

# Ganado Unified School District

## (Computers for 3<sup>rd</sup> Grade, 4<sup>th</sup> Grade, & 5<sup>th</sup> Grade)

### PACING Guide SY 2016-2017

Timeline & Resources	AZ Common Core Standards	Essential Question (HESS Matrix)	Learning Goal	Vocabulary (Content/Academic)
<p><b><u>QUARTER 1:</u></b></p> <p>-Online Resources -Internet access -Printer/Copier -USB Drive</p>	<p><b>Strand 5: Digital Citizenship</b> <i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 1: Safety and Ethics:</b> Advocate and practice safe, legal, and responsible use of information and technology.</p> <p><b>PO 1:</b> Explain when and why it is appropriate to use a personal digital device.</p> <p><b>PO 2:</b> Describe cyber-bullying and describe strategies to deal with such a situation.</p> <p><b>PO 3:</b> Identify and articulate rules for the use of digital tools as defined by school board policy and procedures.</p> <p><b>PO 4:</b> Recognize and describe the potential risks and dangers associated with various forms of online communications.</p> <p><b>PO 5:</b> Recognize and describe the advantages and risks of making a personal spending choice online.</p>	<p>How can we demonstrate appropriate use of digital tools?</p> <p>What is one example of cyber-bullying and explain a positive solution to the situation?</p> <p>Describe the risks and dangers of various forms of online communication or online purchasing.</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Identify the proper use of digital devices, including how, when, and where a personal digital device (iPod, cell phone, PDA, etc.) should be used.</li> <li>• Identify and express the policies presented in the District’s Acceptable Usage Policy.</li> <li>• Explain the consequences of inappropriate use of technology.</li> <li>• Discuss cyber-bullying and brainstorm possible solutions</li> <li>• Recognize and describe the potential risks and dangers associated with various forms of online communications.</li> <li>• Identify acceptable and unacceptable uses of computers in society.</li> <li>• Demonstrate an understanding of digital citizenship by sharing the information with peers individually and in groups.</li> <li>• Research a current technology and produce a digital document (report,</li> </ul>	<p>Authority Concept mapping tool Cyber Cyber-bullying Digital Digital citizenship Digital environments Digital tools Identity theft Fair use Personal digital device Publish Etiquette Netiquette</p>

	<p><b>PO 6:</b> Articulate how to respect the privacy of others' information and digital workspace.</p> <p><b>CONCEPT 2: Leadership for Digital Citizenship:</b> Demonstrate leadership for digital citizenship.</p> <p><b>PO 1.</b> Exhibit digital citizenship by consistently leading by example and advocating social and civic responsibility to others.</p> <p><b>CONCEPT 3: Impact of Technology:</b> Develop an understanding of the cultural, historical, economic, and political impact of technology on individuals and society.</p> <p><b>PO 1.</b> Provide examples of technologies that might be used to solve a specific economic, environmental, health, political, scientific, or social problem.</p>		<p>brochures, video, etc.) explaining the potential use of the technology to solve a current issue in our society.</p>	
	<p style="text-align: center;"><b>Strand 6: Technology Operations and Concepts</b> <i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 1: Understanding:</b> Recognize, define, and use technology term, processes, systems, and applications.</p> <p><b>PO 1.</b> Describe the various technical system terms. <b>PO 2.</b> Define and apply knowledge of various technical process terms. <b>PO 4.</b> Recognize and demonstrate ergonomically safe and sound use of equipment.</p>	<p>What are the causes and effects of using digital technology?</p> <p>What are the differences between proper keyboarding techniques and poor keyboarding techniques?</p>	<p>Students will able to:</p> <ul style="list-style-type: none"> <li>• Identify and define parts of the computer and network folders.</li> <li>• Describe the correct posture, position of hands and feet, proper height of keyboard, proper lifting and moving of equipment.</li> <li>• Demonstrate proper keyboarding techniques, assess keyboard accuracy, and develop speed.</li> <li>• Apply basic operations of hardware and software processes to a new Operating System.</li> </ul>	<p>Component Device Digital Directory Document Ergonomic Hard drive Hardware Icon Input device Interactive white board Media Net speed Output device</p>

	<p><b>PO 5.</b> Identify physical risks of using digital technology.</p> <p><b>CONCEPT 2: Application:</b> Select and use applications effectively and productively.</p> <p><b>PO 1:</b> Demonstrate speed and accuracy in use of keyboard and data entry tools with at least:  <u>5 wpm</u> and 80% accuracy (3<sup>rd</sup> grade)  <u>10 wpm</u> and 80% accuracy (4<sup>th</sup> grade)  <u>15 wpm</u> and 80% accuracy (5<sup>th</sup> grade)</p> <p><b>CONCEPT 4: Transfer of Knowledge:</b>  Transfer current knowledge to learning of new technologies.</p> <p><b>PO 1.</b> Transfer understanding of current input/output devices, symbols and icons, and applications to learning new technologies.</p>			<p>Qwerty keyboard  Server  Toolbar  Wi-Fi  WPM (Words Per Minute)</p>
<p><b>QUARTER 2:</b></p> <p>-Online Resources  -Internet Access  -Microsoft Word Program  -Printer/Copier  -USB Drive</p> <p>-Email  -Skype  -Chat  -Digital camera</p>	<p><b>Strand 1: Creativity and Innovation</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 1: Knowledge and Ideas:</b> Use technology to generate knowledge and new ideas.</p> <p><b>PO 1.</b> Analyze information to generate ideas and processes.</p> <p><b>CONCEPT 2: Models and Simulations:</b>  Use technology to generate knowledge and new ideas.</p>	<p>Evaluate technology, how did it change the way we communicate?</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Create with technology through free computer science clubs (<a href="http://www.cs-first.com">www.cs-first.com</a>).</li> <li>• Use Scratch to create stories, games, and animations and share with others around the world.</li> <li>• Compare and contrast systems, using digital tools, to identify similarities and differences.</li> </ul>	<p>Differences  Graphic organizer  Similarities  Essential questions  Digital tools</p>

	<p><b>PO 1.</b> Recognize and explain relevant interdependent elements of a digital model or simulation.</p> <p><b>PO 2.</b> Explore and experiment with system variables using models or simulations.</p> <p><b>PO 3.</b> Transfer understanding of how one system operates by comparing it to another system.</p> <p><b>CONCEPT 4: Original Works:</b> Use technology to create original works in innovative ways.</p> <p><b>PO 1.</b> Analyze information using digital creativity tools to create original works and express ideas.</p> <p><b>PO 2.</b> Analyze information using digital collaborative tools to produce original works and express ideas.</p> <p><b>Standard 4: Critical Thinking, Problem Solving, and Decision Making</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 1: Investigation:</b> Identify and define authentic problems and significant questions for investigation.</p> <p><b>PO 1.</b> Write essential questions to investigate a topic or issue using digital tools and resources.</p> <p><b>CONCEPT 2: Exploring Solutions:</b> Plan and manage activities to develop solutions to answer a question or complete a project.</p>		<ul style="list-style-type: none"> <li>• <i>Create original works of personal or group expression using digital tools.</i></li> </ul>	
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	<p><b>PO 1.</b> Plan and manage research using credible digital resources to develop solutions to answer a question.</p> <p><b>PO 2.</b> Generate solutions from different perspectives using collected resources and data.</p>			
	<p><b>Strand 2: Communication and Collaboration</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b><u>CONCEPT 1: Effective Communications and Digital Interactions:</u></b> Communicate and collaborate with others employing a variety of digital environments and media.</p> <p><b>PO 1.</b> Communicate digitally with others by selecting and using a variety of appropriate communication tools.</p> <p><b>PO 2.</b> Explain and demonstrate the safety and etiquette of digital environments to communicate with intended audiences.</p> <p><b><u>CONCEPT 2: Digital Solutions:</u></b> Contribute to project teams to produce original works or solve problems.</p> <p><b>PO 1.</b> Contribute to a cooperative learning project and demonstrate effective group behaviors while using digital collaborative resources.</p> <p><b><u>CONCEPT 3: Global Connections:</u></b> Create cultural understanding and global awareness by interacting with learners of other cultures.</p> <p><b>PO 1.</b> Communicate with individuals from different cultures or geographic</p>		<p>Students will able to:</p> <ul style="list-style-type: none"> <li>• Identify communication technologies and how they can be used to promote collaboration between peers and colleagues.</li> <li>• Observes teacher use of email to safely and securely collect information or share ideas with others.</li> <li>• Locate, select, and use various media to be used to communicate (e.g. text, images, audio, and video)</li> <li>• Identify the best tool to communicate a concept, idea, or information <ul style="list-style-type: none"> <li>○ Podcasting</li> <li>○ Email</li> <li>○ Chat</li> </ul> </li> <li>• Describe the proper netiquette with digital environments. <ul style="list-style-type: none"> <li>○ Use of Academic language in a professional environment (ex. Email)</li> <li>○ Use of casual language with social network (ex. FaceBook, MySpace)</li> <li>○ Texting using emoticons or “internet slang” (ex. LOL)</li> </ul> </li> <li>• Collaborate as a group to solve a puzzle using a communication tool</li> </ul>	<p>Blog Bluetooth Chat Collaborative tools Digital image/graphic Digital storytelling Digital video Drawing tool Global community Mobile device Netiquette Network Online community Personal digital device Podcast Social media Social networking Texting or text message Upload</p>

	<p>areas to explore a variety of perspectives.</p>			
	<p style="text-align: center;"><b>Strand 6: Technology Operations and Concepts</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 1: Understanding:</b> Recognize, define, and use technology term, processes, systems, and applications.</p> <p><b>PO 3.</b> Choose technology applications for a given activity/project.</p> <p><b>CONCEPT 2: Application:</b> Select and use applications effectively and productively.</p> <p><b>PO 1.</b> <i>Demonstrate speed and accuracy in use of keyboard and data entry tools with at least:</i> <i>5 wpm and 80% accuracy (3<sup>rd</sup> grade)</i> <i>10 wpm and 80% accuracy (4<sup>th</sup> grade)</i> <i>15 wpm and 80% accuracy (5<sup>th</sup> grade)</i></p> <p><b>PO 2.</b> Compose a document that applies intermediate formatting.</p> <p><b>PO 6.</b> Use interactive web content to access, read, send, and receive information.</p> <p><b>PO 7.</b> Use network storage drives to access information from a directory.</p> <p><b>CONCEPT 3: Troubleshoot Systems and Processes:</b> Define problems and investigates solutions in systems and processes.</p>	<p>Judge and rate your ability to compose a document; use intermediate formatting; and save and print a document.</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Create, Open, Close, Save/Save As to USB/flash drive/external flash drive and Edit a document</li> <li>• Print and Print Preview</li> <li>• Cut, copy, and paste</li> <li>• Format: <ul style="list-style-type: none"> <li>○ Font</li> <li>○ Font Size</li> <li>○ Text Color</li> <li>○ Bold, Italic, Underline</li> </ul> </li> <li>• Alignment of Text <ul style="list-style-type: none"> <li>○ Left</li> <li>○ Right</li> <li>○ Center</li> <li>○ Justified</li> </ul> </li> <li>• Insert Clip Art</li> <li>• Demonstrate how to troubleshoot computer problems such as: <ul style="list-style-type: none"> <li>○ Lost document, connectivity problems, use technology manuals of various tools (camera, iPad, computer software) to determine the order of sequence to solve issues.</li> </ul> </li> <li>• <i>Demonstrate proper keyboarding techniques, assess keyboard accuracy, and develop speed.</i></li> </ul>	<p>Clip art File extension (.doc, .ppt, .jpg, .pdf) Flash drive or USB Formatting Troubleshooting</p>

	<p><b>PO 1.</b> Use the help function within software and hardware to troubleshoot issues and problems.</p>			
<p><b><u>QUARTER 3:</u></b></p> <p>-Online Resources -Internet Access -Microsoft Power Point Program -Printer/Copier -USB Drive</p>	<p style="text-align: center;"><b>Strand 3: Research and Information Literacy</b></p> <p style="text-align: center;"><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 1: Planning:</b> Plan strategies to guide inquiry using technology.</p> <p><b>PO 1.</b> Predict and use key words and phrases that narrow or broaden information searches. <b>PO 2.</b> Predict which information sources will provide the desired data.</p> <p><b>CONCEPT 2: Processing:</b> Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p> <p><b>PO 1.</b> Locate and synthesize information to revise search strategies. <b>PO 2.</b> Select and use authoritative primary and/or secondary sources. <b>PO 3.</b> Evaluate between fact and opinion, bias, inaccurate and misleading information by consulting more than one source. <b>PO 4.</b> Use appropriate digital tools to synthesize research information and develop new ideas. <b>PO 5.</b> Follow copyright laws when using text, images, videos and/or other sources and obtain permission to use the work of others, and cite resources appropriately.</p>	<p>What are some good strategies for researching using the Internet?</p> <p>How can we use our researching skills and apply it to real-life situations?</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Use a variety of resources found in a variety of formats (e.g. Internet, card catalog, CD-ROM, databases)</li> <li>• Use a web browser to navigate the Internet using a child friendly search engine (e.g. forward, back, hyperlink, home, and favorites/ bookmarks, refresh/reload).</li> <li>• Use a teacher prepared list of favorites/bookmarks or portals form a teacher web page to gather information</li> <li>• Use basic web browsing vocabulary (e.g. URL, hyperlink, favorites/ bookmarks, search box, and scroll bar).</li> <li>• Uses appropriate search strategies (identifying keywords for electronic searches and evaluating relevance, gathering techniques, sorting and reporting information strategies).</li> <li>• Explain resources selected for assigned task.</li> <li>• Evaluate Internet resources and check for accuracy, bias, and truth (e.g. blogs, wikis, forums)</li> <li>• Develop an awareness of Internet resource evaluation (Cybersmart lesson)</li> <li>• Identify the URL as a host of information of a domain (e.g. .gov, .com, .edu, .org, .net, .tv)</li> </ul>	<p>Application Browser Cookies Database Digital tools Download FAQ (Frequently Asked Questions) Firewall Hacking Homepage Hyperlink Identity theft Intellectual property (copyright) Intranet Link Media hosting Network Network storage devices Password Primary source Search engine Secondary source Spam Spoofing URL Virus Web browser Webinar Website Webpage Wiki</p>

			<ul style="list-style-type: none"> <li>• Locate the author/creator of a website to determine credibility of the information <i>with assistance</i>.</li> </ul>	World wide web (www.)
	<p style="text-align: center;"><b>Standard 6: Technology Operations and Concepts</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 2: Application:</b> Select and use applications effectively and productively.</p> <p><b>PO 5.</b> Create a multimedia presentation with multiple pages, audio, and transitions for individual assignments.</p> <p><b>PO 1.</b> <i>Demonstrate speed and accuracy in use of keyboard and data entry tools with at least:</i>  <u>5 wpm</u> and 80% accuracy (3<sup>rd</sup> grade)  <u>10 wpm</u> and 80% accuracy (4<sup>th</sup> grade)  <u>15 wpm</u> and 80% accuracy (5<sup>th</sup> grade)</p> <p><b>PO 5.</b> Create multimedia presentations with multiple pages, audio, and transitions for individual assignments.</p> <p><b>PO 7.</b> <i>Use network storage drives to access information from a directory.</i></p>	How can we use technology to present what we have learned?	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Create, edit, and format a Power Point presentation for a given research project.</li> <li>• Present their Power Point presentation to their class.</li> <li>• <i>Create, Open, Close, Save/Save As to USB/flash drive/external flash drive</i></li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• <i>Demonstrate proper keyboarding techniques, assess keyboard accuracy, and develop speed.</i></li> </ul>	<p>Formatting tools</p> <p>Multimedia presentation</p> <p>Presentation software</p>
	<p style="text-align: center;"><b>Standard 1: Creativity and Innovation</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 4: Original Works:</b> Use technology to create original works in innovative ways.</p>		<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Construct a timeline using MS Power Point.</li> <li>• Use the Drawing and Paint tools to illustrate a character.</li> <li>• Use a variety of digital tools (drawing programs, audio clips, movies,</li> </ul>	<p>Collaborative tools</p> <p>Concept mapping tool</p> <p>Digital models</p> <p>Digital simulation</p> <p>Original works</p> <p>Publishing</p> <p>Simulation</p>

	<p><b>PO 1.</b> Analyze information using digital creativity tools to create original works and express ideas.</p> <p><b>PO 2.</b> Analyze information using digital collaborative tools to produce original works and express ideas.</p>		<p>brochures, newsletters, podcast, web), to analyze information and create original works.</p> <ul style="list-style-type: none"> <li>• Create original works of personal or group expression using digital tools.</li> </ul>	
<p><b>QUARTER 4:</b></p> <p>-Online Resources -Internet Access -Microsoft Excel Program</p> <p>-Printer/Copier -USB Drive</p>	<p><b>Standard 6: Technology Operations and Concepts</b> <i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 2: Application:</b> Select and use applications effectively and productively.</p> <p><b>PO 3.</b> Apply spreadsheet formatting skills. <b>PO 4.</b> Perform simple operations in a database. <b>PO 7.</b> Use network storage drives to access information from a directory.</p>	<p>As a business owner, how can you keep track of your financial data?</p> <p>Demonstrate how you can visually present data.</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Create charts and graphs using specific data.</li> <li>• Create a simple spreadsheet adding multiple cells using simple functions and manually writing formulas.</li> <li>• <i>Create, Open, Close, Save/Save As to USB/flash drive/external flash drive.</i></li> </ul>	<p>Cells Chart Data Database Formula Formula bar Graph Spreadsheet</p>
	<p><b>Standard 1: Creativity and Innovation</b> <i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 3: Trend and Possibilities:</b> Use technology to forecast trends and possibilities.</p> <p><b>PO 1.</b> Identify patterns and trends to draw conclusions and forecast possibilities.</p>		<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Construct a survey to gather data using an interactive digital tool, then display results.</li> <li>• Create a simple database from a template to organize, sort, and manage information <i>with assistance.</i></li> <li>• <i>Use a variety of digital tools (drawing programs, audio clips, movies, brochures, newsletters, podcast, web), to analyze information and create original works.</i></li> </ul>	<p>Patterns Survey Trends</p>

	<p style="text-align: center;"><b>Standard 6: Technology Operations and Concepts</b></p> <p><i>*POs determined by Grade Levels</i></p> <p><b>CONCEPT 2: Application:</b> Select and use applications effectively and productively.</p> <p><b>PO 1.</b> <i>Demonstrate speed and accuracy in use of keyboard and data entry tools with at least:</i></p> <p><u>5 wpm</u> and 80% accuracy (3<sup>rd</sup> grade)</p> <p><u>10 wpm</u> and 80% accuracy (4<sup>th</sup> grade)</p> <p><u>15 wpm</u> and 80% accuracy (5<sup>th</sup> grade)</p>		<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>○ <i>Demonstrate proper keyboarding techniques, assess keyboard accuracy, and develop speed.</i></li> </ul>	
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