

Basic Operations

K-2	3-5	6-8	9-12
<ul style="list-style-type: none"> • Start, restart, and correctly shut down the computer. • Click, double-click, and click and drag the mouse. • Recognize program and document icons. • Open and exit programs correctly. • Click on an icon, folder, or document to open or start a program. • Log on and off the NPS network correctly. • Identify the parts of a computer. 	<ul style="list-style-type: none"> • Open and save files to their own network drive (U drive/MyStuff). • Insert, eject, and properly care for a CD-ROM. • Print a document. • Open, close, minimize, and resize a window. • Insert a letter or word using the cursor. • Use the mouse to choose options in a menu. • Rename a file. • Delete files. • Create a new folder and move files to that folder. • Use "Save" and "Save as" appropriately to save documents or create new versions of a document 	<ul style="list-style-type: none"> • Customize their desktop (UDT). • Move between two or more open programs. • Resize and move windows. • Use Page Setup and Print Preview. • View file Properties to determine memory size. • Use a virus scanner to protect and maintain files. 	<ul style="list-style-type: none"> • Create and organize folders in multiple ways, and save to different disks and drives. • Set preferences and options in different software programs, change control panel settings, create shortcuts on the desktop, and add printer settings. • Check for computer viruses and know how to prevent them. • Recognize different common file extensions, use online applications (PDF, plug-ins), and understand memory size. • Burn a CD, use a digital cameras, scanner, LCD projector, fax machine, printer, and be familiar with video/audio applications.

Acceptable Use & Ethics

K-2	3-5	6-8	9-12
<ul style="list-style-type: none"> • Describe and exhibit responsible and appropriate use of computers, disks, and peripherals. • Explain and practice the rules of NPS policies related to Internet and computer use. 	<ul style="list-style-type: none"> • Explain and practice the rules of NPS policies related to Internet and computer use. • Explain Internet safety guidelines. • Explain and respect copyright law. 	<ul style="list-style-type: none"> • Identify ethical and unethical uses of computers, networks, and other technologies. • Demonstrate an understanding of plagiarism and its consequences. • Explain Internet safety guidelines. 	<ul style="list-style-type: none"> • Use email appropriately. • Use email and chat safely. • Follow copyright laws and explain the concepts of Fair Use, intellectual property and intellectual freedom. • Explain how hacking, filtering, information technology and business practices, government controls, and access to technology and privacy issues affect you and the world in general. • Explain how technology affects the natural environment.

Graphics

K-2	3-5	6-8	9-12
<ul style="list-style-type: none"> • Use tools in a paint program. • Change colors and patterns in a paint program. • Use the line and shape tools in a paint program. • Use the text tool to describe a picture in a paint program. 	<ul style="list-style-type: none"> • Use the shape tools, change the size or shape of an object, and change an object's pattern or color in a draw program. • Use the text tool, move, and copy and paste objects in a draw program. • Insert, move, and resize a graphic in a document. • Use a scanner or digital camera. • Rotate and flip objects in a draw program. • Import a digital image into other documents. 	<ul style="list-style-type: none"> • Use tools and options in a draw program or on a draw toolbar. • Use Microsoft Word Art in a document. 	<ul style="list-style-type: none"> • Use graphics software to edit photos. • Use graphics software to create original graphics. • Use video cameras, computers, and software to create short movies.

Word Processing & Desktop Publishing

K-2	3-5	6-8	9-12
<ul style="list-style-type: none"> • Enter text. • Delete text. • Select text and change the text size, font, and style. • Insert clip art. 	<ul style="list-style-type: none"> • Use text alignment. • Use text/word wrap. • Copy, cut, and paste. • Create columns and tables. • Insert photos and graphics from other files. 	<ul style="list-style-type: none"> • Use bullets and numbered lists. • Use the spell checker, dictionary, and thesaurus. • Use the principles and elements of visual design. • Create a newsletter. • Create a booklet or tri-fold brochure. 	<ul style="list-style-type: none"> • Insert graphs or charts. • Use stationary and templates. • Change preferences and options. • Use the find and replace function. • Create text boxes and draw objects. • Set margins, justification, and line spacing. • Insert links to web sites or other files. • Use headers and footers; insert date and page numbers.

Online Research & Information Literacy

K-2	3-5	6-8	9-12
<ul style="list-style-type: none"> • Students use a web browser, buttons and hypertext links. • Students use a favorites/bookmarked list to access web sites. • Students do a keyword search using an online encyclopedia. • Students enter an internet address (URL) to access a web site. • Students bookmark web sites. • Students use search engines. • Students use a library database to find information. 	<ul style="list-style-type: none"> • Students can search using a keyword, name, title, author, and phrase. • Students use Boolean search terms (AND, OR, NOT). • Students design a search strategy, narrowing the search parameters as needed. • Students develop and implement a project using online resources. • Students analyze and evaluate the accuracy and credibility of web resources. • Students skim online text for main ideas. • Students gather information from several online sources and save the text in a word processing document. • Students create an outline for a report using a word processor or concept mapping software. 	<ul style="list-style-type: none"> • Students use multiple search engines. • Students use the Find function in a browser to locate specific information on a web page. • Students capture information from several CD-ROM articles or web sites and transfer notes to a notepad or word processor. • Students cite the resources they use. • Students use content-specific tools and software (science probes, calculators, simulation, etc.) to support learning and research. 	<ul style="list-style-type: none"> • Effectively use a variety of search engines, online databases and search techniques, and know how these tools rank and choose “hits.” • Evaluate accuracy and quality of information. • Use correct bibliographic citation.

Database & Spreadsheet

3-5	6-8	9-12
<ul style="list-style-type: none"> • Students enter data into database templates. • Students explain what a database is and demonstrate how it works. • Students create and sort simple databases. • Students explain the purpose and uses of a spreadsheet. • Students create simple spreadsheets, enter data, and graph the results. 	<ul style="list-style-type: none"> • Students use Find, Sort, and Show and Hide functions in a database. • Students use a database to look for relationships and test hypotheses. • Students design, create, and test the effectiveness of a database. • Students format cells in a spreadsheet. • Students use formulas in a spreadsheet. • Students sort, insert, and delete cells in a spreadsheet. • Students add a header and a footer to a spreadsheet • Students insert spreadsheets and graphs in other documents. • Students use a spreadsheet to analyze trends and test hypotheses. • Students design a spreadsheet and test its effectiveness. 	<ul style="list-style-type: none"> • Create and use spreadsheets and databases for assessment, productivity and problem solving.

Multimedia & Web Pages

3-5	6-8	9-12
<ul style="list-style-type: none"> • Collaborate in the creation of a multimedia slide show containing text and graphics. • Use different views to create and organize multimedia presentations. • Individually create a multimedia slide show presentation. • Use transitions and create simple animations in a multimedia program. • Add sounds to a multimedia presentation. • Students create simple web pages using a web page design/editing program. • Students create hypertext links and insert graphics in simple web pages. • Students collaborate to create class web pages or online class projects. 	<ul style="list-style-type: none"> • Modify the color scheme in a multimedia presentation. • Insert graphs and charts in a multimedia presentation. • Import sounds in a multimedia product. • Create a non-linear (branching) presentation or instructional game. • Use transitions and create simple animations in a multimedia product. • Print audience handouts to go with a multimedia product. • Students create simple web pages using a web page design/editing program. • Students create hypertext links, mailto links, and insert graphics in simple web pages. 	<ul style="list-style-type: none"> • Create multimedia presentations with custom animation. • Create presentations with Internet links. • Add background music and narration to a presentation. • Insert video clips in a presentation. • Create a presentation using navigation buttons and non-linear design • Create web pages with graphics, links, and tables. • Use graphics and video software to create graphics, edit photos and create short movies.