

# Computer Applications Skills Continuum (2<sup>nd</sup> Grade)

## Standard 1: Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes
- b. create original works as a means of personal or group expression
- c. use models and simulations to explore complex systems and issues
- d. identify trends and forecast possibilities

Students will continue to practice skills introduced in earlier grade(s) and be introduced to and practice:

### KEYBOARDING

<b>Use proper posture:</b>	Proper body position (sit up straight)	(P)
	Proper position of keyboard (center with body)	(P)
	Correct wrist & elbow placement	(P)
<b>Use two hands while typing:</b>	Left hand for keys on left side of keyboard	(P)
	Right hand for keys on right side of keyboard	(P)
<b>Key in Network ID and Password</b>		(C)
<b>Identify home row keys:</b>	ASDF JKL;	(P)
<b>Use thumbs for spacebar</b>		(P)
<b>Use home row keys</b>	Use correct finger positioning	(P)
<b>Use keys other than home row:</b>	M	(P)
	C	(P)
	I	(P)
	B	(P)
	P	(P)
	W	(P)
	G	(P)
	Q	(P)
	U	(P)
<b>Use appropriate fingers:</b>	Left Shift	(I)
	Right Shift	(I)
	Backspace	(I)
	Tab	(I)
<b>Use caps lock key properly</b>		(I)
<b>Use punctuation keys correctly:</b>	. Period	(I)
	' Apostrophe	(I)
	, Comma	(I)
	" Quotation Marks	(I)
	; Semicolon	(I)
	: Colon	(I)
<b>Use special keys:</b>	Enter	(C)
	Ctrl-Alt-Delete	(C)
	Esc (escape)	(P)
<b>Use number keys</b>		(C)
<b>Keyboard with a speed of 10 wpm</b>		(P)

<b>WORD PROCESSING</b>		
<b>Recognize a word processing document</b>		(P)
<b>Identify the purposes of a word processing document</b>		(P)
<b>Answer questions relating to a word processing document</b>		(P)
<b>Edit a word processing document</b>		(P)
<b>Use upper and lower case letters appropriately</b>		(P)
<b>Use correct spacing:</b>	One space between words	(P)
	One space after punctuation	(P)
	Enter key to create blank lines	(P)
	Delete key to delete individual letter/character to the right	(P)
	Backspace to delete individual letter/character to the left	(P)
	Backspace or Delete key to delete blank lines	(P)
	Line Spacing	(I)
<b>Point and click with mouse</b>		
<b>Place the cursor for editing purposes</b>		(C)
<b>Highlight/Select text and apply changes:</b>	Change the font	(P)
	Change the size of text	(P)
	Change the text color	(P)
<b>Highlight/Select text and apply style changes:</b>	Bold	(P)
	Underline	(P)
	Italics	(P)
<b>Use spell check to check a document</b>		(P)
<b>Set page margins</b>		(I)
<b>Change page orientation:</b>	Landscape	(I)
	Portrait	(I)
<b>Insert a page number</b>		(I)
<b>Use tab key to indent paragraph</b>		(P)
<b>Utilize Toolbars:</b>	Drawing	(I)
	Standard	(I)
	Formatting	(I)
<b>Insert picture/clip art</b>		(P)
<b>Format picture/clip art</b>		(P)
<b>Align picture/clip art</b>		(P)
<b>Create:</b>	Brochure	(I)
	Newsletter	(I)
<b>SPREADSHEET</b>		
<b>Recognize a spreadsheet document:</b>	Cell	(P)
	Cell Address	(P)
	Row	(P)
	Column	(P)
	Label	(P)
<b>Answer questions using a spreadsheet</b>		(P)
<b>Identify purposes of a spreadsheet</b>		(P)
<b>Given specific directions, enter data into a spreadsheet:</b>	Using a template	(P)
	Titles	(P)
	Column labels	(P)

	Row labels	(P)
	Use a blank spreadsheet	(I)
<b>Identify the active cell</b>		
<b>Move cell data:</b>	Cut	(P)
	Copy	(P)
	Paste	(P)
	Delete	(P)
	Insert row(s)	(I)
	Insert column(s)	(I)
	Insert a chart	(I)
	Delete row(s)	(I)
	Delete column(s)	(I)
	Move data in columns and/or rows	(I)
<b>Format data in a cell:</b>	Font	(P)
	Size	(P)
	Color	(P)
	Style	(P)
	Numbers	(I)
	Currency	(I)
<b>Select/Highlight data in a spreadsheet</b>	Select cells, entire row, entire column, and cells for making a chart/graph	(I)
<b>Charts/Graphs:</b>	Answer questions using a computer-generated chart/graph	(P)
	Use charts/graphs	(P)
	Identify the purpose of charting data	(P)
	Column	(I)
	Bar	(I)
<b>Use a prepared spreadsheet to create a graph</b>		
<b>As a class, use a graph to produce results and make informed decisions to answer real life questions</b>		(P)
<b>Insert a spreadsheet and/or chart into a presentation</b>		(P)
<b>PRESENTATION</b>		
<b>Create multimedia projects individually or as a class activity using age-appropriate software</b>		(P)
<b>Create a simple presentation</b>		(P)
<b>Insert:</b>	New slide	(P)
	Textboxes	(P)
	Picture from clip art	(P)
	Picture from a file	(P)
	Word Art	(P)
<b>Format:</b>	Background color	(P)
	Slide design	(P)
<b>Setup presentation/show:</b>	Slide Show	(P)
<b>Delete</b>	Slide	(P)
<b>DATABASE</b>		
<b>Define database</b>	Record	(I)
	Field	(I)
<b>Search a database to retrieve specific information</b>		(I)
<b>Use logical operators to refine searches:</b>	= , < , > , And, Or, Not	(I)
<b>Answer comprehension questions using a given</b>		(I)

electronic resource		
Analyze data from an electronic resource and present conclusions		(I)

## Standard 2: Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- interact, collaborate, and publish with peers, experts, or others, employing a variety of digital environments and media
- communicate information and ideas effectively to multiple audiences using a variety of media and formats
- develop cultural understanding and global awareness by engaging with learners of other cultures
- contribute to project teams to produce original works or solve problems

Students will continue to practice skills introduced in earlier grade(s) and be introduced to and practice:

### TELECOMMUNICATIONS

Define telecommunications		(I)
Use templates to present written communication		(C)
Identify how the community uses telecommunications in everyday activities:	Business, library, educational institutions & government	(I)

### E-MAIL

Define e-mail		(P)
Define netiquette		(I)
Understand and use netiquette:	Use language that does not include profanity, socially insensitive remarks or insults	(P)

### PRESENTATION

Explain the purpose of a presentation:	Communication	(P)
	Show knowledge of content subject	(P)
	Publish/Share information	(P)
Create and publish products collaboratively for audiences inside and outside the classroom using technology tools	Multimedia or presentation	(I)
Use technology communication to participate in online group projects and learning activities:	CSILE, JCPSonline	(I)
Use templates to present written communication		(P)

## Standard 3: Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- plan strategies to guide inquiry
- locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- process data and report results

Students will continue to practice skills introduced in earlier grade(s) and be introduced to and practice:

Demonstrate knowledge of appropriate use of the Internet:	Education-based research (e.g. gathering data)	(P)
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	Define appropriate, inappropriate web sites	(I)
<b>Identify and/or use Internet terms:</b>	Home Page	(P)
	Favorites/Bookmarks	(P)
	Home Icon/Home Button	(P)
	Address Bar	(P)
	Links	(P)
	Back	(P)
	Forward	(P)
	Stop	(P)
	Refresh	(P)
	World Wide Web	(P)
	Browser	
	URL	(P)
	Search Engine	(I)
<b>Identify parts of a URL:</b>	http://	(P)
	www	(P)
<b>Open web browser; use Home, Back &amp; Forward buttons</b>		(P)
<b>Identify JCPs Home Page</b>		(P)
<b>Enter a URL</b>		(P)
<b>Understand the function of links (hyperlinks)</b>		(P)
<b>Use links</b>	Displayed in text & graphic format	(P)
<b>Demonstrate knowledge of Information Technology:</b>	JCPsonline scrimmages, quizzes, etc.	(P)
<b>Use multimedia resources to support learning:</b>	Interactive books, educational software, elementary multimedia	(P)
<b>Discuss the Internet as a source of information at school, home and at the public library</b>		(P)

### **Standard 4: Critical Thinking, Problem Solving, and Decision Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation
- b. plan and manage activities to develop a solution or complete a project
- c. collect and analyze data to identify solutions and/or make informed decisions
- d. use multiple processes and diverse perspectives to explore alternative solutions

**Students will continue to practice skills introduced in earlier grade(s) and be introduced to and practice:**

<b>As a team or individually, employ technology in the development of strategies for solving problems in the real world:</b>	Use an electronic database to gather resources to answer essential questions	(P)
<b>Use appropriate technology tools to successfully engage in higher-order thinking activities</b>		(P)

## Standard 5: Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- c. demonstrate personal responsibility for lifelong learning
- d. exhibit leadership for digital citizenship

Students will continue to practice skills introduced in earlier grade(s) and be introduced to and practice:

Identify and demonstrate knowledge of the Nine Elements of Digital Citizenship:	Digital Rights & Responsibilities (e.g. AUP, citing sources, cheating, cyberbullying)	(P)
	Digital Health & Wellness (e.g. carpal tunnel, eye strain, poor posture, addiction)	(P)
	Digital Security (e.g. virus protection, backups, personal information, hackers, identity theft)	(P)
Acknowledge ownership of own work:	Put name on work, etc.	(C)
Explain that one must have permission to use another person's work or any part of that person's work		(P)
Identify the copyright symbol	©	(P)
Sign and discuss the JCPSNet User Agreement Form		(C)
Explain that a good citizen is a person who follows rules in a community. A cyber citizen obeys the rules of the online cyber community.		(P)
Discuss how a stranger can pretend to be a friend in cyberspace		(P)
Identify a stranger as someone whom you and your parents don't know		(P)
Identify the characteristics of personal information		(P)
Explain potential risks to personal safety when supplying personal information, choosing a screen name and selecting a password		(P)
Discuss the importance of ethical, responsible and safe behavior when using networked digital information		(P)
As a class/group or individual, recognize, discuss and model responsible and safe behavior using online resources		(P)
Describe what to do when an unintended web site is entered		(P)
Explain why a password needs to be kept secret:	Someone could delete your files	(P)
	Someone could send an offensive message from your e-mail account	(P)
	Someone could change your password and you could no longer log on	(P)
Discuss the importance of being a responsible citizen when using technology		(P)
Participate in Internet projects		(P)
Discuss and follow the five Safety Tips published by the FBI for protecting oneself online:	Never give out personal information such as your name, home address, school name or telephone number in a chat room or on bulletin boards. Also, never send a picture	(P)

	of yourself to someone you chat with on the computer without your parent's permission.	
	Never write to someone who has made you feel uncomfortable or scared.	(P)
	Never meet someone or have them visit you without the permission of your parents.	(P)
	Tell your parents right away if you read anything on the Internet that makes you feel uncomfortable.	(P)
	Remember that people online may not be who they say they are. Someone who says that "she" is a "12-year-old girl" could really be an older man.	(P)
<b>Use internet safety skills</b>		(P)
<b>Respect other people's point of view and ideas when completing a class project</b>		(P)
<b>Explain why computers and/or other technologies are used for learning</b>		(P)
<b>Define cyberbullying</b>		
<b>Compare and contrast the critical attributes of bullying:</b>	Real-world & virtual world	(P)
<b>Understand the procedures of how to report cyberbullying</b>		(P)

## Standard 6: Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- understand and use technology systems
- select and use applications effectively and productively
- troubleshoot systems and applications
- transfer current knowledge to learning of new technologies

Students will continue to practice skills introduced in earlier grade(s) and be introduced to and practice:

<b>Distinguish between hardware and software:</b>	Identify CPU, Hand-held computer, RAM, Palmtop	(C)
<b>Identify:</b>	Monitor	
	Mouse	
	Disk drive	
	External disk drive	
	Projector	
<b>Describe and demonstrate proper care of equipment:</b>	Keep food, drinks & magnets away from equipment	(C)
	Keep your hands clean	(C)
	Not writing on equipment	(C)

## APPLICATIONS

<b>Create products for content area assignments using appropriate technology</b>		(P)
<b>Follow on-screen directions</b>		(P)
<b>Use proofreading and electronic editing skills</b>		(P)
<b>Start up and shut down computer</b>		(C)
<b>Log on/in:</b>	Ctrl-Alt-Delete	(C)

	UserID/Password	(C)
<b>Use mouse click to make selections</b>		
<b>Use click &amp; drag to move items on a page</b>		
<b>Use right &amp; left click when applicable</b>		
<b>Select an item from :</b>	Menu bar	(P)
	Drop down menu	
	Toolbar	(P)
<b>Open applications:</b>	File – Open	(P)
	Start - Program Files	(P)
<b>Quit applications:</b>	File – Quit/Exit	(P)
	Click “X” on Windows	(P)
<b>Identify open application on taskbar</b>		
<b>Close document leaving application open</b>		(P)
<b>Save</b>		(P)
<b>Save with assistance</b>		(P)
<b>Identify the recycle bin &amp; explain its purpose</b>		
<b>Navigate to open a file from different sources and save to specific location:</b>	Disk, folder, etc.	(I)
<b>Open a new document</b>		(P)
<b>Navigate to open a saved document</b>		(I)
<b>Print with assistance</b>		
<b>Print documents</b>		(P)
<b>REMOVABLE MEDIA</b>		
<b>Care and Handling:</b>	Compact Disc, Digital Video Disc, Data Disk	(C)
	Load correctly	(C)
	Remove correctly	(C)
	Explain the use of a disk, CD & DVD	(P)
<b>FILES</b>		
<b>Navigate to open a file from different sources:</b>	Application	(P)
	Disk	
	CD	(P)
	Desktop	(I)
<b>Identify file formats:</b>	.doc	(I)
	.xls	(I)
	.ppt	(I)
<b>Save documents as a variety of file types to move data across platforms:</b>	.doc	(I)
	.xls	(I)
	.ppt	(I)
<b>Use basic troubleshooting techniques:</b>	Determine if all equipment is turned on & plugged in	(P)
	Check mouse connection	(P)
	Check keyboard connection	(P)
	Check plugs/cables (plug in both ends; check for loose plugs)	(I)
<b>Print with options:</b>	Print a specific page	(I)
	Print a specific # of copies	(P)
	Change page orientation	(I)