Florida CTE

Middle School CTE: Information and Communications Technology (ICT) Essentials 1 (2024)

Identify computer components and their functions. The student will be able to: 1.0	**1** Describe what defines a computer and ways a computer can be used. 1.1
	2 Identify the internal components of a computer (e.g., case, CPU, RAM, power supply, hard drive, motherboard, expansion cards, cabling). 1.2
	3 Identify and know how to connect various computer input devices (e.g., mouse, keyboard, phone, camera, scanner, microphone, game controller, stylus, barcode reader finger print scanner, GPS device, touch pad, graphics tablet) and describe their use. 1.
	4 Identify and know how to connect various computer output devices (e.g., monitor, printer, projector, speakers, headphones) and describe their use. 1.
	5 Identify and know how to connect various storage devices (e.g., flash drive, external hard drive (SSD, network drive), memory card, discs, cloud). 1.5
Demonstrate knowledge of different operating systems. The student will be able to: 2.0	**1** Compare and contrast various operating systems used in a computer and mobile devices (i.e., Windows, OS (Apple), UNIX, Android, iOS). 2.1
	2 Describe and use conventional file naming conventions. 2.2
	3 Demonstrate proficiency with file management tasks (e.g., folder creation, file creation, backup, copy, delete, open, save). 2.3
	4 Be able to identify file types by extension (e.g., .doc, .txt, .wav, xls). 2.4
	5 Demonstrate proficiency in using gadgets, icons, and taskbars and other pre-loaded operating system programs. (e.g., calculator, text editor, clock, volume controls, adding icons and shortcuts to taskbar and shortcut menus). 2.5
Demonstrate an un Int	**1** Describe risks associated with social networking sites (e.g., FaceBook, Snapchat, nstagram, Twitter) and ways to reduce these risks. 3.1

Skip to main content

ethics. The student will be able to: 3.0	**2** Define “privacy” and relate it to the term “digital footprint”. 3.2
	3 Practice cyber safety techniques to protect your personal information when using internet searches, email, chat rooms, and social network websites. 3.3
	4 Describe cyberbullying, its impact on perpetrators and victims and ways to respond. 3.4
	5 Describe risks associated with sexting (including legal issues, social consequences), and discuss methods for response, reporting, and prevention. 3.5
	6 Describe risks associated with online gaming, and identify ways to reduce these risks. 3.6
	7 Discuss issues related to downloading music or videos from the Internet, including unethical vs. illegal actions. 3.7
	8 Compare and contrast rules for copyright and fair use, especially in relation to using online resources for school and educational purposes. 3.8
	9 Distinguish between viruses and malware and discuss their impact on personal privacy and computer operation. 3.9
	10 Describe common threats used to spread malware and viruses, including phishing, pharming, Trojans, spyware, malicious sites, “free” downloads. 3.10
	11 Perform an antivirus scan on a computer system to check for viruses and malware. 3.11
	12 Describe strong password practices. 3.12
	13 Practice cyber safety techniques to protect your computer system when using Internet searches, email and social network websites. 3.13
	14 Identify security issues related to mobile phones, including personal information compromised if a phone is lost or stolen. 3.14
	15 Adhere to Acceptable Use Policies when accessing the Internet. 3.15
Demonstrate proficiency using the Internet to locate information. The student will be able to: 4.0	**1** Identify and use web terminology (WWW, Web Browser, Internet, Web Server, Web Page, Address Bar, Hyperlinks, Navigation Buttons, Search Bar, Bookmarks/Favorites, Tab, Downloading, Plug-ins, Social Media Plug-ins). 4.1
	2 Define Universal Resource Locators (URLs) and associated protocols (e.g., http, ftp, telnet, mailto). 4.2
	3 Compare and contrast the types of Internet domains (e.g., .com, .org, .edu, .gov, net, .mil). 4.3

Skip to main content

4 Demonstrate proficiency using search engines, including Boolean search techniques. 4.4

5 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, PDF). 4.5

6 Compare and contrast the roles of web servers and web browsers. 4.6

7 Evaluate online information for relevance, credibility and quality using basic guidelines and indicators (e.g. authority, affiliation, purpose, bias, date). 4.7

8 Identify and apply copyright and fair use guidelines, and explain plagiarism as an ethical and legal violation. 4.8

9 Incorporate results from Internet searches into a research project (e.g., report, summary). 4.9

10 Download images as needed to support a research project, complying with copyright notices. 4.10

11 Properly cite Internet sources used to obtain information for a research project. 4.11

Demonstrate proficiency in using word processing software. The student will be able to: 5.0

1 Describe the general functions of word-processing software, including benefits for document creation, commonly used word-processing applications. 5.1

2 Define the term “cloud computing,” and explain benefits of creating and storing word-processing documents online. 5.2

3 List and describe common word processor interface tools and features. 5.3

4 Identify common keyboard shortcuts used in word processors, and explain the benefits of using shortcuts. 5.4

5 Format the page setup of a document, including margins, line spacing, indents, headers vs. footers, orientation. 5.5

6 Explain printing options in a word processor, including shrink-to-fit, 2-sided printing, and document orientation. 5.6

7 Copy, paste and move text within a document using mouse, menu and keyboard techniques. 5.7

8 Copy, paste and move text among multiple documents using mouse, menu and keyboard techniques. 5.8

9 Modify document view settings to display close-up, single and multiple pages. 5.9

Skip to main content

10 Define the term “format” as it relates to word processing. 5.10

11 **Format text using styles and font tools in a word processor.** 5.11

12 **Format a document using multi-level heading styles to enable an outline view (e.g. document map, navigation pane) in a word processor.** 5.12

13 **Create a table of contents using auto-generation tools and techniques in a word processor.** 5.13

14 **Insert page breaks in a document.** 5.14

15 **Create source citations and/or a bibliography in a document.** 5.15

16 **Insert a current date and time stamp into a document.** 5.16

17 **Use word processor tools to determine the number of pages, words and characters in a document.** 5.17

18 **Use spell check, grammar check, thesaurus, and find & replace to edit a document.** 5.18

19 **Insert and modify sizing of images in a word-processing document.** 5.19

20 **Position an image relative to text in a document, using various text-wrapping options (inline, square, tight).** 5.20

21 **Use word-processing drawing tools to create pre-formatted shapes that enhance a document's content.** 5.21

22 **Use word-processor drawing tools to create a visual representation of information (e.g. SmartArt), such as diagram, flow chart.** 5.22

23 **Apply a column layout to text in a document as appropriate for the content (e.g., article, newsletter).** 5.23

24 **Apply simple numbered and bulleted lists in a document to make content easier to read and understand.** 5.24

25 **Format numbered and bulleted lists to produce multi-level outline in a document.** 5.25

26 **Create a simple brochure and/or flyer using a template.** 5.26

27 **Create a table in a word-processing document, and enter and move data in the table.** 5.27

28 **Convert a body of text into a table structure in a document to make content easier to read and understand.** 5.28

Skip to main content

	29 Define “collaboration” and explain ways that users can collaborate on word-processing documents, including installed software vs. cloud-based software, real-time collaboration, auto save, sharing tools, revision history. 5.29
	30 Use the translation tool in a word processor to translate text in a document from English into another language, and vice versa. 5.30
	31 Add comments to a document when reviewing and/or editing content. 5.31
	32 Revise a document using editing tools (e.g. Track Changes) in a word processor, and accept or reject changes as appropriate. 5.32
Demonstrate proficiency in using presentation software. The student will be able to: 6.0	1 Describe presentation software and the ways it can be used. 6.1
	2 Create and/or modify a “slide master” or template to apply a consistent appearance to a presentation. 6.2
	3 Add and format titles, subtitles and talking points in presentation slides. 6.3
	4 Add slide numbers and/or date and time codes to presentation slides. 6.4
	5 Insert and format images/graphics in presentation slides. 6.5
	6 Insert new or duplicate slides in a presentation. 6.6
	7 Modify slide transitions in a presentation to include animation. 6.7
	8 Insert and/or modify sound settings and timing in a presentation. 6.8
	9 Modify the sequence of slides in a presentation. 6.9
	10 Produce a presentation that includes text, graphics and images, and present it. 6.10
	11 Modify a presentation’s setup to repeat (i.e., loop) the presentation continuously. 6.11
Demonstrate proficiency in using graphics software. The student will be able to: 7.0	1 Describe graphics software and the ways it can be used. 7.1
	2 Compare and contrast vector and raster images. 7.2
	3 Identify image file formats for photos and graphical art (e.g., TIFF, BMP, PSD, EPS, JPEG, GIF, PNG), and specify which formats are supported on the web. 7.3
	4 Define terms related to the creation and display of graphical images (e.g., raster, vector, transparency, opacity, cropping, lasso, magic wand, marquee, canvas size, flattened, blur, dodge, sharpen, staking order, free transform, lossless, djustments, move, clone, zoom, layers, filter, distort). 7.4

Skip to main content

	5 Create images with effects using different tools, brushes, adjustments and filters available in graphics software. 7.5
	6 Copy and paste graphical images. 7.6
	7 Modify shapes and colors in a graphical image. 7.7
	8 Save and export a digital photograph in a format that provides the best image quality and file size for Internet use. 7.8
	9 Create a progressive slide presentation using graphical design/layout template features (e.g., SmartArt) and animated transitions. 7.9
	10 Use a portable digital video device (e.g., mobile phone, flip camera) or similar online tools to shoot video files, and transfer them to a computer. 7.10
	11 Use video-editing software to produce a slide show or movie. 7.11
	12 Create a multimedia presentation that incorporates edited video, animation, music and/or narration, and that applies principles of good design, smooth transitions and effective message delivery. 7.12
Demonstrate appropriate use of email. The student will be able to: 8.0	1 Define “email “and describe the functions and advantages as a form of communication. 8.1
	2 Identify components of an email message. 8.2
	3 Explain the format of an email address (i.e., user name, @ symbol, domain). 8.3
	4 Attach a file to an email message. 8.4
	5 Reply to and forward an email message to one or more addressees. 8.5
	6 Use the Internet to perform email activities (i.e., web-based email). 8.6
	7 Identify the appropriate use of email and demonstrate related email etiquette. 8.7
	8 Perform email organization and cleanup (e.g., trash, flags, create folders). 8.8