm>
<https://support.google.com/sites/?hl=en#topic=1689606>
<https://sites.google.com/site/mflynchsites/>

Technology Software Programs Used:

Google Chrome
Google Sites
Google Drive