

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 Identify and explain common hardware adjustments

- 1.4.1 Identify and explain common sound setting adjustments
- 1.4.2 Identify and explain monitor brightness and contrast controls

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 Assess 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 Workbooks
- 4.1.4 Perform basic image editing
- 4.1.5 Describe basic video-editing techniques
- 4.1.6 Display proficient keyboarding skills
- 4.1.7 Track changes in a document
- 4.1.8 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 Explain file versioning concepts

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

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

- 6.2.1 Video conferences
- 6.2.2 Webinars

7. Safety and Security

7.1 Avoid health risks and physical harm while using digital technologies

- 7.1.1 Describe health risks of standard computing practices
- 7.1.2 Describe risks of internet use
- 7.1.3 Describe the purpose of universal hardware design

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 methods of protecting against untrusted portable media devices
- 7.3.2 Define device encryption and identify encryption methods
- 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 and software requirements
- 1.1.2 Identify digital devices that meet specific requirements
- 1.1.3 Identify software programs that meet specific needs

1.2 Identify, troubleshoot, and resolve technical problems with assistance

- 1.2.1 Identify basic troubleshooting steps
- 1.2.2 Obtain system information to support troubleshooting

1.3 Understand selected software concepts

- 1.3.1 Understand software licensing concepts
- 1.3.2 Understand software versioning concepts
- 1.3.3 Identify processes for setting software defaults
- 1.3.4 Explain how to use common features across similar applications

2. Digital Citizenship

2.1 Understand how to protect others' personally identifiable information

- 2.1.1 Explain the need for and how to achieve online privacy
- 2.1.2 Explain the need for and how to achieve privacy at the workplace
- 2.1.3 Explain the responsibility that comes with knowing another's password and account information
- 2.1.4 Avoid broadcasting other people's information without permission

2.2 Explain best practices for digital citizenship

- 2.2.1 Keep your digital knowledge current
- 2.2.2 Responsibly report dangerous, illegal, or harmful behavior

3. Information Management

3.1 Construct an effective information search

- 3.1.1 Design an effective search request
- 3.1.2 Determine when a Boolean search is appropriate

3.2 Evaluate digital information sources and multiple search results

- 3.2.1 Assess the accuracy, bias, credibility, or relevance of search results
- 3.2.2 Assess the perspective through which information is filtered and presented on a given site

4. Content Creation

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

- 4.1.1 Capture and edit video and audio content and images
- 4.1.2 Finalize and distribute video and audio content and images
- 4.1.3 Consider the audience and purpose when determining what to distribute

4.2 Represent data visually

- 4.2.1 Identify the appropriate visual formats to express various data sets
- 4.2.2 Produce business graphics by using productivity software
- 4.2.3 Build tables, charts, and visual representations of raw data
- 4.2.4 Compose procedural flowcharts and instructions

4.3 Manage digital information and files

- 4.3.1 Identify the principles of cloud versioning
- 4.3.2 Consider variables when delivering digital content

4.4 Be aware of challenges and solutions for accessibility

- 4.4.1 Explain the effects of color contrast on the visually impaired
- 4.4.2 Explain the importance of font size and selection
- 4.4.3 Explain what readability is and how it is achieved
- 4.4.4 Explain what alt text is and how it is used

4.5 Apply intellectual property standards

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

4.6 Plan and manage a cyclical design process for digital projects

- 4.6.1 Identify requirements, consider design restraints, generate ideas, test theories
- 4.6.2 Develop, test, and refine prototypes

5. Communication

5.1 Manage interpersonal digital communications

- 5.1.1 Identify strategies to clarify ambiguity in digital communications
- 5.1.2 Customize the message and medium for a specific audience
- 5.1.3 Engage with people in ways that broaden mutual understanding and learning

5.2 Communicate with others to identify and understand issues

- 5.2.1 Work with internal team members to identify and understand issues
- 5.2.2 Interact appropriately with external clients to identify and understand issues

6. Collaboration

6.1 Collaborate with others to resolve issues

- 6.1.1 Work with internal team members to resolve issues
- 6.1.2 Interact appropriately with external clients to resolve issues

6.2 Contribute constructively to project teams

7. Safety and Security

7.1 Manage device security

- 7.1.1 Explain multifactor authentication concepts
- 7.1.2 Explain virus-scanning concepts
- 7.1.3 Manage the transfer of hardware to others

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

- 7.2.1 Identify the physical impact of digital tools and technologies
- 7.2.2 Identify the environmental impact of digital tools and technologies