

*Grade 5 Computers*  
*Unit 1: Computer Basics*  
*(3 weeks)*

**Targeted Standards**

- 8.1.P.A.4 Use basic technology terms in the proper context in conversation with peers and teachers (e.g., camera, tablet, Internet, mouse, keyboard, and printer).
- 8.1.P.A.5 Demonstrate the ability to access and use resources on a computing device.
- 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
- 8.2.2.E.5 Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).
- 8.2.5.E.2 Demonstrate an understanding of how a computer takes input of data, processes and stores the data through a series of commands, and outputs information.
- 8.2.8.E.2 Demonstrate an understanding of the relationship between hardware and software.
- 8.2.8.E.4 Use appropriate terms in conversation (e.g., programming, language, data, RAM, ROM, Boolean logic terms).
- 8.2.12.E.2 Analyze the relationships between internal and external computer components.

**Rationale and Transfer Goals :**

This unit serves as an introduction to computers and computer processes. Students will be introduced to terminology and concepts related to hardware and software applications. The concepts and skills student acquire in this unit will serve as a foundation for future understanding of more in-depth computer applications.

**Enduring Understandings: What are the most essential conclusions that students should be guided towards throughout this unit?**

- A tool is only as good as the operator utilizing the tool; knowing how to use the tool is paramount.
- Technology is constantly changing and requires continuous learning of new skills.

**Essential Questions:** What are the questions that will guide critical thinking about the content of this unit? Essential questions should, in part, be thought-starters toward the enduring understandings.

- How can computers be used to create new and innovative products?
- How do I choose which technological tools to use and when it is appropriate to use them?

Content/Objectives		Instructional Actions	
Content <i>What students will know</i>	Skills <i>What students will be able to do</i>	Activities/Strategies <i>How we teach content and skills</i>	Evidence (Assessments) <i>How we know students have learned</i>
<p><b>Introduction</b> Basic computer functions.</p> <p>Related vocabulary terms.</p> <p>Buttons and parts.</p> <p>Inside a computer.</p> <p><b>Software Basics</b> Computer operating systems—Linux, MAC OS, DOS.</p> <p>Computer applications—ie. Internet browsers, MS Office Suite, etc.</p>	<p>Identify operations and components of computers.</p> <p>Use correct computer-specific terminology.</p> <p>Identify and use specific computer applications.</p> <p>Identify different computer operating systems.</p> <p>Explain the difference between different Internet browsers.</p>	<p>Compose computer identity biography.</p> <p>Student-developed presentations.</p> <p>Teacher modeling of software and hardware.</p> <p>Demonstration of relative computer components.</p>	<p>Student biography assignment.</p> <p>GCF skills check.</p> <p>Summative course assessment.</p>

<p><b><u>Safety &amp; Maintenance</u></b> Care and maintenance</p> <p>Computer Protection Creating and saving files</p> <p>Organization of files</p> <p>Basic troubleshooting techniques</p>	<p>Summarize basic computer maintenance procedures.</p> <p>Follow or develop a system for organizing saved files.</p> <p>Explain steps for solving basic computer problems.</p>		
<p><u>Spiraling for Mastery</u> Where does this unit spiral back to other units from this or previous years in order to ensure that students retain mastery of what they've learned?</p>			
Content or Skill for this Unit	Spiral Focus from Previous Unit	Instructional Activity	
<p>Identify operations and components of computers.</p> <p>Use correct computer-specific terminology.</p> <p>Identify and use specific computer applications.</p> <p>Identify different computer operating systems.</p>	<p>Basic computer operating skills—power, mouse, keyboard, etc.</p> <p>Point-and-click procedures for opening applications.</p>	<p>Student biography assignment</p> <p>GCF Lessons</p> <p>Demonstrations and modeling</p> <p>Word Wall</p> <p>Student application and practice.</p>	

<p>Explain the difference between different Internet browsers.</p> <p>Summarize basic computer maintenance procedures.</p> <p>Follow or develop a system for organizing saved files.</p> <p>Explain steps for solving basic computer problems.</p>		
<p><b>21<sup>st</sup> Century Skills:</b> What are the <a href="#">21<sup>st</sup> Century Skills</a> that are a part of this unit, and where are they experienced? This unit particularly address ICT (Information, Communications, and Technology) Literacy.</p>		
<p><b>Key resources:</b> What are the resources that are essential for this unit (may also be listed in “Activities/Strategies”)?</p> <p>Student biography assignment—directions and resources</p> <p>Computers—Microsoft Suite, LAN School, and other related software</p> <p>GCF modules</p>		