

IC3 GS6 Level 1

Objective Domains

1. Technology Basics

1.1 Access and navigate between digital environments

- 1.1.1 Recognize operating system terms and concepts
- 1.1.2 Explain basic functions of web browsers
- 1.1.3 Explain processes and requirements for accessing digital environments
- 1.1.4 Explain methods of navigating between digital environments

1.2 Identify digital devices and connections

- 1.2.1 Identify input devices
- 1.2.2 Identify output devices
- 1.2.3 Identify cables, connectors, and connections

1.3 Explain fundamental software concepts

- 1.3.1 Explain basic software application concepts
- 1.3.2 Compare and contrast proprietary and open source software
- 1.3.3 Describe processes for installing software from online sources

1.4 Explain fundamental hardware concepts

- 1.4.1 Describe concepts related to computing devices
- 1.4.2 Describe concepts related to memory
- 1.4.3 Describe concepts related to data storage

1.5 Explain fundamental operating system concepts

- 1.5.1 Compare and contrast features of mobile device operating systems
- 1.5.2 Compare and contrast features of computer operating systems

1.6 Explain fundamental networking concepts

- 1.6.1 Describe network connectivity concepts
- 1.6.2 Describe online connectivity concepts
- 1.6.3 Compare and contrast network and connection types
- 1.6.4 Describe networking infrastructure
- 1.6.5 Identify whether a device is connected
- 1.6.6 Describe basic network troubleshooting techniques

2. Digital Citizenship

2.1 Create and manage a digital identity

- 2.1.1 Explain how to manage personal data online
- 2.1.2 Explain how to manage personally identifiable information
- 2.1.3 Explain how to maintain digital privacy and security

2.2 Cultivate, manage, and protect your digital reputation

- 2.2.1 Recognize the permanence of actions in the digital world
- 2.2.2 Recognize legal and ethical behavior when using technology

2.3 Respond to inappropriate digital behavior and content

- 2.3.1 Explain the impact of negative digital communication
- 2.3.2 Assess the validity of online information
- 2.3.3 Explain the importance of online anonymity
- 2.3.4 Explain the value of nonresponse to negative communication

3. Information Management

3.1 Use and refine criteria for online searches

- 3.1.1 Define the information required to complete a given task
- 3.1.2 Distinguish between relevant and irrelevant search results
- 3.1.3 Collect and retain source reference information for search and research results

3.2 Understand methods for searching within digital content

- 3.2.1 Explain features that enable you to locate information in a file
- 3.2.2 Explain features that enable you to locate information on a webpage

3.3 Understand copyright and licensing restrictions for digital content

- 3.3.1 Explain the basics of public domain content
- 3.3.2 Explain the basics of Creative Commons content

4. Content Creation

4.1 Create basic documents and presentations

- 4.1.1 Display proficiency in creating basic documents
- 4.1.2 Display proficiency in creating basic presentations

4.2 Understand accepted referencing and attribution practices

- 4.2.1 Define referencing and attribution
- 4.2.2 Explain the purpose of referencing and attribution
- 4.2.3 Locate online referencing and attribution sources
- 4.2.4 Implement appropriate online citations in a given document

4.3 Save and back up work

- 4.3.1 Determine how, when and where to back up data in a typical digital work setting
- 4.3.2 Implement file management principles and naming conventions

4.4 Understand fundamental printing concepts

- 4.4.1 Describe portrait vs landscape orientation
- 4.4.2 Describe double-sided printing
- 4.4.3 Explain common print settings
- 4.4.4 Explain printing methods

5. Communication

5.1 Express yourself through digital means

- 5.1.1 Know where you can post or share in the digital world
- 5.1.2 Be aware of platform-specific guidelines for posting and sharing
- 5.1.3 Understand and follow acceptable use policies for posting and sharing

5.2 Interact with others in a digital environment

- 5.2.1 Implement digital interactions in a given digital technology
- 5.2.2 Differentiate between effective and ineffective digital interaction methods
- 5.2.3 Demonstrate the use of inclusive language
- 5.2.4 Differentiate among email response options

6. Collaboration

6.1 Identify digital collaboration concepts

- 6.1.1 Identify the benefits of digital collaboration
- 6.1.2 Define synchronous and asynchronous communications
- 6.1.3 Identify methods to review work and provide feedback to peers

6.2 Identify digital etiquette standards for collaborative processes

- 6.2.1 For written digital collaboration
- 6.2.2 For visual digital collaboration

7. Safety and Security

7.1 Describe digital security threats

7.2 Protect devices and digital content

- 7.2.1 Identify features of secure passwords
- 7.2.2 Identify when and how to reset a password
- 7.2.3 Identify when and how to lock a device
- 7.2.4 Explain how to clear saved browser settings

7.3 Be aware of data-collection technology

- 7.3.1 Describe how navigation tracking works
- 7.3.2 Describe security concerns related to navigation tracking
- 7.3.3 Describe security concerns related to storing information on a device
- 7.3.4 Describe the benefits of private mode browsing

7.4 Identify health risks associated with the use of digital technologies

- 7.4.1 Identify mental health risks associated with online technologies
- 7.4.2 Identify physical health threats associated with computer and device usage

IC3 GS6 Level 2

Objective Domains

1. Technology Basics

1.1 Customize digital environments

- 1.1.1 Configure device settings to meet individual needs and preferences
- 1.1.2 Configure browser settings to meet individual needs and preferences

1.2 Use a personal digital calendar

- 1.2.1 Create appointments or tasks on a personal digital calendar
- 1.2.2 Share a personal digital calendar with others
- 1.2.3 Display specific information on your personal calendar

1.3 Define higher-level technology concepts

- 1.3.1 Describe automation methods
- 1.3.2 Describe cloud computing
- 1.3.3 Describe and understand the use of autocorrect functions
- 1.3.4 Describe and understand the use of autocomplete functions

1.4 Explain and implement common hardware adjustments

- 1.4.1 Locate and adjust volume settings
- 1.4.2 Locate and adjust monitor brightness controls
- 1.4.3 Locate and adjust monitor contrast controls
- 1.4.4 Describe the purpose of universal design

1.5 Explain core printer concepts

- 1.5.1 Distinguish between laser and inkjet printers
- 1.5.2 Confirm a successful connection to a printer
- 1.5.3 Select a default printer

1.6 Identify digital devices and connections

- 1.6.1 Define processing devices
- 1.6.2 Distinguish between categories of data cables and connectors

2. Digital Citizenship

2.1 Create and manage multiple digital identities

- 2.1.1 Differentiate between personal and professional digital identities
- 2.1.2 Manage multiple site credentials

2.2 Apply digital etiquette standards

- 2.2.1 Implement situational digital etiquette standards
- 2.2.2 Determine the appropriate time to send a communication
- 2.2.3 Describe digital etiquette standards for content
- 2.2.4 Display sensitivity to cultural diversity

2.3 Seek opportunities to increase your digital competence

- 2.3.1 Be aware of technological advancements
- 2.3.2 Use help features and community resources
- 2.3.3 Seek feedback that informs and improves your learning

3. Information Management

3.1 Determine digital information needs and requirements

- 3.1.1 Understand key search terms
- 3.1.2 Demonstrate how to filter search results

3.2 Determine the veracity of an individual search result or digital artifact

- 3.2.1 Assess the accuracy of a search result or digital artifact
- 3.2.2 Validate the perspective of a search result or digital artifact
- 3.2.3 Assess the bias of a search result or digital artifact
- 3.2.4 Determine the credibility of a search result or digital artifact
- 3.2.5 Assess the relevance of a search result or digital artifact

3.3 Manage online data collection, storage, and retrieval

- 3.3.1 Explain methods of collecting digital data and responses
- 3.3.2 Explain and interact with central data storage systems
- 3.3.3 Fill out online forms

4. Content Creation

4.1 Create and edit digital content

- 4.1.1 Prepare structured documents
- 4.1.2 Prepare presentations
- 4.1.3 Prepare basic spreadsheets
- 4.1.4 Perform basic image editing
- 4.1.5 Display proficient keyboarding skills
- 4.1.6 Track changes in a document
- 4.1.7 Use common shortcuts

4.2 Manage digital information and files

- 4.2.1 Organize, store, and retrieve data and content
- 4.2.2 Explain benefits and methods of compressing files
- 4.2.3 Explain and identify ownership of data in various storage locations
- 4.2.4 Distinguish between read-only and read-write files
- 4.2.5 Implement password protection
- 4.2.6 Restore previous versions of a file

4.3 Responsibly repurpose digital resources

- 4.3.1 Understand the rights and obligations of using or sharing intellectual property
- 4.3.2 Unify design elements by using design themes and artistic styles

4.4 Publish or present content for a specific audience

- 4.4.1 Determine how to customize information for a given audience
- 4.4.2 Determine the file format that will work for a given user
- 4.4.3 Describe basic video-editing techniques

5. Communication

5.1 Interact with others in a digital environment

- 5.1.1 Choose appropriate communication platforms and tools
- 5.1.2 Compose email messages
- 5.1.3 Interact with members of a digital community
- 5.1.4 Use online resources to determine availability of community services

5.2 Understand Internet commerce basics

- 5.2.1 Describe goods and services
- 5.2.2 Explain how digital payments work
- 5.2.3 Describe in-app purchases and their security concerns
- 5.2.4 Identify examples of media streaming services

6. Collaboration

6.1 Use digital tools and technologies to collaborate on the creation of content

- 6.1.1 List digital tools used for collaboration
- 6.1.2 Explain the benefits of collaboration
- 6.1.3 Compare and contrast synchronous editing and asynchronous editing
- 6.1.4 Describe coauthoring techniques
- 6.1.5 Explain methods used to review and provide feedback to peers

6.2 Apply digital etiquette standards for collaborative processes

7. Safety and Security

7.1 Avoid health risks and physical harm while using digital technologies

7.2 Avoid mental health threats while using digital technologies

- 7.2.1 Explain the concept of Catfishing
- 7.2.2 Explain "FOMO" (fear of missing out)
- 7.2.3 Explain the potential dangers and consequences of negative media posts

7.3 Understand device security

- 7.3.1 Identify untrusted media devices
- 7.3.2 Define encryption
- 7.3.3 Explain when blocking camera access is appropriate and necessary

7.4 Understand file security

- 7.4.1 Identify password protection file options
- 7.4.2 Explain editing restrictions

IC3 GS6 Level 3

Objective Domains

1. Technology Basics

1.1 Evaluate software and hardware devices

- 1.1.1 Assess hardware requirements and software requirements
- 1.1.2 Identify devices that meet specific needs
- 1.1.3 Identify software programs that meet specific needs
- 1.1.4 Identify the minimum system requirements of software programs

1.2 Identify digital devices, apps, and add-ins to meet specific requirements

- 1.2.1 Select appropriate hardware platforms and tools for a given use
- 1.2.2 Select the appropriate software and tools to use for a given task

1.3 Use multiple and group digital calendars

- 1.3.1 Create appointments on group calendars
- 1.3.2 Create tasks for other users
- 1.3.3 Schedule meetings

1.4 Identify, troubleshoot, and resolve technical problems with assistance

- 1.4.1 Deconstruct problems into their component parts
- 1.4.2 Obtain system information to support troubleshooting
- 1.4.3 Identify information that can be restored from a backup

1.5 Understand selected software concepts

- 1.5.1 Understand software licensing
- 1.5.2 Understand software versioning
- 1.5.3 Understand how to set software defaults
- 1.5.4 Understand how browser extensions work

2. Digital Citizenship

2.1 Understand how to protect others' personally identifiable information

- 2.1.1 Discuss privacy as it applies to social media
- 2.1.2 Explain the need for and how to achieve privacy at the workplace
- 2.1.3 Understand the sensitivity and responsibility that comes with knowing another's password and account information
- 2.1.4 Avoid broadcasting other people's information without permission
- 2.1.5 Responsibly report dangerous, illegal, or harmful behavior

2.2 Explain best practices for digital citizenship

- 2.2.1 Explain why digital literacy requires a literate person to constantly update their digital knowledge
- 2.2.2 Assess advancements in security practices
- 2.2.3 Explain how to use common features across similar applications

3. Information Management

3.1 Construct an effective information search

- 3.1.1 Search by using keywords
- 3.1.2 Search by using images
- 3.1.3 Determine when a location-based search is appropriate
- 3.1.4 Determine when a Boolean search is appropriate

3.2 Evaluate digital information sources and multiple search results

- 3.2.1 Assess the accuracy of information returned in a search
- 3.2.2 Assess the perspective through which information is filtered and presented on a given site
- 3.2.3 Assess bias in search results
- 3.2.4 Assess the credibility of the information presented on a website
- 3.2.5 Assess the relevance of search results

4. Content Creation

4.1 Create, edit, and publish or present original digital media content

- 4.1.1 Enhance visual presentations by using appropriate audio
- 4.1.2 Prepare video for distribution by cutting or compressing
- 4.1.3 Consider the audience, purpose and technical limitations of devices when determining what is or is not appropriate to post

4.2 Gather information from digital resources using a variety of tools and methods to create relevant content

- 4.2.1 Produce business graphics by using productivity software
- 4.2.2 Build tables, charts, and visual representations of raw data

4.3 Compose procedural flowcharts and instructions

4.4 Manage digital information and files

4.5 Understand the principles of cloud versioning

4.6 Be aware of challenges and solutions for accessibility

- 4.6.1 Explain the effects of color contrast on the visually impaired
- 4.6.2 Explain the importance of font size and selection
- 4.6.3 Explain readability, what it is and how it is achieved
- 4.6.4 Explain what alt text is and how it is used

4.7 Apply intellectual property standards

- 4.7.1 Implement intellectual property guidelines for reusing another's work
- 4.7.2 Explain how to protect individual and corporate intellectual property

5. Communication

5.1 Customize the message and medium for a specific audience

5.2 Use digital tools to engage with people in ways that broaden mutual understanding and learning

5.3 Communicate complex ideas clearly and effectively by using digital objects such as visualizations, models or simulations

5.4 Manage interpersonal digital communications

- 5.4.1 Identify strategies to clarify ambiguity in digital communications
- 5.4.2 Demonstrate the capacity to work with open-ended problems in a digital environment

5.5 Plan and manage a cyclical design process for digital projects

- 5.5.1 Identify requirements
- 5.5.2 Consider design constraints
- 5.5.3 Generate ideas
- 5.5.4 Test theories
- 5.5.5 Develop, test, and refine prototypes

6. Collaboration

6.1 Use collaborative technologies to work with others to examine issues and problems

6.2 Contribute constructively to project teams

7. Safety and Security

7.1 Manage device security

- 7.1.1 Explain encryption
- 7.1.2 Explain biometric passwords
- 7.1.3 Explain how to scan for viruses
- 7.1.4 Explain what it means to 'wipe a device'
- 7.1.5 Explain social engineering attacks

7.2 Be aware of the physical and environmental impact of digital tools and technologies