

# **Grade 8 Computers Curriculum Maps**

**[Unit 1: Master Keyboarding Techniques](#)**

**[Unit 2: Internet Research Techniques](#)**

**[Unit 3: PowerPoint](#)**

**[Unit 4: Programming](#)**

<b>Grade:</b> 8 <b>Subject:</b> Computers	<b>Unit 1: Master Keyboarding Techniques</b>
<b>Big Idea/Rationale</b>	The touch method of keyboarding helps to prevent injuries and promotes accuracy and speed
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• Students will identify and demonstrate the ten skills that make up ergonomic techniques and demonstrate proper techniques of alpha-numeric keyboard and 10-key pad to promote a healthy life style while using the computer</li> <li>• A tool is only as good as the person using it</li> <li>• Technology is constantly changing and requires continuous learning of new skills</li> <li>• Students will be responsible for preventing injuries while using a computer</li> <li>• Accurate documents reflect one's image and the image of one's company</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How does good posture help to promote good health?</li> <li>• How does an accurate document promote a positive image?</li> <li>• How does speed influence one's image?</li> <li>• How can you use technology to advance your learning in middle school?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.typingweb.com">www.typingweb.com</a></li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Computer, Internet</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 8 <b>Subject:</b> Computers	<b>Unit 2: Internet Research Techniques</b>
<b>Big Idea/Rationale</b>	The Internet can be used to conduct research for school assignments, issues involves with copying from the Internet, selecting appropriate websites for research
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• Not everything on the Internet is reliable</li> <li>• Anyone can create a webpage and post it on the Internet</li> <li>• It is important to verify the validity of sources cited on the Internet</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• What is the Internet?</li> <li>• What does a browser do?</li> <li>• Why is bookmarking websites a useful tool?</li> <li>• What is a search engine and what does it do?</li> <li>• Why are .edu and .gov sites reliable?</li> <li>• Why is copying a bad idea?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Browser Basics</li> <li>• Search Engines</li> <li>• Selecting Appropriate Websites</li> <li>• Copying from the Internet</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• 8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.</li> <li>• 8.1.8.B.1 Synthesize and publish information about a local or global issue or event on a web-based shared hosted service.</li> <li>• 8.1.8.D.1 Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.</li> <li>• 8.1.8.D.2 Summarize the application of fair use and creative commons.</li> <li>• 8.1.8.D.3 Demonstrate how information may be biased on a controversial issue. 8.1.8.E.1 Gather and analyze findings to produce a possible solution for a content-related or real world problem using data collection technology.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• LCD Projector, Internet, Worksheets</li> </ul>
<b>Notes</b>	

<b>Grade: 8</b> <b>Subject: Computers</b>	<b>Unit 3: PowerPoint</b>
<b>Big Idea/Rationale</b>	PowerPoint software allows the user to create and present information in a concise and visually appealing way.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• PowerPoint presentations allow presenters to make the information they present more memorable.</li> <li>• PowerPoint provides presenters with many features that allow them to effectively disseminate information.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• When is it appropriate to use PowerPoint?</li> <li>• What effects would ease the audience’s ability to see the information presented?</li> <li>• How can effects enhance or diminish the message delivered in a presentation?</li> <li>• What are some of the characteristics of an effective PowerPoint presentation?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Make the point and explain what you are referring to.</li> <li>• Selecting appropriate backgrounds that relate to topic.</li> <li>• Appropriately using animation.</li> <li>• Choosing appropriate             <ul style="list-style-type: none"> <li>○ Create and design presentations</li> <li>○ Apply design templates</li> <li>○ Apply custom backgrounds</li> <li>○ Incorporate animations and transitions</li> <li>○ Add an animation scheme</li> <li>○ Run an animated slide show</li> <li>○ Insert appropriate sound files</li> <li>○ Insert, move, and resize graphics</li> <li>○ Apply various slide layouts including single and multi-level bulleted lists</li> <li>○ Follow the 7x7 rule</li> <li>○ Print slides, handouts, outlines</li> <li>○ Add, delete, and reorder slides</li> <li>○ Add header and footer to slides and handouts</li> <li>○ Incorporate Smart Art into a presentation</li> </ul> </li> <li>• Color schemes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• 8.1.8.A.3 - Create a multimedia presentation including sound and images.</li> <li>• 8.1.8.A.5 - Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.</li> <li>• 8.1.8.B.1 - Synthesize and publish information about a local or global issue or event on a collaborative, web-based service (also known as a</li> </ul>

	<p>shared hosted service).</p> <ul style="list-style-type: none"> <li>• 8.1.8.D.1 - Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.</li> <li>• 8.1.8.D.3 - Demonstrate how information on a controversial issue may be biased.</li> <li>• 8.1.8.E.1 - Gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• LCD Projector, Internet, Microsoft PowerPoint Software, Assessment Rubric</li> </ul>
<b>Notes</b>	

<b>Grade: 8</b> <b>Subject: Computers</b>	<b>Unit 4: Programming</b>
<b>Big Idea/Rationale</b>	Computers are a big part of our society. Everything we do involves technology. Computer programs run all of the technology available such as computers, ATMs, cell phones, tablets, etc.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• Computer systems have evolved and become an intrinsic part of everyday life, both personal and in the workforce.</li> <li>• Hardware and software work together to accomplish complex tasks.</li> <li>• A computer program is a set of instructions created to perform the steps specified in an algorithm.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• What are the major milestones in the evolution of computer programming?</li> <li>• Identify the characteristics of object-oriented programming languages</li> <li>• Describe the types of applications that can be made through the use of a computer program</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Identify the major milestones in the evolution of computer programming.</li> <li>• Identify and discuss the characteristics of object-oriented programming languages.</li> <li>• Identify the types of applications that can be made through the use of a computer program.</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• 8.1.4.A.1: Demonstrate effective input of text and data using an input device.</li> <li>• 8.1.4.A.5: Determine the benefits of a wide range of digital tools by using them to solve problems.</li> <li>• 8.1.8.A.5: Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.</li> <li>• 8.1.12.F.2: Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address educational, career, personal, and social needs.</li> <li>• 9.4.12.K.4: Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.</li> <li>• 9.4.12.K.11: Apply active listening skills to obtain and clarify information.</li> <li>• 9.4.12.K.17: Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.</li> <li>• 9.4.12.K.21: Use information technology design processes and guidelines to produce a quality information technology product or service.</li> <li>• 9.4.12.K.22: Implement problem-solving processes to evaluate and</li> </ul>

	<p>verify the nature of problems in this cluster.</p> <ul style="list-style-type: none"> <li>● 9.4.12.K.24: Employ technological tools to expedite workflow.</li> <li>● 9.4.12.K.36: Analyze and summarize the use of information technology to enhance business effectiveness.</li> <li>● 9.4.12.K.65: Identify and explain the implications that information technology has for business transformation and development to demonstrate an understanding of the impact the industry has on business.</li> <li>● 9.4.12.K.69: Compare classes of software associated with the development and maintenance of information systems to develop software and maintain computer systems.</li> <li>● 9.4.12.K.70: Identify and compare new information systems trends and technologies to build an understanding of their potential influence on industry practices.</li> <li>● 9.4.12.K.(2).6: Employ knowledge of information system analysis and design to evaluate information systems.</li> <li>● 9.4.12.K.(3).7: Iterate through the design and development process to create a uniform Web-based or digital product.</li> <li>● 9.4.12.K.(3).10: Demonstrate the effective use of tools, including tools for product development, product management, and production, to complete Web-based or digital communication projects.</li> <li>● 9.4.12.K.(4).1: Identify and analyze customer software needs and requirements to guide programming and software development.</li> <li>● 9.4.12.K.(4).4: Demonstrate the effective use of software development tools to develop software applications.</li> <li>● 9.4.12.K.(4).5 : Use the software development process to design a software application and deliver it to the customer.</li> <li>● 9.4.12.K.(4).6: Produce a computer application, in code, to demonstrate proficiency in developing an application using the appropriate programming language.</li> <li>● 9.4.12.K.(4).7: Implement software testing procedures to ensure quality products.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>● LCD projector, slide show presentations, Programming program</li> </ul>
<b>Notes</b>	