ISTE Scope & Sequence with Standards

Basic Operations & Concepts	K (Introduced)	1 (Introduced)	2 (Introduced)	3 (Developing)	4 (Developing)	5 (Developing)	6 (Proficient)	ISTE STANDARDS
Identify the basic components of the computer: monitor, keyboard, mouse, headphones, ports and printers.	Introduced	Developing	Proficient	Proficient	Proficient	Proficient	Proficient	1C, 1D, 6A
Turn on/off a computer, laptop and/or handheld device and login.	Introduced	Introduced	Developing	Developing	Proficient	Proficient	Proficient	1C, 1D, 6A
Use a mouse or trackpad to manipulate shapes, icons; click on URLs, radio buttons, check boxes; use scroll bar.	Introduced	Introduced	Developing	Developing	Developing	Proficient	Proficient	1C, 1D, 6A
Use desktop icons, windows and menus to open and close applications and documents; understand difference between closing and quitting applications.	Introduced	Introduced	Introduced	Introduced	Introduced	Developing	Developing	1C, 1D, 6A
Use shortcuts to operate the computer (i.e. Command-P, Command-C, Command-V).	Introduced	Introduced	Introduced	Developing	Developing	Developing	Developing	1C, 1D, 6A
Use gestures to navigate handheld devices.	Introduced	Introduced	Introduced	Introduced	Developing	Developing	Proficient	1C, 1D, 6A
Use the print dialog box to select local printers and change settings (i.e. number of copies, color, paper size, orientation, scale, one-sided vs. two-sided).		Introduced	Introduced	Introduced	Introduced	Introduced	Developing	1C, 1D, 6A
Utilize basic troubleshooting steps to solve technical problems independently.			Introduced	Introduced	Introduced	Introduced	Developing	1C, 1D, 6A

Skill	K	1	2	3	4	5	6	Standard
Apply prior technical knowledge and experiences to figure out how new technologies or applications work.		▓	▓	▓	▓	▒	▒	**1C, 1D, 6A**
Manage and deploy software updates.						▓	▒	**1C, 1D, 6A**

Logins / File Management	K	1	2	3	4	5	6	
Use login credentials for access to network devices, accounts, servers, printers and cloud services.		▓	▓	▓	▒	▒	▩	**1C, 1D, 6A**
Name documents with appropriate file names and understand where files are being saved.		▓	▓	▓	▓	▒	▒	**1C, 1D, 6A**
Create, save, edit, copy and rename files and folders to organize documents and materials.		▓	▓	▓	▓	▓	▒	**1C, 1D, 6A**
Delete files and folders; recover files and folders from the trash; empty trash.			▓	▓	▓	▓	▒	**1C, 1D, 6A**
Retrieve previous file revisions/access revision history for documents located in cloud services.				▓	▓	▓	▒	**1C, 1D, 6A**
Download, upload, attach and zip files and folders via email or cloud services.				▓	▓	▓	▒	**1C, 1D, 6A**
Use search tools to locate files and applications.		▓	▓	▒	▒	▩	▩	**1C, 1D, 6A**

Skill	K	1	2	3	4	5	6	Ref
Can associate document extensions with appropriate file types.			(blue)	(blue)	(blue)	(yellow)	(yellow)	**1C, 1D, 6A**
Understand how cloud computing is different from using software applications.			(blue)	(blue)	(yellow)	(yellow)	(yellow)	**1C, 1D, 6A**
Is able to upload/download/retrieve files to and from the cloud.			(blue)	(blue)	(yellow)	(yellow)	(yellow)	**1C, 1D, 6A**

Personal Data Management	K	1	2	3	4	5	6	
Protect accounts by logging out of shared equipment.	(blue)	(blue)	(blue)	(yellow)	(yellow)	(yellow)	(yellow)	**2A, 2B**
Keep passwords confidential, and be proactive if they are compromised.	(blue)	(blue)	(yellow)	(yellow)	(yellow)	(yellow)	(yellow)	**2A, 2B**
Use passcodes/passwords to secure individual devices.		(blue)	(blue)	(yellow)	(yellow)	(green)	(green)	**2A, 2B**
Create robust passwords and effectively manage password privacy.		(blue)	(yellow)	(yellow)	(yellow)	(yellow)	(green)	**2A, 2B**
Find and adjust privacy settings.					(blue)	(blue)	(yellow)	**2A, 2B**

Online Safety	K	1	2	3	4	5	6	

Skill	K	1	2	3	4	5	6	Standard
Use technology independently and with peers responsibly and make safe choices.		X	X	X	X	X	X	2A, 2B
Understand how to be safe online and in a digital world.	X	X	X	X	X	X	X	2A, 2B
Understand the importance of not sharing personal information online.	X	X	X	X	X	X	X	2A, 2B
Understand how to practice safe internet searches.			X	X	X	X	X	2A, 2B
Evaluate whether sources/websites are safe to conduct research.			X	X	X	X	X	2A, 2B, 3B
Understand the positive and negative effects social media sites can have on one's life.				X	X	X	X	2A, 2B
Digital Identity	K	1	2	3	4	5	6	
Recognize how overuse of technology can impact one's mental, physical and emotional health.		X	X	X	X	X	X	2A, 2B
Set appropriate profile pictures and other profile content across social media, web pages, blogs, etc.				X	X	X	X	2A, 2B
Understand that digital content is permanent and cannot be deleted.			X	X	X	X	X	2A, 2B, 2D

	K	1	2	3	4	5	6	
Build a positive digital footprint/reputation.		blue	blue	blue	blue	yellow	yellow	**2A, 2B**
Recognize the difference between active and passive data collection when using the Internet and social media sites.				blue	blue	blue	blue	**2A, 2B, 2D**
Understand how browser settings such as cookies track personal information.			blue	blue	blue	blue	blue	**2A, 2B, 2D**
Keyboarding	**K**	**1**	**2**	**3**	**4**	**5**	**6**	
Use keyboarding programs and games to assist in development of skills.	blue	blue	yellow	yellow	yellow	yellow	yellow	**1C, 1D, 6A**
Use proper posture and ergonomics.	blue	blue	yellow	yellow	yellow	yellow	green	**1C, 1D, 6A**
Locate and use letter and number keys with correct left and right hand placement (home row).	blue	blue	blue	yellow	yellow	yellow	yellow	**1C, 1D, 6A**
Locate and use correct finger/hand for space bar, return/enter and shift key.	blue	blue	yellow	yellow	yellow	green	green	**1C, 1D, 6A**
Gain proficiency and speed in touch typing.	blue	blue	blue	yellow	yellow	yellow	yellow	**1C, 1D, 6A**
Learn to use special characters as needed (i.e. accents, tilda)			blue	blue	blue	blue	yellow	**1C, 1D, 6A**

Painting & Drawing Programs	K	1	2	3	4	5	6	
Use basic drawing tools including pencil, paint brush, shape, line, undo, redo and eraser.								1C, 1D, 4A, 4B, 6A
Use color palette/color wheel to change tool color.								1C, 1D, 4A, 4B, 6A
Use selection tools to copy, paste, move and modify work.								1C, 1D, 4A, 4B, 6A
Use text tool to add text features to artwork.								1C, 1D, 4A, 4B, 6A
Use basic design principles (i.e. whitespace, color, balance, texture)								1C, 1D, 4A, 4B, 6A
Communication & Collaboration Tools	K	1	2	3	4	5	6	
Is polite and respectful in all communications and collaborations using technological tools, using appropriate language at all times.								2A, 2B
Use email, messaging and other tools to share information and communicate ideas with others.								1B, 1C, 1D, 6A
Compose and send an email.								1C, 1D, 6A

Skill								Standards
Understand the difference between Reply Send, Reply All and Forward when responding to an email.								**1C, 1D, 6A**
Understand the difference between CC (carbon copy) and BCC (blind carbon copy) and use them appropriately.								**1C, 1D, 6A**
Attach a document or file to an email.								**1B, 1C, 1D, 6A**
Use a course or learning management system to access class pages, class calendars, portfolios and grades.								**1B, 1C**
Use features of a course or learning management system such as discussion forums, polls, wikis, dropbox, etc. to access and complete assignments.								**1B, 1C**
Access calendar and student pages on school website as needed.								**1C, 1D, 6A**
Use audience response tools and apps to participate in class discussions.								**6A, 7B**
Set up, share and utilize collaborative workspaces, documents, or other digital tools for asynchronous and synchronous collaboration.								**6A, 7A, 7B**
Use synchronous collaboration tools such as video conferencing, interactive television and voice over IP to connect with others.								**6A, 7A, 7B**
Use virtual world and gaming tools to work collaboratively toward common goals.								**6A, 7A, 7B, 7C, 7D**

	K	1	2	3	4	5	6	
Use social media tools to connect, collaborate, and share.				blue	blue	yellow	yellow	**7A, 7B, 7C, 7D**
Use digital tools such as blogs, websites and social media to crowdsource, crowdfund, and mobilize a community toward a goal.			blue			blue	blue	**3D, 6A, 7C, 7D**
Create and maintain a digital portfolio or collection of works related to one's learning.	blue	blue	yellow	yellow	yellow	yellow	yellow	**1A, 1C, 3C**
Word Processing	**K**	**1**	**2**	**3**	**4**	**5**	**6**	
Use a word processing application to write, edit, print and save assignments.	blue	blue	yellow	yellow	green	green	green	**1C, 1D, 6A**
Use the menu/tool bar functions to format, edit and print a document.		blue	yellow	yellow	yellow	yellow	yellow	**1C, 1D, 6A**
Highlight, copy and paste text within a document or from an outside source.	blue	blue	yellow	yellow	green	green	green	**1C, 1D, 6A**
Insert and resize images within a document.			blue	yellow	yellow	yellow	green	**1C, 1D, 6A**
Copy, paste and resize images found from outside sources.			blue	blue	yellow	yellow	green	**1C, 1D, 6A**
Use the menu/toolbar functions to format a paper using MLA, APA or other appropriate style.					blue	blue	blue	**1C, 1D, 6A**

	K	1	2	3	4	5	6	
Proofread and edit writing using built-in resources (i.e. dictionary, spell checker, thesaurus, grammar check).								**1C, 1D, 6A**
Problem Solving & Computational Thinking	**K**	**1**	**2**	**3**	**4**	**5**	**6**	
Use technology tools to represent solutions to problems in a variety of ways including text, sounds, pictures, and numbers.								**5A, 5B, 6C, 6D**
Use technology resources and tools to solve age- appropriate computing problems or for independent learning.								**4D, 5A, 5B**
Define an algorithm as a sequence of instructions and use the basic steps of algorithmic thinking to solve problems and design solutions.								**4C, 4D, 5A, 5D**
Use a block based visual programming interface to build a game, tell a story, or solve a problem.								**4D, 5B, 5C, 5D, 6C**
Use 2D design tools to create prototypes, models and simulations to demonstrate solutions and ideas.								**4C, 5B, 5C, 5D, 6C**
Use 3D design tools to create prototypes, models and simulations to demonstrate solutions and ideas.								**4C, 5B, 5C, 5D, 6C**
Spreadsheets & Databases	**K**	**1**	**2**	**3**	**4**	**5**	**6**	
Understand that spreadsheets, databases, and other specialized data tools are used to collect, manage, analyze and visualize data.								**1C, 1D, 6A**

	K	1	2	3	4	5	6	
Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart, graph)				■	■	■	■	**1C, 1D, 6A**
Enter/edit data and text into a spreadsheet and format spreadsheet to accommodate data.				■	■	■	■	**1C, 1D, 6A**
Calculate numerical equations using spreadsheet formulas and functions.							■	**1C, 1D, 6A**
Designate the format of a cell to accommodate different kinds of text and numerical data.					■	■	■	**1C, 1D, 6A**
Utilize spreadsheet data to create tables, charts and graphs.					■	■	■	**1C, 1D, 6A**
Identify and explain terms and concepts related to database systems (i.e. field, set, subset, query, ordered, sorted).			■	■		■		**1C, 1D, 6A**
Enter/edit data and/or text into a database and use queries to find information.				■	■	■	■	**1C, 1D, 6A**
Use spreadsheets and databases to make predictions, solve problems and draw conclusions.						■	■	**1C, 1D, 6A**
Multimedia and Presentation Tools	**K**	**1**	**2**	**3**	**4**	**5**	**6**	
Use a digital camera, video camera, or camera on a handheld devices to take pictures and videos.	■	■	■	■	■	■	■	**1C, 1D, 6A, 4A, 4B**

	K	1	2	3	4	5	6	
Capture images that incorporate rules of photography.								**1C, 1D, 6A, 4A, 4B**
Use photo and video editing tools to adjust images and add effects.								**1C, 1D, 6A, 4A, 4B**
Save images in multiple formats.								**1C, 1D, 6A, 4A, 4B**
Use recording and editing equipment to record, edit and publish audio.								**1C, 1D, 6A, 4A, 4B, 6B**
Create, edit and format text, visuals and audio within a multimedia presentation.								**1C, 1D, 6A, 4A, 4B, 6B**
Create a series of slides and organize them to present research or convey an idea.								**1C, 1D, 6A, 4A, 4B, 6B**
Copy/paste or import graphics within a multimedia presentation. Be able to change their size and position on a slide.								**1C, 1D, 6A, 4A, 4B**
Insert songs, videos or other media on slides.								**1C, 1D, 6A, 4A, 4B**
Add a working hyperlink to a multimedia presentation.								**1C, 1D, 6A, 4A, 4B**
Internet Searching & Online Databases	**K**	**1**	**2**	**3**	**4**	**5**	**6**	

Skill								Standards
Use refresh, forward and back buttons to navigate a web browser.								**1C, 1D, 6A**
Use tab browsing to navigate multiple pages.								**1C, 1D, 6A**
Create bookmarks and add frequently used sites to the bookmark bar.								**1C, 1D, 6A**
Locate the URL of a website and make a distinction between the suffixes .org, .com, .edu, .net, .gov and international domains.								**1C, 1D, 3A, 3B, 6A**
Use age-appropriate search engines to find information.								**1C, 1D, 3A, 3B, 6A**
Use browser search tools and advanced search features to find information.								**1C, 1D, 6A**
Use a browser's History feature to locate previously visited sites.								**1C, 1D, 6A**
Identify and use hyperlinks within web pages or documents.								**1C, 1D, 6A**
Use digital tools or platforms to organize, display, annotate and/or share a curated collection.								**1C, 1D, 6A**
Locate and add browser or other web apps or add ons to customize learning.								**1C, 1D, 6A**

	K	1	2	3	4	5	6	
Access online catalogs and databases for research.			▓	▓	▓	▓	▓	**1C, 1D, 6A**
Acceptable Use, Copyright & Plagiarism	K	1	2	3	4	5	6	
Locate required citation information on web pages and other digital resources and cite in the appropriate style.		▓	▓	▓	▓	▓	▓	**2B, 2C**
Use age-appropriate guidelines to evaluate websites and other resources for accuracy, perspective, credibility and relevance.		▓	▓	▓	▓	▓	▓	**2B, 2C, 6D**
Transfer the information learned from online sources into your own words.		▓	▓	▓	▓	▓	▓	**2A, 2B, 2C, 6B**
Understand all rules and guidelines in the school's Responsible Use Policy.	▓	▓	▓	▓	▓	▓	▓	**2B, 2C**
Understand Fair Use guidelines and its application to all forms of work.			▓	▓	▓	▓	▓	**2B, 2C**
Organizational and Project Tools	K	1	2	3	4	5	6	
Use a calendar, task manager, or other tools to organize one's self as well as manage projects.			▓	▓	▓	▓	▓	**1C, 1D, 6A**
Use age-appropriate note taking tools.	▓	▓	▓	▓	▓	▓	▓	**1C, 1D, 6A**

Use graphic organizers, brainstorming applications, or other digital tools to gather and organize information.							**1C, 1D, 6A**
Use digital tools to create timelines of people, historical events, etc. to organize information sequentially.							**1C, 1D, 3A, 3C, 6A, 6C**