

## Course: Computers Grade 6

Preface:

Below is the curriculum map for Computers, Grade 6. In addition to the content, skills, and alignment to the NETS (National Educational Technology Standards), this map embeds various forms of assessment. Assessment is critical to show not only what teachers are teaching but, more importantly, to indicate what students are learning.

In order for teachers to determine if students have learned the content, skills, and standards listed in the curriculum maps, the Diocese has developed several assessments. Your child's learning is assessed by using a variety of methods such as written responses, oral communication, and performance assessments.

Teachers use formative assessments to inform instruction and to monitor on-going student progress. Some formative assessments include: teacher observations, quizzes, tests, homework, class participation, portfolios of student work, student self-assessment, rubrics, projects, journal writing, oral exams, media presentations, and teacher/student conferences. Technology is integrated across all subject areas and grade levels. The technology teacher works closely with the classroom teacher to ensure a holistic learning experience for your child.

Basic Operating System - 6		
Content	Skills	Standards
<b>Basic OS (Operating System) and Universal Window Elements</b>  <b>BIG IDEA:</b> <b>Knowing the Basic Operating System and Universal Window Elements helps users to be more productive.</b>	Organize and manage files  Utilize desktop elements independently: Start, icons, taskbar, pointer  Explain the purpose of and how to use window items, e.g., Title/Drag bar, Menu Bar, Tool Bar, Address Bar  Employ multitasking techniques (e.g., understand there may be multiple functions running by observing the taskbar)  Manipulate windows: minimize, maximize,	6.a ~ understand and use technology systems.  6.b ~ select and use applications effectively and productively.  6.c ~ troubleshoot systems and applications.  6.d ~ transfer current knowledge to learning of new technologies.

	<p>restore, close</p> <p>Demonstrate how to log on/off and properly shut down the computer</p> <p>Identify files by their file name extension, e.g., doc, xls, bmp, jpg, etc.</p> <p><b>TERMS:</b> Start, icons, taskbar, pointer, minimize, maximize, restore, log on, log off, shut down, close, menu bar, tool bar, title bar, status bar, file extensions, multitasking</p>	
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### Computer History, Hardware Usage and Terminology

Content	Skills	Standards
<p><b>Computer History, Hardware Usage and Terminology</b></p> <p><b>BIG IDEA:</b>  <b>Having a sound understanding of technology concepts, systems and operations prepares people to confidently transfer current knowledge to new situations.</b></p>	<p>Demonstrate an understanding of the evolution of technology, the history of computers, and the impact of the Internet in our global society</p> <p>Use all peripherals located in the lab and/or classroom appropriately</p> <p>Store and retrieve files on computers or networks</p> <p>Explain and demonstrate the function of each component, e.g., input/process/output</p> <p>Describe how computers communicate within a networked infrastructure including LANs (Local</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.d ~ identify trends and forecast possibilities.</p> <p>4.a ~ identify and define authentic problems and significant questions for investigation.</p> <p>4.c ~ collect and analyze data to identify solutions and/or make informed decisions.</p> <p>4.d ~ use multiple processes and diverse perspectives to explore alternative solutions.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>6.a ~ understand and use technology systems.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>

<p>Area Networks), WANs (Wide Area Networks) and the Internet</p> <p>Transfer current knowledge to learning of new technologies</p> <p>Troubleshoot simple system problems and error messages</p> <p>Identify internal hardware components including motherboard, circuits, power supply, port, RAM, ROM, CPU and BIOS</p> <p><b>TERMS:</b> Netiquette, LAN, WAN, AUP, input, output, process, peripherals, component, USB, ports, flash drive, plagiarism, copyright, identity, fair use, virus protection, network security, passwords, firewalls, privacy laws, freeware, shareware, site licensing, motherboard, circuits, power supply, RAM, ROM, CPU, BIOS, spam, file extension</p>	
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**Curriculum Integration - 6**

Content	Skills	Standards
<p><b>Curriculum Integration</b></p> <p><b>BIG IDEA:</b>  <b>Using technology in all content areas prepares people to identify and to solve real-world problems.</b></p>	<p>Research topics to align with content areas</p> <p>Identify that different programs have different purposes</p> <p>Recognize that technology can be used to solve problems and to</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.b ~ create original works as a means of personal or group expression.</p> <p>1.c ~ use models and simulations to explore complex systems and issues.</p> <p>2.a ~ interact, collaborate, and publish with peers,</p>

	<p>make informed decisions</p> <p>Practice and build content area skills related to classroom curriculum through the use of appropriate software and/or pre-selected websites</p>	<p>experts or others employing a variety of digital environments and media.</p> <p>2.b ~ communicate information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>2.d ~ contribute to project teams to produce original works or solve problems.</p> <p>3.a ~ plan strategies to guide inquiry.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p> <p>3.c ~ evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p> <p>3.d ~ process data and report results.</p> <p>4.a ~ identify and define authentic problems and significant questions for investigation.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>4.c ~ collect and analyze data to identify solutions and/or make informed decisions.</p> <p>4.d ~ use multiple processes and diverse perspectives to explore alternative solutions.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>6.a ~ understand and use technology systems.</p> <p>6.b ~ select and use applications effectively and productively.</p>
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**Digital Citizenship - 6**

Content	Skills	Standards
<b>Digital Citizenship: Ethical and Responsible Use of</b>	Discuss and demonstrate compliance with school rules for technology including the	5.a ~ advocate and practice safe, legal, and responsible use of information and technology.

<p><b>Technology and Information Resources</b></p> <p><b>BIG IDEA:</b>  <b>People need to use technology in an ethical and responsible way to ensure their safety, privacy, and compliance with the law.</b></p>	<p>AUP (Acceptable Use Policy)</p> <p>Demonstrate netiquette</p> <p>Identify and discuss plagiarism, copyright and fair use guidelines</p> <p>Identify and discuss the concepts of identity, privacy and the importance of not sharing personal information and/or passwords with others</p> <p>Discuss consequences for abuse of computer usage</p> <p>Explore the need for protection against viruses and vandalism</p>	<p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>5.d ~ exhibit leadership for digital citizenship.</p>
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**Graphic Applications - 6**

Content	Skills	Standards
<p><b>Graphic Applications</b></p> <p><b>BIG IDEA:</b>  <b>Computer graphics help communicate information effectively and descriptively through personal expression.</b></p>	<p>Continue to work in draw/paint programs expanding skills with the use of the different drawing tools and programs</p> <p>Incorporate graphics into additional applications; e.g., export a graphic from one application and insert it into an original story created in a word processing or other application</p> <p>Manipulate pictures (e.g., scan) and modify digital images</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.b ~ create original works as a means of personal or group expression.</p> <p>2.a ~ interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.</p> <p>2.b ~ communicate information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>2.d ~ contribute to project teams to produce original works or solve problems.</p> <p>3.a ~ plan strategies to guide inquiry.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a</p>

		<p>variety of sources and media.</p> <p>3.c ~ evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>5.a ~ advocate and practice safe, legal, and responsible use of information and technology.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>
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**Graphic Organizers - 6**

Content	Skills	Standards
<p><b>Graphic Organizers</b></p> <p><b><u>BIG IDEA:</u></b>  <b>Graphic organizers are used to brainstorm ideas, to structure and plan projects, to analyze problems, and to make decisions.</b></p>	<p>Incorporate graphic organizers in collaboration with the classroom teacher</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.b ~ create original works as a means of personal or group expression.</p> <p>1.d ~ identify trends and forecast possibilities.</p> <p>2.b ~ communicate information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>2.d ~ contribute to project teams to produce original works or solve problems.</p> <p>3.a ~ plan strategies to guide inquiry.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p> <p>3.c ~ evaluate and select information sources and</p>

		<p>digital tools based on the appropriateness to specific tasks.</p> <p>3.d ~ process data and report results.</p> <p>4.a ~ identify and define authentic problems and significant questions for investigation.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>4.c ~ collect and analyze data to identify solutions and/or make informed decisions.</p> <p>4.d ~ use multiple processes and diverse perspectives to explore alternative solutions.</p> <p>5.a ~ advocate and practice safe, legal, and responsible use of information and technology.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>5.d ~ exhibit leadership for digital citizenship.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>
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**Internet Applications - 6**

Content	Skills	Standards
<p><b>Internet Applications</b></p> <p><b>BIG IDEA:</b>  <b>The Internet contains both accurate and inaccurate information. People need to make informed evaluations of the</b></p>	<p>Recognize and use basic browser functions: url/address bar, home page, single click, double click, scroll bar, scroll box, search box, bookmark/favorite, hyperlink, back, forward</p>	<p>2.a ~ interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.</p> <p>2.b ~ communicate information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>2.c ~ develop cultural understanding and global</p>

<p><b>information presented.</b></p>	<p>Access teacher approved sites to gather data, research topics, and reinforce content areas</p> <p>Cite web references properly</p> <p>Evaluate website content for validity and credibility</p> <p>Use multiple websites to gather information</p> <p>Practice basic Internet safety skills</p> <p>Access the Internet to locate requested information in a specific website</p> <p>Locate address bar and type web addresses accurately</p> <p>Use search engines to locate sources of information independently</p> <p>Locate and synthesize information from an on-line resource and transfer notes to a word processor with proper reference and citation</p> <p>Use a variety of Internet search strategies such as Boolean logic</p> <p>Select and use a variety of search engines to locate specific content</p> <p><b>TERMS:</b> URL, address bar, home page, single click, double click, scroll bar, scroll box, search box, bookmark, favorite, hyperlink, back, forward,</p>	<p>awareness by engaging with learners of other cultures.</p> <p>3.a ~ plan strategies to guide inquiry.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p> <p>3.c ~ evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p> <p>3.d ~ process data and report results.</p> <p>4.a ~ identify and define authentic problems and significant questions for investigation.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>4.c ~ collect and analyze data to identify solutions and/or make informed decisions.</p> <p>4.d ~ use multiple processes and diverse perspectives to explore alternative solutions.</p> <p>5.a ~ advocate and practice safe, legal, and responsible use of information and technology.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>5.d ~ exhibit leadership for digital citizenship.</p> <p>6.a ~ understand and use technology systems.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>
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	web-browsing, surfing	
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## Keyboarding - 6

Content	Skills	Standards
<b>Keyboarding</b> <b>BIG IDEA: Knowing how to type ergonomically and with proper hand position promotes productivity while using technology.</b>	<p>Demonstrate mastery of correct posture, hand position, finger placement and territories</p> <p>Demonstrate improved accuracy and speed over the course of the school year</p>	<p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>6.b ~ select and use applications effectively and productively.</p>

## Presentation Tools and Techniques - 6

Content	Skills	Standards
<b>Presentation Tools and Techniques</b> <b>BIG IDEA: People use presentation tools to effectively express ideas through the use of multi-media -- words, sounds, and images.</b>	<p>Create a new presentation via template or a blank presentation</p> <p>Open and edit an existing presentation</p> <p>Create a new slide and/or insert slides from other presentations</p> <p>Format slide background via design template or customize individual elements</p> <p>Insert and format text elements such as text boxes, lists and tables</p> <p>Customize font style, size, color, justification</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.b ~ create original works as a means of personal or group expression.</p> <p>2.a ~ interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.</p> <p>2.b ~ communicate information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>2.d ~ contribute to project teams to produce original works or solve problems.</p> <p>3.a ~ plan strategies to guide inquiry.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p> <p>3.c ~ evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p>

	<p>Insert objects such as clip art, pictures, and sounds</p> <p>View and navigate the slide show</p> <p>Incorporate classroom content areas in collaboration with classroom teacher</p> <p>Discuss presentation techniques and collaborate with teams</p> <p>Add and/or customize slide transitions and animations</p> <p>Add hyperlinks</p>	<p>3.d ~ process data and report results.</p> <p>4.a ~ identify and define authentic problems and significant questions for investigation.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>4.c ~ collect and analyze data to identify solutions and/or make informed decisions.</p> <p>4.d ~ use multiple processes and diverse perspectives to explore alternative solutions.</p> <p>5.a ~ advocate and practice safe, legal, and responsible use of information and technology.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>
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### Spreadsheet Concepts - 6

Content	Skills	Standards
<p><b>Spreadsheet Concepts</b></p> <p><b><u>BIG IDEA:</u></b>  <b>When you can analyze data, you can learn almost anything about any topic that interests you.</b></p>	<p>Demonstrate a working knowledge of spreadsheet basics such as columns, rows, cells, cell names, cell formatting and basic formulas</p> <p>Describe the use of spreadsheets as a tool to collect, analyze, sort, and graph data</p> <p>Organize information in a variety of formats</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.b ~ create original works as a means of personal or group expression.</p> <p>1.c ~ use models and simulations to explore complex systems and issues.</p> <p>1.d ~ identify trends and forecast possibilities.</p> <p>3.a ~ plan strategies to guide inquiry.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p>

	<p>Create a spreadsheet to graph data</p> <p>Create and explain different types of graphs and charts to best represent data effectively</p> <p>Apply knowledge of basic spreadsheet skills and components previously introduced (such as cells, rows, columns, formatting, line grids, formulas, Sigma symbol and graphs)</p> <p>Analyze and explain data represented</p>	<p>3.c ~ evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p> <p>3.d ~ process data and report results.</p> <p>4.a ~ identify and define authentic problems and significant questions for investigation.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>4.c ~ collect and analyze data to identify solutions and/or make informed decisions.</p> <p>5.a ~ advocate and practice safe, legal, and responsible use of information and technology.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>5.d ~ exhibit leadership for digital citizenship.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>
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**Word Processing/Publishing - 6**

Content	Skills	Standards
<p><b>Word Processing/Publishing</b></p> <p><b>BIG IDEA:</b>  <b>People use word processing/publishing software to communicate effectively and/or to create original works.</b></p>	<p>Select page setup -- orientation and margins</p> <p>Format and edit a document; e.g., select font style, size, and color; page setup (margins, justifications, etc); borders, Word Art, bullets, numbering and</p>	<p>1.a ~ apply existing knowledge to generate new ideas, products, or processes.</p> <p>1.b ~ create original works as a means of personal or group expression.</p> <p>2.a ~ interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.</p>

	<p>tables</p> <p>Add additional page elements such as lists and graphics</p> <p>Incorporate classroom content areas in collaboration with classroom teacher</p> <p>Plan, create, edit, publish and print an original formatted document</p> <p>Demonstrate proficiency in word processing skills when creating stories, letters, reports, research papers and/or poems</p> <p>Identify and customize menus and toolbars</p>	<p>2.b ~ communicate information and ideas effectively to multiple audiences using a variety of media and formats.</p> <p>2.d ~ contribute to project teams to produce original works or solve problems.</p> <p>3.b ~ locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.</p> <p>3.c ~ evaluate and select information sources and digital tools based on the appropriateness to specific tasks.</p> <p>3.d ~ process data and report results.</p> <p>4.b ~ plan and manage activities to develop a solution or complete a project.</p> <p>5.a ~ advocate and practice safe, legal, and responsible use of information and technology.</p> <p>5.b ~ exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.</p> <p>5.c ~ demonstrate personal responsibility for lifelong learning.</p> <p>5.d ~ exhibit leadership for digital citizenship.</p> <p>6.b ~ select and use applications effectively and productively.</p> <p>6.c ~ troubleshoot systems and applications.</p> <p>6.d ~ transfer current knowledge to learning of new technologies.</p>
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