DIGITAL LITERACY *for the* CONSTRUCTION INDUSTRY

Instructor Workbook

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Preface

Developing and enhancing Adult Education curriculum that educates learners about digital literacy skills and provides them with opportunities to explore, experiment, and develop expertise using real-world applications can help prepare learners to successfully find, evaluate, create, and communicate information within the workforce.

Within the construction industry, digital literacy plays an integral role in employee advancement across disciplines. Employees who possess digital literacy skills have an increased ability to problem solve, demonstrate efficiency, and collaborate. In a technology-driven workforce, employers recognize the importance of digitally literate employees.

Purpose Statement

This course content is aligned with the Texas Adult Education and Literacy Content Standards 3.0 and O*NET Online elements, as well as an adapted adult digital literacy framework from the Maryland Department of Labor.

This course is designed for you to use hands-on activities to teach your learners the basic digital skills needed for working in the construction field, with a focus on computer-based skills, like writing emails and creating documents and spreadsheets.

Learning these skills will enhance employee opportunities for promotion and job-related mastery across the construction industry. Upskilling the workforce ensures employers that potential employees are equipped to participate in the evolving digital literacy landscape.
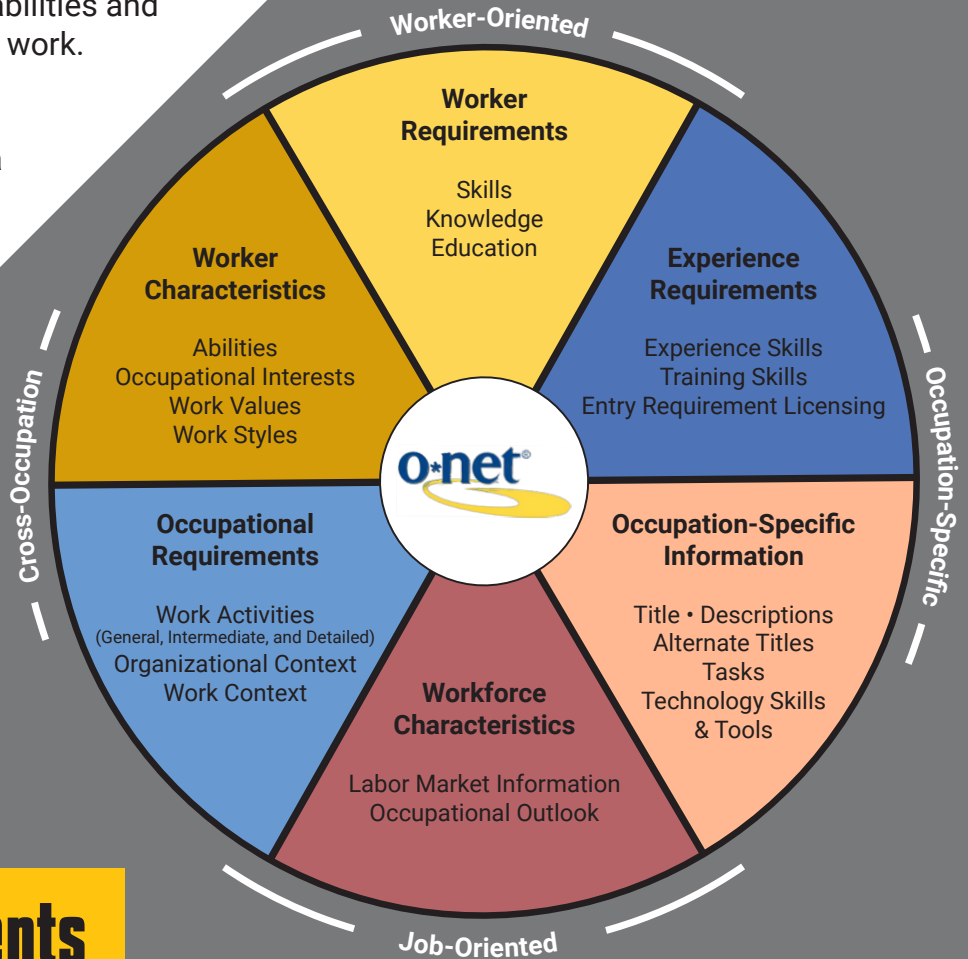
Texas Adult Education and Literacy Content Standards 3.0

Texas Adult Education and Literacy Content Standards 3.0 (AEL) aligns Texas Adult Education and Literacy Content Standards to the knowledge, skills, and abilities required for success in high-demand entry and intermediate-level jobs. AEL standards merge employer needs with content-related skills in areas of English Language Learners (ESL), Math, History, Civics, and English.

According to the Texas Workforce Commission, Standards 3.0 aims to illustrate how the standards are relevant to work while maintaining the competencies needed to prepare students for educational progress and to transition to post-secondary education or training. This is accomplished by bridging the academic standards to crosswalks that define the specific knowledge, skills, and abilities and detailed work activities required for work.

The digital literacy curriculum uses the Standards 3.0, which provides a clear outline of content and skills for programs to develop and align curriculum, instruction, and assessments. This curriculum supports adult education students for their education, training, and career goals.

Worker-Oriented

Worker Requirements
Skills
Knowledge
Education

Experience Requirements
Experience Skills
Training Skills
Entry Requirement Licensing

Worker Characteristics
Abilities
Occupational Interests
Work Values
Work Styles

O*net®

Occupation-Specific Information
Title • Descriptions
Alternate Titles
Tasks
Technology Skills
& Tools

Cross-Occupation

Occupational Requirements
Work Activities
(General, Intermediate, and Detailed)
Organizational Context
Work Context

Workforce Characteristics
Labor Market Information
Occupational Outlook

Occupation-Specific

Job-Oriented

O*NET OnLine Elements

O*NET OnLine provides the O*NET Content Model, which encapsulates the key features of an occupation into a standardized, measurable set of variables called "descriptors." The hierarchical model starts with six domains, describing the day-to-day aspects of the job and the qualifications and interests of the typical worker. This provides a framework for the development of a comprehensive, targeted curriculum for the construction workforce.

Digital Literacy Framework for Adult Learners

The Digital Literacy Framework for Adult Learners was developed for adult learners in Maryland and adapted for the Texas workforce. The overarching goal is to further define, for adult learners at different levels, the elements required to navigate and fully participate in the constantly evolving digital landscape.

The framework provides guidance for integration into already existing contexts, resulting in unique and flexible applications related to digital technology. Digital literacy is not solely about the operational skills, but is also about cognitive processes such as analyzing, collaborating, and communicating that empower adult learners to operate seamlessly in digital environments.

The Digital Literacy Framework for Adult Learners identifies seven interconnected, essential elements of a digitally literate adult learner. Within each element, a definition, guiding questions, a description, and situational examples exist.

Digitally Literate Adult Learner
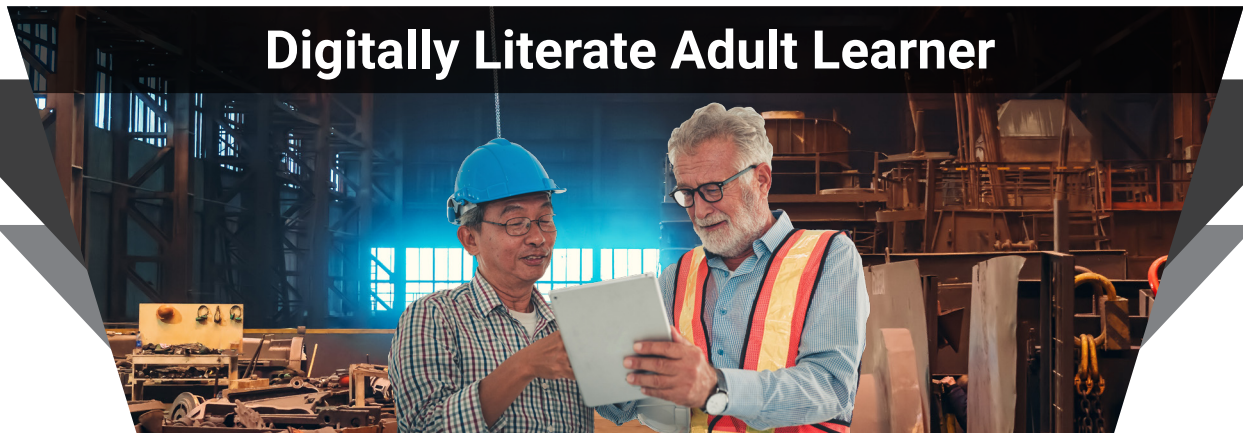
| Vocab Word	Definition
Technical	Physical navigation and operation of digital tools, structures, and conventions
Civic	Using digital tools safely, effectively, and appropriately
Communicative	Sharing ideas clearly, effectively, and creatively with different audiences, following digital communication protocols
Collaborative	Connecting and working with others, while using appropriate digital platforms and tools
Computational Thinking	Using critical thinking and problem-solving skills in conjunction with technology to gather data, analyze information, and find a solution
Investigative	Searching, identifying, and validating reliable and authentic digital resources
Productive	Creating content and/or products through the use of digital tools

Credit to Maryland Department of Labor Digital Literacy Framework.

Curriculum Overview

As the instructor for this Adult Education course, you will use this guide to assist your learners in gaining knowledge about basic computer skills, digital literacy, email, word processing, and spreadsheets.

As shown in the Contents, each lesson provides an overview and several short lessons to assist learners with building content knowledge. The instructor guide provides AEL and O*NET standard correlations along with instructional procedures and lesson guidance, including learner objectives, guiding questions, suggested instructional strategies, and engaging activities.

DIGITAL LITERACY for the **CONSTRUCTION INDUSTRY**

Each lesson is tied to the Digital Literacy Framework, and instructors are provided an element correlation chart. Instructors also have access to Student Views with answers to each activity.
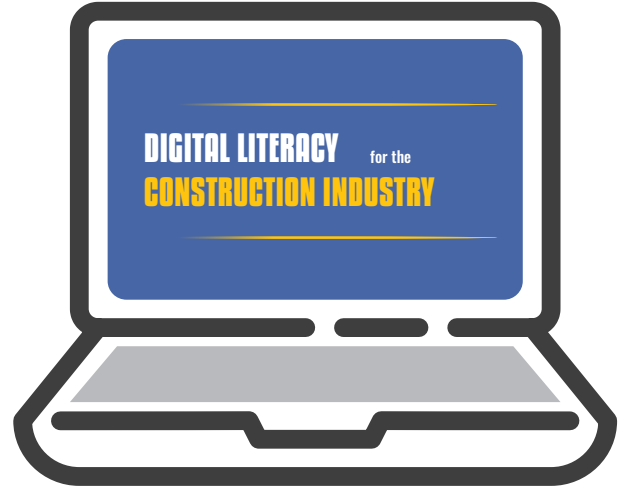
To get the most out of this curriculum:

1 Prepare for the lesson in advance (read the lesson, gather materials).

2 Know your audience.

3 Modify and adapt learning based on learner needs and abilities.

4 Watch the pace; each lesson is designed to be completed in a 90-minute session.

5 However, as the instructor, you should adjust based on learner needs.

6 Assess learner progress; make sure to check for understanding throughout each lesson to ensure learner engagement and content retention.

7 Make real-world or personal connections to the content.

8 Use varying instructional strategies to engage learners (individual, small group, and whole class instruction).

9 Refer back to the Digital Literacy Framework.

Introduction

There are many tools used in the construction industry. These include the basics, such as hammers, tape measures, and specialized tools for different types of work, but they also include technology-based tools.

On a job site, you might see different tools with technology components, like digital measuring devices or even helmets that take photos and videos. But before you get the job, you may need to have digital literacy skills, which allow you to locate, evaluate, and communicate information.

This course will use hands-on activities to teach you the basic digital skills needed for working in the construction field, with a focus on computer-based skills, like writing emails and creating documents and spreadsheets.

By the end of this course, you will be able to:

1 - **Perform basic functions on a computer**
2 - **Explain what digital literacy means**
3 - **Compose and send an email with an attachment**
4 - **Create a document**
5 - **Create a spreadsheet**

Lesson Overview: Basic Computer Skills

As the instructor, you will facilitate activities to help learners identify different types of devices, the parts of a computer, keyboard key functions, icons and symbols on a desktop, and file and storage types.

To begin the lesson, explain to learners the importance of having basic computer skills. The activities within the lesson will help build the foundation they need to perform technology-based tasks in the workplace.

Digitally Literate Adult Learner	
Technical	Computational Thinking
Civic	Investigative
Communicative	Productive
Collaborative	

Group Discussion

Use the following guiding questions to engage learners in a discussion to introduce this lesson. Then proceed to Activity 1.

- Are you familiar with different types of technology devices?
- Which technology devices or tools have you used in your personal or work experience?
- Are you comfortable using technology tools to complete tasks in the workplace?

AEL Standards

Content Area I
English Language Arts
- I.6 A - Listening
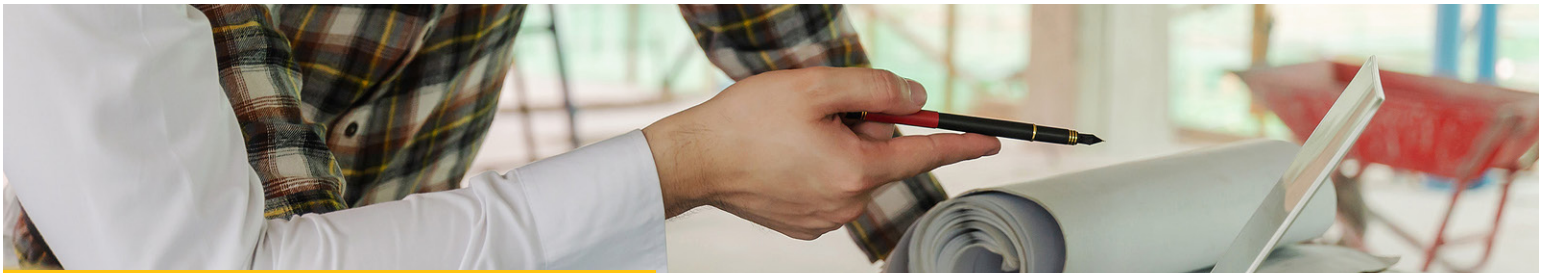- I.6 B - Speaking
- I.6 C - Teamwork

Content Area III
English as a Second Language
- III.1 B-G - Listening Skills
- III.2 C, F-H - Speaking Skills

O*NET Elements

- Active Listening
- Attention to Detail
- Cooperation
- Critical Thinking
- Speaking
- Technology Skills: Operating system software

1. Basic Computer Skills

Computers come in many different shapes, sizes, colors, and speeds, but they all essentially perform the same tasks. It is important to understand the basic functions of computers and other devices so that you can perform technology-based job tasks at your workplace.

For example, your boss may ask you to complete a safety training course online or digitally sign a document. The activities within this lesson will provide you with a basic understanding of computers, which will build the foundation needed to complete the activities in future lessons.

After completing this lesson, you will be able to:

1 - **Identify different technology devices and tools**
2 - **Identify the parts of a computer**
3 - **Demonstrate knowledge of keyboard keys**
4 - **Identify icons and symbols on a desktop**
5 - **Identify file and storage types**

Activity 1: Technology Devices

As the instructor, you will teach learners about ten technology devices.

Walk through one of the procedures below. Then have learners open the workbook and complete Activity 1.

Learner Objective
Identify different types of technology devices.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with devices and require less assistance.

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Instructional Procedures: Option 1

Divide learners into groups.

1. Have each group assign a speaker role and a recorder role.
2. Explain that the group must identify the device or tool the instructor is displaying. This will be repeated for all ten devices.
3. The instructor should display a real-world example (photo or actual device) for the following: desktop, tablet, webcam, flash drive, keyboard, mouse, phone, laptop, monitor, touchpad.
4. After each group has had the opportunity to identify all ten devices/tools, the instructor should revisit each one, explaining the correct name and use.
5. Have students return to their workstations to complete Activity 1.

Instructional Procedures: Option 2

1. Have learners work individually or with a partner to use the word bank to complete Activity 1 with a pencil.
2. When all learners are finished labeling, identify and explain each tool, having students correct any mislabeled devices or tools.

Activity 1: Technology Devices

In the workplace, you might see various technology devices and tools. Using the word bank below, identify each technology device or tool.

Word Bank				
Desktop	Tablet	Webcam	Flash Drive	Keyboard
Mouse	Phone	Laptop	Monitor	Touchpad

Keyboard

Laptop

Phone

Touchpad

Tablet

Monitor

Webcam

Flash Drive

Mouse

Desktop

Basic Computer Skills
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Activity 2: Parts of a Computer

Now that learners have demonstrated the ability to identify technology devices and tools, they will take a closer look at the parts of a computer.

Learner Objective

Identify the parts of a computer.

Activity Setup

Make sure all computers are shut down before starting the activity.

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Instructional Procedures:

1. Explain to learners that they will not only need to be able to identify devices and tools, but they will also need to be able to identify the specific parts of a computer to perform workplace tasks.

2. Using the diagram for Activity 2, work as a whole group to correctly label the parts of a computer.

3. Using the classroom computer, have learners identify each part of the computer.

4. Once learners have located all parts of the computer, have them locate the power button and turn the computer on.

5. Turn the page and proceed to Activity 3.

Activity 2: Parts of a Computer

Now that you have had an opportunity to identify various technology tools in the workplace, let's take a closer look at the parts of a computer.

	Label the computer parts by filling in the blanks below.		
1	Speaker	**6**	Mouse
2	Monitor	**7**	USB Ports
3	CPU or Tower	**8**	Keyboard
4	Memory Card Reader	**9**	Modem
5	Printer	**10**	Power Button

Activity 3: Keys on a Keyboard

Now that learners have identified parts of a computer, they will take a closer look at the keys on a keyboard.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with the keys on a keyboard and require less assistance.

Activity Setup

Make sure all students have access to a keyboard for this activity.

Instructional Procedures: Option 1

1. Explain to learners that they will not only need to be able to identify the parts of a computer, but they will also need to be able to identify the specific keys on the keyboard. Being familiar with these keys and their functions will assist learners when completing workplace tasks.

2. Using the diagram for Activity 3, work as a whole group to correctly identify the keys on a keyboard. As the instructor, you should demonstrate the function each key can perform for the all learners to observe.

3. Using the classroom computer keyboard, have learners identify each key on the keyboard.

4. Once learners have located all keys on the keyboard, turn the page and proceed to Activity 4.

Instructional Procedures: Option 2

1. Have students work individually or with a partner to follow along as you explain each key and its function.

2. Have learners work within a Word document to practice using the keys on the keyboard.

3. Once learners have manipulated all keys on the keyboard, turn the page and proceed to Activity 4.
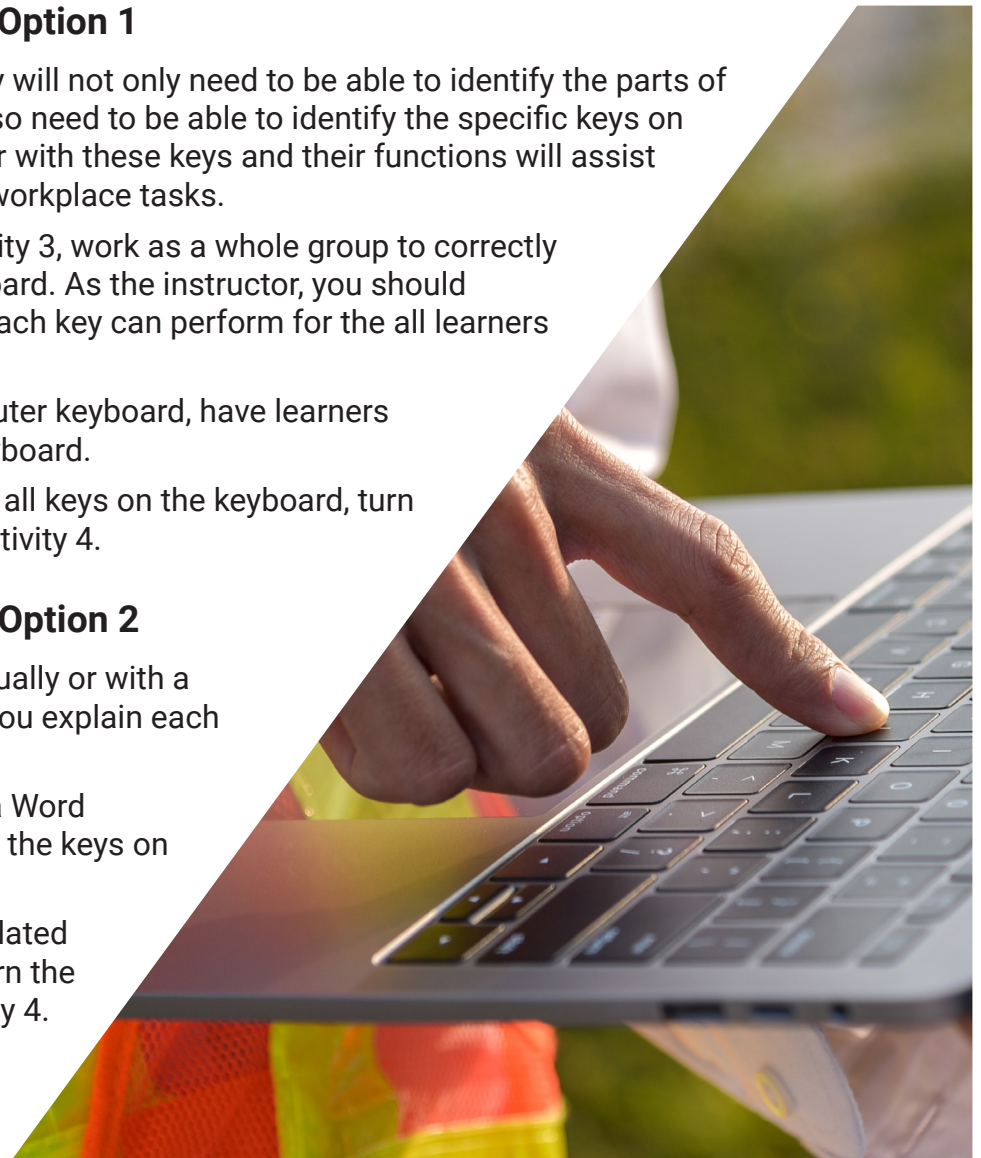
Activity 3: Keys on a Keyboard

It is important to familiarize yourself with the various keys on a keyboard. In this activity, you will locate the keys shown on the keyboard below and on your classroom computer. Understanding the functions and locations of the keys will assist you when completing word processing tasks.

Keyboard Functions

The descriptions provided below will remind you of what each key does.

Control: Used together with other keys to complete certain actions (for example: copying, pasting, and cutting text)

Shift: Used to make a letter capital or to access the characters on the top line of some keys (for example: &, ?, or +)

Enter: Starts a new line at the cursor position

Delete: Used to remove the character to the right of the cursor
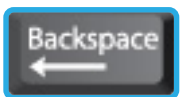
Backspace: Used to remove the character to the left of the cursor

Tab: Used to advance the cursor to the next tab stop
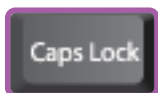
Caps Lock: Used to type capital letters or in ALL CAPS

Number Lock: Allows the number keypad to be used

Arrow Keys: Used to move the text cursor to the right, left, previous line, or next line

Space Bar: Used to enter a space between words

Activity 4: Icons on a Desktop/Phone

Now that learners have identified keys on the keyboard, they will take a closer look at the common icons found on a desktop.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with the icons on a desktop and require less assistance.

<table>
<tr><td>Learner Objective</td></tr>
<tr><td>Demonstrate knowledge of icons on a desktop/phone.</td></tr>
</table>

Activity Setup

Make sure all students have a desktop that displays the icons for the software programs and internet browsers covered in Activity 4.

Instructional Procedures: Option 1

1. Explain to learners that they will not only need to be able to identify the parts of a computer and keys on a keyboard, but they will also need to be able to identify the specific icons on the desktop. Being familiar with these icons and their functions will assist learners when completing workplace tasks.

2. Using the diagram for Activity 4, work as a whole group to correctly identify the icons on the desktop.

3. Explain the use of each software application or internet browser icon.

4. Using the classroom computer keyboard, have learners identify each icon on their classroom computer.

5. Once learners have located all icons, turn the page and proceed to Activity 5.

Instructional Procedures: Option 2

1. Have students work individually or with a partner to follow along as you explain each icon and its function.

2. Have learners open and explore each software application or internet browser.

3. Once learners have explored each software application and internet browser for this activity, turn the page and proceed to Activity 5.

Activity 4: Icons on a Desktop/Phone

Icons are used on computers, tablets, and phones to represent items, like programs and folders.
Clicking or tapping the icon opens the program or folder.

The icons below represent some of the software programs and internet browsers you will be working with throughout this course.

Word Processing	Email

Spreadsheets	Web Browsers

Activity 5: File and Storage Types

Now that learners have identified the icons on the desktop, they will take a closer look at the various file and storage types.

Activity Setup

Make sure the instructor's computer has different files saved on the hard drive, flash drive, and cloud storage.
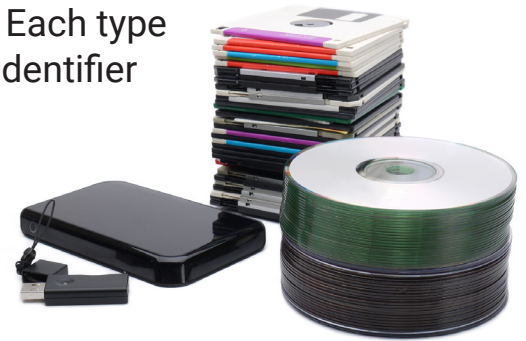
Instructional Procedures:

1. Explain to learners that they will not only need to be able to identify the icons on a desktop, but they will also need to be able to open and save files on a computer's hard drive, flash drive, or online cloud storage. Being familiar with the various file and storage types will assist learners when completing workplace tasks.

2. Using the definition from the vocabulary list, define each storage type (hard drive, flash drive, cloud storage). Explain the differences between each storage type, and model how to locate the storage device using File Explorer. Make sure to discuss each file extension (.docx, .xlsx).

3. Now explain that when various files are created using different software applications the file types have different extensions. Display these extensions on the instructor's File Explorer folder for the whole group to view. Explain the difference between files saved to the hard drive and flash drive versus files saved using cloud storage. It is important to make connections for learners that relate to real-world examples of when, where, and how to save to the various file types.

4. Discuss which software applications are saved to the hard drive or flash drive and which ones are saved to a cloud-based storage. Depending on learner experience and background knowledge, you may need to revisit this information in later lessons.

5. Have learners create a Word document and save to the hard drive or flash drive.

6. Have learners create an Excel file and save to the hard drive or flash drive.

7. Model for students how the web-based text document or spreadsheet files automatically save to Google Drive. Make sure to point out how to change the name of the document within the web-based application.

8. Have learners complete the Matching activity and Reflection for Activity 5.

9. Once learners have completed Activity 5, turn the page and proceed to Activity 6.

Activity 5: File and Storage Types

Computers have many different types of files on them. Each type of file has an extension, which is a three- or four-letter identifier found at the end of the file name, after the period.

Files can be saved in many places on the computer hard drive, on an external drive, or online.

Matching

Match each icon below to its file type.

.gsheet

.docx

.gdoc

.xlsx

Reflection

Do you feel comfortable saving files on a hard drive, flash drive, and online?

Use the space below to write your file name down, and describe where you saved the file.

_____

_____

_____

Activity 6: Accessibility Settings

Now that learners have identified different file extensions and storage types, they will take a closer look at the accessibility features available on the classroom computer.

On a Windows computer, these are found in the *Ease of Access* settings.

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Instructional Procedures:

1. Explain to learners that each computer is equipped with accessibility settings that can assist in making the computer more user-friendly to enhance their experience.

2. Open the Control Panel on the instructor's computer and select Ease of Access, then Ease of Access Center. Display your screen. Tell your learners that once you have explained the available features, you can assist them with adding the features to their classroom computer.

3. Explain to learners that the settings screen may look different, depending on how old the operating system is (Windows 10 vs. Windows 11, etc.).

4. Explain to learners that there are three areas in which features can be adjusted to enhance their computer use: Vision, Hearing, and Interaction. (Note: In Windows 11, these are labeled, but in earlier versions, they are not. However, you can still categorize them as you review the features offered.) As you explain each feature, ask learners to use the boxes for Activity 6 to take notes.

5. As you explain each available feature, make sure to demonstrate the change or modification offered by the setting. For example, for the text size option, model for students how to increase the text size.

6. Once you have explained each available feature offered, ask learners if they have any questions or would like to make accessibility adjustments to their classroom computer.

7. Once all questions are addressed and learners have finished typing notes, turn the page and proceed to Activity 7.

Activity 6: Accessibility Settings

It is possible to change settings to make your computer more user-friendly to enhance your experience. Use the spaces below to take notes on each type of *Ease of Access* setting. What can you change, and will any of these settings be useful for you?

VISION

HEARING

INTERACTION

Basic Computer Skills
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Learner Resources & Assessment Tools

Learner Resources

Learners have been exposed to technology-based vocabulary specific to *Basic Computer Skills* within the activities they completed for this lesson.

As the instructor, it is important that you refer back to this vocabulary list as you move through the Digital Literacy Unit. Each lesson will have a specific list of vocabulary words to assist learners.

. . . .

Assessment (Check Your Understanding)

Now that learners have identified technology devices, parts of a computer, keys on a keyboard, icons on a desktop, file and storage types, and accessibility features, they will demonstrate their understanding by completing a *Check Your Understanding* assessment. This assessment is not intended to be graded, but instead used to identify areas of strength and weakness within the learner knowledge related to *Basic Computer Skills*.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with basic computer knowledge and require less assistance.

Option 1	Option 2
Have learners work individually or with a partner on the *Check Your Understanding* assessment. Once learners have completed the assessment, go over each question with the whole group. Make sure to clarify misunderstandings or questions students may have about the content.	As an Exit Ticket to end the class, please have learners complete the *Check Your Understanding* assessment within their workbook individually. As the instructor, you should review each learner's answers prior to beginning the next class session.

Vocabulary

Some of the vocabulary words you learned in this lesson are listed below.
Refer back to this page if you need help remembering.

Vocab Word	Definition
Cloud-based Storage	Storage space which can be accessed from the internet.
CPU	Central Processing Unit; the brain of the computer system.
Cursor	The indicator on a screen showing the point that will be affected by input from the user, such as where typed text will be inserted.
Desktop	The first screen you see on the monitor when the computer starts up.
Email	Electronic messages sent from one user to another.
Flash Drive	A small, portable file storage device.
Hard Drive	A hardware component that stores all of your digital content.
Hardware	The parts of the computer system that you can touch (like the CPU).
Icon	A graphical representation of a program or file.
Keyboard	Input device used to communicate with the computer — composed of keys that send a signal to the computer to complete processes.
Laptop	A small, portable computer with a screen and keyboard.
Monitor	The part of the computer that visually communicates with the user; also known as the screen.
Mouse	A tool that is used to communicate with the computer; it is used to move the cursor and perform other tasks.
Printer	A device that takes information from the computer and prints it on paper.
Power Button	A button used to turn the computer on and off.
Software	Programs used on the computer; also called applications.
Tablet	A touch-screen device that resembles a large smart phone.
Touchpad	A computer input device used like a mouse.
USB Port	A port on a computer used to plug in devices and tools like flash drives and keyboards.
Webcam	A camera that attaches to a computer to stream video in real time.

Check Your Understanding

In this lesson, you learned basic computer skills. You should now be able to identify types of devices, parts of a computer, keyboard functions, icons, and file and storage types. You should also understand accessibility settings, which are called *Ease of Access* settings.

1: Technology Devices

Label each device below.

Desktop

Laptop

Tablet

2: Parts of a Computer

Fill in the blanks within the statements below.

A __**Keyboard**__ is made up of many different keys, and it allows the user to communicate with the computer.

The button used to turn on a computer or device is called a __**Power Button**__.

__**USB Ports**__ are commonly used to plug in devices and tools, like flash drives, to the computer.

3: Keys on a Keyboard

What are these keys called, and what do they do?
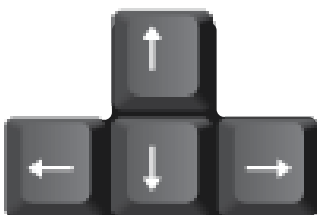
Arrow Keys - Used to move the text cursor to the right, left, previous line, or next line.

Check Your Understanding

4: Icons on a Desktop

In your own words, explain what an icon is. Then inside the box, draw the icon of an internet browser of your choice.

An Icon is:

(Vocabulary definition) A graphical representation of a program or file.

5: File and Storage Types

Write the name of the Microsoft application next to its file type.

.docx Microsoft Word

.xsls Microsoft Excel

Which hardware device could you use to store files externally (in a place outside of your computer)?

Flash Drive

6: Accessibility Settings

What are the three main types of accessibility settings on a computer?

1. Vision

2. Hearing

3. Interaction

Lesson Overview: Digital Literacy Overview

Digitally Literate Adult Learner	
Technical	Computational Thinking
Civic	Investigative
Communicative	Productive
Collaborative	

As the instructor, you will facilitate activities to help learners develop a clear understanding of digital literacy and its importance in the workplace.

To begin the lesson, review with learners the importance of having basic computer skills and the connections between basic computer skills and digital literacy.

The activities within this lesson will continue to build the foundation they need to perform technology-based job tasks in the workplace.

Group Discussion

Use the following guiding questions to engage learners in a discussion to introduce this lesson. Then proceed to Activity 1.

- What is digital literacy?
- How is digital literacy used in the workplace?
- What is a digital footprint?
- What is digital security, and how is it used within the workplace?

AEL Standards

Content Area I
English Language Arts
- I.6 A - Listening
- I.6 B - Speaking
- I.6 C - Teamwork

Content Area III
English as a Second Language
- III.1 B-G - Listening Skills
- III.2 C, F-H - Speaking Skills

O*NET Elements

- Active Listening
- Attention to Detail
- Cooperation
- Critical Thinking
- Speaking
- Technology Skills: Operating system software

2. Digital Literacy Overview

In today's world, technology is seen and used everywhere: in public, at home, and in the workplace. Having digital literacy means having the ability to work in a place where technology is used, not only to perform tasks on a job site but also to communicate with your boss and co-workers.

This lesson will give you an overview of digital literacy and explain why having digital skills will make you even more valuable as an employee.

After completing this lesson, you will be able to:

1 - **Define digital literacy**
2 - **Demonstrate an understanding of the importance of digital literacy in the workplace**
3 - **Understand and describe your digital footprint**
4 - **Describe digital citizenship**
5 - **Describe digital security and identify ways to keep your information safe**
6 - **Create a Google account with a strong password**
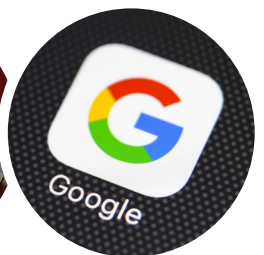
Activity 1: Defining Digital Literacy

Now that the learners have familiarized themselves with the computer and its parts, they will take a closer look at digital literacy. As the instructor, you will facilitate the activities as the learners work to define digital literacy.

To begin the lesson, use the following guiding question to facilitate a brainstorming discussion to introduce the lesson. Then proceed to Activity 1.

- What does it mean to be digitally literate?

- Is digital literacy part of your everyday life?

Learner Objectives

Define digital literacy, and identify what digital literacy looks like in the construction industry.

Please note: Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with digital literacy and require less assistance.

Instructional Procedures: Option 1

1. Divide learners into groups.

2. Have each group discuss the definition of digital literacy.

3. After each group discusses the definition of digital literacy, learners should discuss digital literacy skills used in their workplace and how digital literacy impacts their industry.

4. Once their small group discussion is complete, have learners share with the large group.

5. Have students return to their workstations to complete Activity 1.

Instructional Procedures: Option 2

1. Have learners work individually or with a partner to complete Activity 1.

2. When all learners have completed the reflection, discuss their responses in a large group setting.
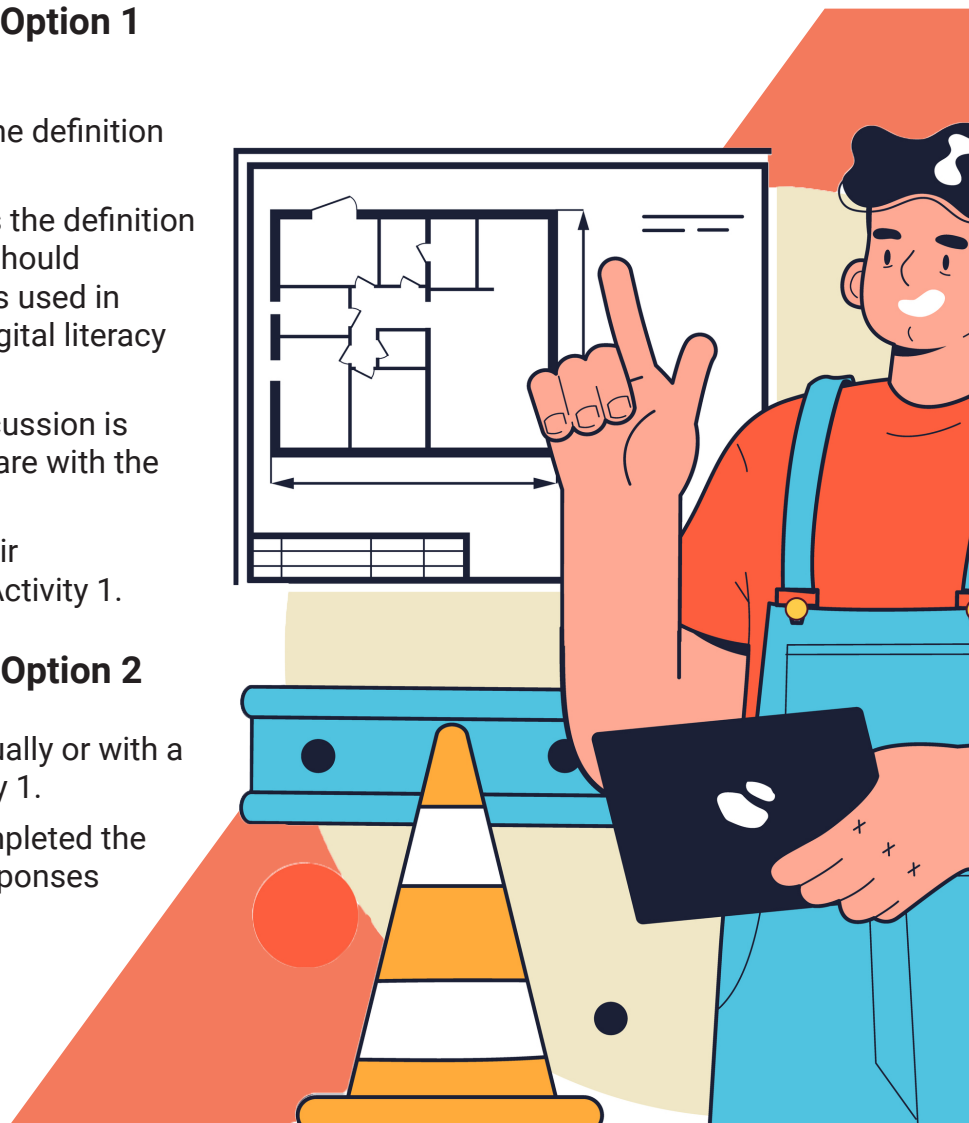
Activity 1: Defining Digital Literacy

Digital literacy is a person's ability to use information and communication technologies to find, evaluate, use, create, and share information and content.

In other words, it means having the skills you need to work in a society where access to information is largely through digital technologies like internet platforms, mobile devices, and social media.

Reflection

Digital literacy incorporates a wide range of skills needed to succeed in a workforce where many forms of technology are used. Think about digital literacy skills that may be needed in your workplace. **In your own words, what does having digital literacy in the workplace mean to you?**

_____

_____

_____

_____

Why is digital literacy an important skill?

_____

_____

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_____

Activity 2: Your Digital Footprint

Now that the learners have defined and can describe digital literacy, they will examine the digital footprint and its impact on individuals' personal and professional lives.

Begin the lesson by discussing the following probing questions with learners:

- What is a digital footprint?
- How is a digital footprint used?
- How can your digital footprint impact your personal and professional life?

Learner Objective

Define a digital footprint, and identify the impact a digital footprint has in both a personal and professional setting.

Instructional Procedures:

1. Using the probing questions, establish a working definition of a digital footprint.

2. Have the group discuss the definition of a digital footprint and the impact on both their personal and professional lives. Be sure to emphasize professionalism and how their digital footprint may impact their search for a job.

3. Using the computer, have learners explore their own digital footprint. Instruct students to Google themselves and take inventory of what's out there. Discuss what they find, and explain that learners should search for their name periodically so they are aware of the information others have access to.

4. After the group discusses the impact of their digital footprint in both personal and professional settings, learners should discuss the benefits of a digital footprint and how to cultivate a strong digital footprint in a small group discussion.

5. Once their small group discussion is complete, have learners share with the large group.

6. Have learners complete the circle/highlight activity *What's in a footprint?* within Activity 2.

7. Once learners have completed the circle/highlight activity, close with discussing the tips highlighted to protect their digital footprint before proceeding to Activity 3.

Activity 2: Your Digital Footprint

Your digital footprint is the information about you that exists on the internet. It shows where you have been, the data you have shared, and the traces you have left behind.

The footprint consists of many types of information. Some sources include browsing, job searching, shopping online, financial activities, and social activities.
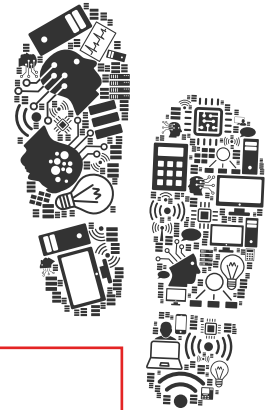
? What's in a footprint?

Circle or highlight each action that can show up in your digital footprint.

- Buying something online

- Viewing articles on a news app

- Reading a paper magazine

- Signing up for a newsletter online

- Opening a credit card account

- Using a banking app

- Using a digital tape measure

- Subscribing to a newsletter

- Reposting articles you read

- Joining a dating website or app

- Using a fitness app to track workouts

- Playing games on social media

- Shopping at a cell phone store

- Sharing photos on social media

Tips for Protecting Your Digital Footprint

1. Use privacy settings when available.
2. Don't overshare information online, including on social media.
3. Be aware of being tagged in posts and photos on social media, and un-tag yourself when needed.
4. Keep a list of accounts, and delete accounts you no longer use.
5. Unsubscribe from emails and newsletters you no longer need.
6. Don't enter personal information when using public Wi-Fi.
7. Don't log into third-party websites or apps using your Facebook account.

Activity 3: Digital Citizenship

Now that the learners know the importance of a digital footprint, they will take a closer look at digital citizenship.

Activity Setup

Using a large Post-it sheet, write each sample guiding question found below on a poster.

Place the posters around the room for the learners to answer the questions. The number of posters needed will depend on the size of your class.

• •

Instructional Procedures:

1. Using the selected guiding questions, learners will begin a *Graffiti Wall* activity.
    Sample Guiding Questions:
    - What is digital citizenship?
    - How does my online presence shape people's perception of my identity?
    - What are some examples of good digital citizenship?
    - How do you describe online professional behavior?

2. Depending on the size of your class, divide students into partners or small groups.

3. Allow each group 3 to 5 minutes at each poster to write down what they know about the topic.

4. After 3 to 5 minutes, groups will rotate to each poster and have an opportunity to add to each poster (use a different color marker for each group).

5. Assess the room during the activity. If you observe learners not participating or completing the activity sooner than expected, then you should adjust your time at each poster. Walk around during the activity, and encourage participation using probing questions about the topic to help guide responses.

6. After the *Graffiti Wall* activity is completed, have a class discussion with learners regarding the information written on the posters. Take this opportunity to discuss/answer the questions for the group and make connections to real-world examples in the workplace. Connect their knowledge to the new content not covered in Activity 3 in their handbooks.

Activity 3: Digital Citizenship

Digital citizenship is the ability to safely and responsibly access digital technologies and also to be a respectful member of society. As people who use and communicate with others through digital technologies, we are digital citizens.

Digital Citizenship Basics

The tips below will help you to be a good digital citizen.
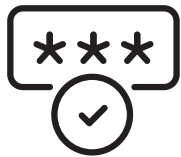
Passwords:
Be sure to create strong passwords, and don't use the same password for every account or website.

Private Information:
Be sure to protect your private information, like your address, email address, and phone number.

Personal Information:
Be careful about sharing personal information, like information about your family and pets.

Photographs:
Be careful sharing photos, and check photos for private details (like license plates or street signs) before posting them online.

Property & Permission:
Be sure you have permission to use someone else's work (property), such as images, before using them in your own projects.

Protection:
Beware of viruses, phishing, and identity theft. Protect your information.
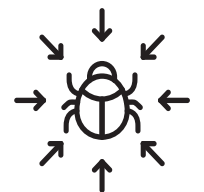
Professionalism:
Be respectful of others when communicating online.
Use professional language when talking with your supervisor and co-workers digitally, such as through email.

Activity 4: Digital Security

After learning about digital citizenship, learners will become familiar with digital security.

To begin the lesson, ask learners the following guiding questions:

- What is digital security?
- How is digital security important in the construction industry?

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Instructional Procedures:

1. Divide learners into groups.

2. Have each group discuss the definition of digital security (shown in Activity 4).

3. After each group discusses the definition of digital security, learners should discuss digital security used in their workplace and how digital security impacts their industry.

4. Once their small group discussion is complete, have learners share with the large group.

5. As the instructor, make sure to reinforce correct responses and clarify any response that does not align with information included in Activity 4: Digital Security. It is important to make relatable connections to the construction industry for the learners.

6. Once the discussion is complete, make sure to refer learners to Activity 4 information as a reference.

Activity 4: Digital Security

Digital security means protecting your online identity and your computer (and any other internet-connected devices) from people meaning to do harm.

Security & Online Safety Tips

The tips below will help you protect yourself and your devices as you navigate the internet and communicate online.

To protect your identity and devices:

- Make sure your computer has updated virus and malware protection software installed.
- Avoid suspicious or untrustworthy websites.
- Watch out for fake antivirus messages and pop-ups online.
- Make sure a website is secure before using your credit or debit card.
- Create strong passwords and change them often.
- Use different passwords for each online account you create.
- Never post your driver's license number, social security number, or other sensitive information online.
- Be careful what you send via chat, instant message, or email.
- Do not reply to strangers asking you to submit personal or account information.

To make sure your security has not already been compromised:

- Scan your computer using antivirus software to check for issues.
- Frequently check your bank and credit accounts for unusual activity.
- Check your credit score often to make sure no accounts have been opened in your name without your permission.

Activity 5: Creating a Google Account

Now that the learners have familiarized themselves with digital literacy, their digital footprint, digital citizenship, and digital security, they will create a Google account as an introduction to the suite of products available.

As the instructor, you will facilitate the activities as the learners work to create a Google account.

Instructional Procedures:

1. Remind learners of the parts of the computer (power button, screen, mouse, cursor) and make sure learners know how to turn the computer on.

2. Ask learners if anyone already has a Google account that they have access to. If a learner has a Google account, verify that the learner can log into the account and that there is a Gmail address associated with it.

   - If you have learners that already have existing accounts, they can assist other learners during the account setup process.

   - If a learner does not know the username or password for an existing account, then he/she should create a new one.

3. Once you have ensured all learners are ready, explain that you are going to walk them through the steps to create a Google account. As the instructor, you will display your screen and model each step with the students.

4. Have learners navigate to the Google Chrome icon on their computer.

5. Walk learners through the setup process while modeling on your computer. Be sure to emphasize choosing a professional username and strong password.

6. Once learners have completed Activity 5, they will move on to the Vocabulary review and Check for Understanding activity.
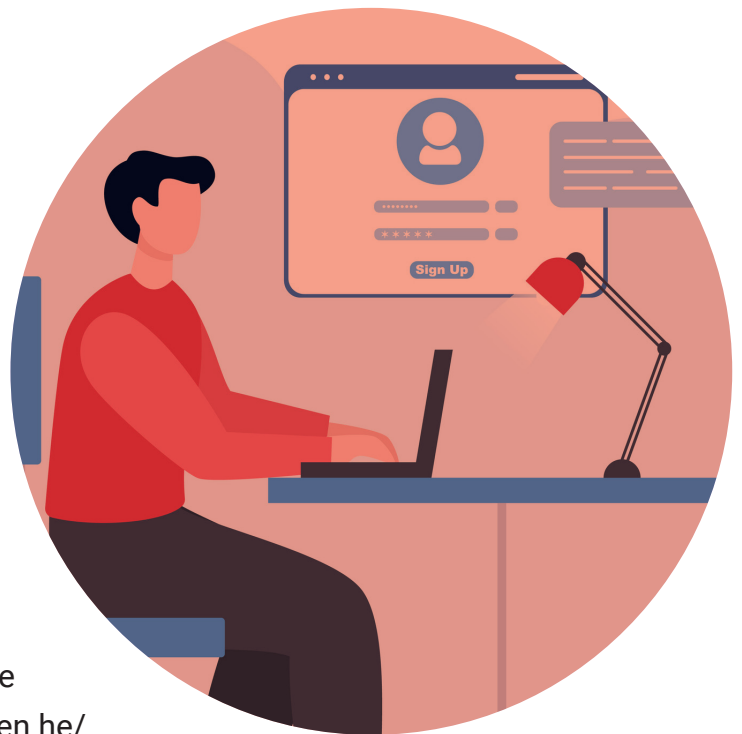
Activity 5: Creating a Google Account

Your Google account will allow you to access many of Google's online apps and tools, including Docs (word processing), Sheets (spreadsheets), and Drive (file storage). When you sign up for a Google account, you can create a Gmail (email) address at the same time. That email address will then be your Google username.

Basic steps to sign up for a Google account

Your instructor will walk you through creating an account, but the basic steps are provided here to remind you in the future.

1. Use an internet browser to navigate to www.google.com.
2. Click the *Sign in* button at the top of the page.
3. Click the *Create account* link.
4. Enter your first name, last name, and a username.
   - Remember that your username will become your email address.
5. Enter a password, then confirm the password (type the same thing). Be sure to choose something with at least 8 characters, with a mix of letters, numbers, and symbols, so no one can guess what you selected.
6. Click the *Next* button.

Did you choose a professional username and strong password?

Write your username and password below if you need help remembering them. You will use the account you created for future activities.

Username: _____

Password: _____

Remember:

Being professional online (including choosing an appropriate email address and choosing a strong password) helps ensure you are a good digital citizen and helps keep your digital information secure.

Learner Resources & Assessment Tools

Learner Resources

Learners have been exposed to technology-based vocabulary specific to *digital literacy skills* within the activities they completed for this lesson.

Each lesson will have a vocabulary list to assist learners. As the instructor, it is important that you refer back to these vocabulary lists and reinforce connections between lessons as you move through the course.

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Assessment (Check Your Understanding)

Now that learners have defined digital literacy, their digital footprint, digital citizenship, and digital security, along with creating a Google account, they will demonstrate their understanding by completing a *Check Your Understanding* assessment. This assessment is not intended to be graded, but instead used to identify areas of strength and weakness within the learner knowledge.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with digital literacy and require less assistance.

Option 1	Option 2
Have learners work individually or with a partner on the *Check Your Understanding* assessment. Once learners have completed the assessment, discuss their responses with the whole group. Make sure to clarify misunderstandings or answer questions students may have about the content.	As a closing activity to end the class, please have learners complete the *Check Your Understanding* assessment within their workbooks individually. As the instructor, you should review each learner's answers prior to beginning the next class session.

Vocabulary

Some of the vocabulary words you learned in this lesson are listed below.
Refer back to this page if you need help remembering.

Vocab Word	Definition
Antivirus Software	A type of computer program used to prevent, detect, and remove viruses and other harmful programs from a computer.
Digital Citizenship	The responsible use of technology by anyone who uses computers, the internet, and digital devices to engage with people.
Digital Footprint	The trail of information left behind when a person has been online.
Digital Literacy	The ability to use information and communication technologies to find, evaluate, use, create, and share information and content.
Digital Security	A broad term that describes resources used to protect a person's online identity and information. *This includes tools such as antivirus software.*
Identity Theft	A crime in which someone pretends to be someone else by stealing their information, such as their social security number, driver's license number, or account numbers.
Malware	Malicious (harmful) software that is typically delivered over a network, that infects a computer, steals information, or otherwise harms a computer or other device.
Phishing	A form of fraud where an attacker pretends to be someone they are not, often via email, in order to send harmful internet links or email attachments that can damage a device or lead to identity theft.
Username	A name given to, or selected by, a user (person) to identify that person on a computer, website, or anywhere online requiring a unique identifier.
Virus	A type of harmful software that causes damage to data and software on a computer.

Instructor Notes

Digital Literacy Overview
- 40 -

Check Your Understanding

In this lesson, you learned a lot about what it means to live and work in a world where technology is everywhere. Think about how being a digitally literate citizen will help you in your job in the construction field.

What's in your footprint?

Think of one or two examples of information that may be found in your digital footprint, and explain how that information might affect either your current job or a job you plan to apply for in the future. **Write your response on the lines below.**

_____

_____

_____

_____

_____

How will you protect yourself?

What can you do to protect your device and your personal information as you navigate through the digital world? **Discuss one or two safety tips on the lines below.**

_____

_____

_____

_____

Lesson Overview: Email

As the instructor, you will facilitate activities to help learners identify how email is used in the workplace.

To begin the lesson, explain to learners the importance of using email to communicate within the workforce. Whether seeking a new job or performing daily communication within their current job, understanding how to properly utilize email in a professional manner is an important skill to possess.

Digitally Literate Adult Learner

Technical	Computational Thinking
Civic	Investigative
Communicative	Productive
Collaborative	

• •

Group Discussion

Use the following guiding questions to engage learners in a discussion to introduce this lesson. Then proceed to Activity 1.

•   Are you familiar with electronic communication (email)? If so, how are you using it in your personal life/work life?

•   Are you comfortable using email to communicate within the workplace?

AEL Standards

Reading Foundations
Beginning Reading Skills
•   A.1, B.1, C.1, C.2, D.1

Content Area I
English Language Arts
•   1.2 A - Vocabulary Development
•   1.4 B - Print Production
•   1.3 A - Writing Process
•   I.6 A - Listening
•   I.6 B - Speaking
•   I.6 C - Teamwork

Content Area III
English as a Second Language
•   III.1 B-G - Listening Skills
•   III.2 C, F-H - Speaking Skills

O*NET Elements

•   **Active Listening**
•   **Attention to Detail**
•   **Critical Thinking**
•   **Cooperation**
•   **Oral Comprehension**
•   **Speaking**
•   **Technology Skills: Operating system software**
•   **Writing**

Student View
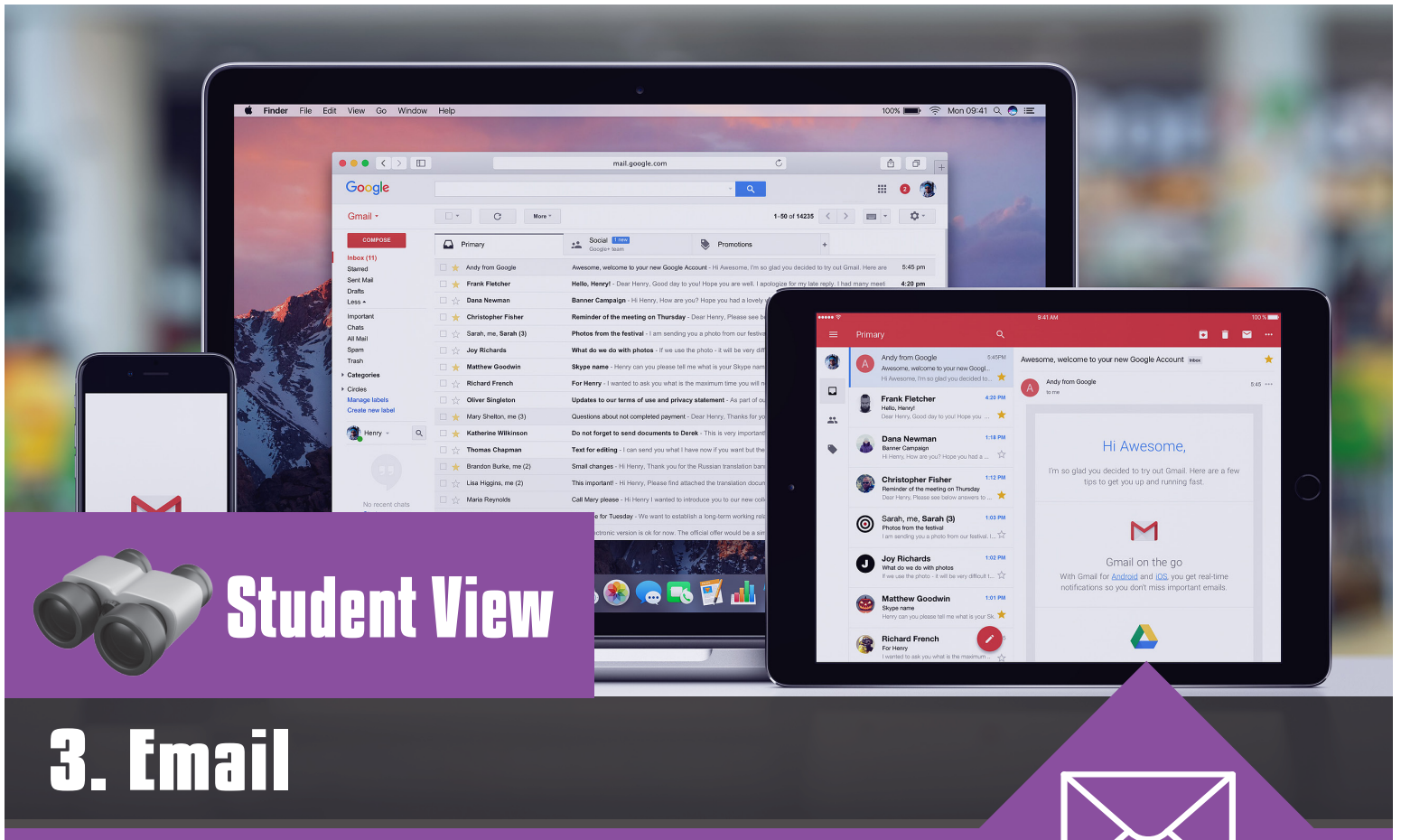
3. Email

Electronic mail, commonly called email, is a way to send messages between people using digital devices, like computers, tablets, and mobile phones. In the workplace, you may receive emails from your supervisor, from the human resources department, or from other employees.

This lesson will prepare you to receive and respond to those emails, as well as compose messages of your own.

After completing this lesson, you will be able to:

1 - Explain what email is
2 - Identify common email products and apps
3 - Identify the parts of an email
4 - Understand safety tips for using email
5 - Compose an email using text-formatting options
6 - Create an email signature

Activity 1: Intro to Email and Parts of an Email

As the instructor, you will teach learners about email communication and the importance of using it in the workplace.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with email and require less assistance.

Learner Objectives

Define email communication, and identify the parts of an email.

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Instructional Procedures: Option 1

1. Define email communication for learners.
2. Discuss the importance of using email within the workplace. Have learners discuss with a partner how they currently use email to communicate.
3. Have learners create a list of ways email communication can be used in relation to their workplace.
4. Discuss various email products/tools (e.g., Outlook, Yahoo, Gmail).
5. Using the diagram for Activity 1, work as a whole group to correctly identify the parts of an email. Demonstrate the use of each part. Give examples of how each part relates to composing a professional email.
6. Using the classroom computer, have learners locate each part of the email within their Gmail accounts.
7. Once learners have identified all parts, turn the page and proceed to Activity 2.

Instructional Procedures: Option 2

1. Define email communication for learners and discuss the importance of using email communication within the workplace.
2. Have students work individually or with a partner to follow along as you explain each part of the email and its function.
3. Have learners open and explore their Gmail application.
4. Once learners have explored the Gmail software application and identified each part of an email, turn the page and proceed to Activity 2.

Activity 1: Parts of an Email

Email is a popular way to communicate in many workplaces, so knowing how to format and send an email is an important skill.

To boss@job.com ✕   **1**
Cc officemanager@job.com ✕   **2**   **3** Bcc

Request for Time Off   **4**

Good Morning,   **5**

I would like to request to use sick time on Monday, October 13 from 1pm to 4pm to attend an appointment.   **6**

Thank you,   **7**
Michael

Michael White
Assistant Project Manager   **8**
ABC Construction
(123)456-7890

9

Sans Serif   **10**   B   I   U   A ▾   ...   ❝   S   X̶

Send ▾   **A**   📎   🔗   🙂   △   🖼   🕐   🖋   ⋮   🗑
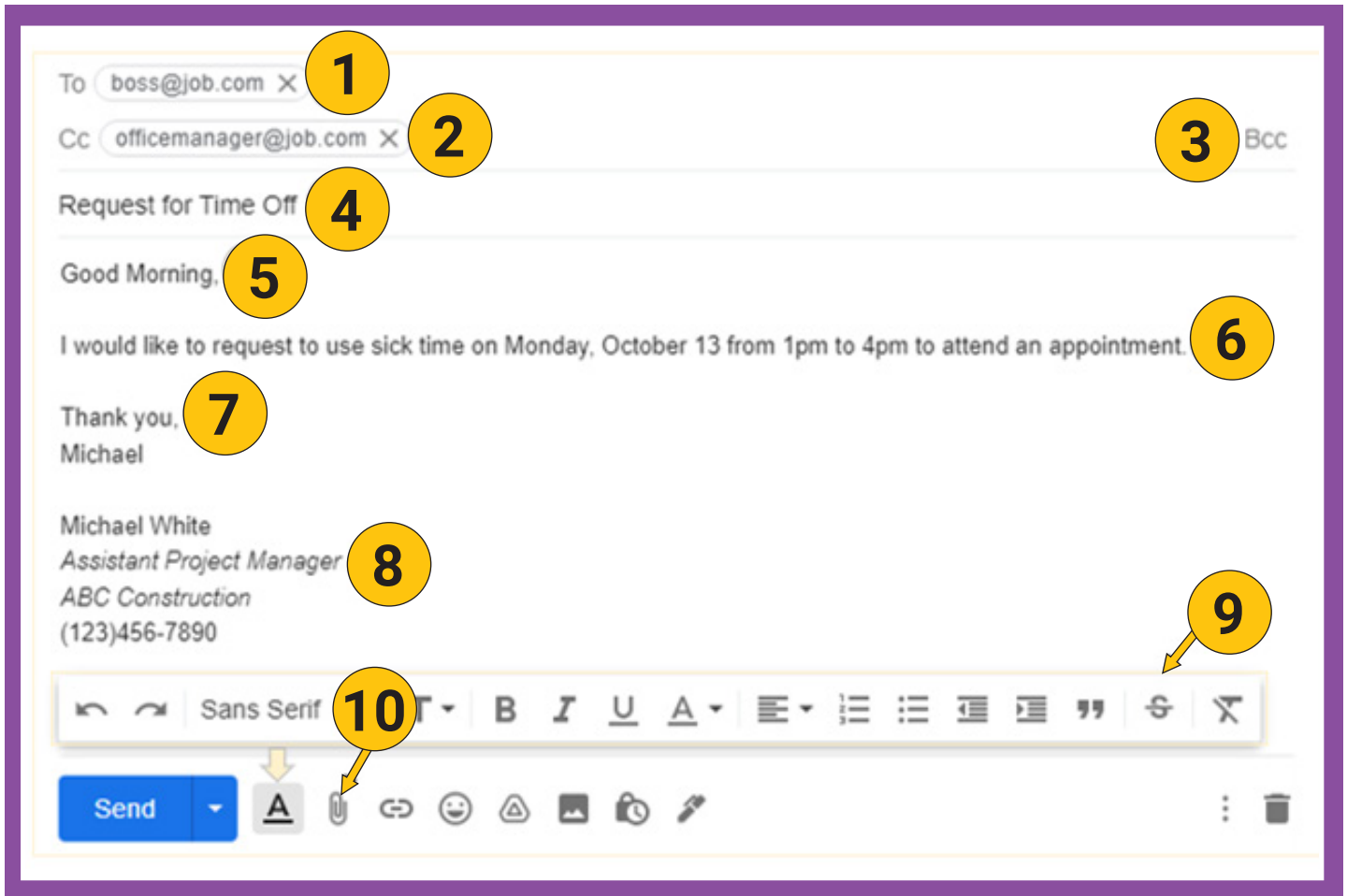
Label the parts of the email by filling in the blanks below.

1 ___Recipient___

2 ___Carbon Copy___

3 ___Blind Carbon Copy___

4 ___Subject Line___

5 ___Salutation or Greeting___

6 ___Message Body___

7 ___Closing___

8 ___Signature___

9 ___Formatting Options___

10 ___Attachment___

Activity 2: Email Safety

Now that learners have identified and explored the parts of an email, they will take a closer look at the safety tips they should follow when using email products.

To begin the lesson, ask learners the following guiding questions:

- What is email safety?
- How is email safety important to the workplace environment?

• •

Instructional Procedures:

1. After learners have had an opportunity to discuss the guiding questions, discuss the *Safety Tips for Email Use* infographic found in Activity 2.

2. Divide learners into two groups. Give each group a scenario (see scenarios below). Ask them to read the scenario and come up with a solution or reason it is a concern/impact on the workplace environment.

3. Once the small group discussion is complete, have learners share with the large group their scenario and solution.

4. Once the discussion is complete, refer learners to Activity 2 as a reference.

Scenarios

Scenario One:

An employee uses her company's iPad to open and view her personal email. She opens an email from an unknown user and clicks the link included in the email.

- In this scenario, is the employee following the email safety tips?
- If so, how is she complying with email safety?
- If not, what is she doing to violate the recommended safety tips?

Scenario Two:

An employee sends an email to his coworker. In the email, he shares his password with the coworker so she can gain access to a company computer program.

- In this scenario, is the employee following the email safety tips?
- If so, how is he complying with email safety?
- If not, what is he doing to violate the recommended safety tips?

Activity 2: Email Safety

The following tips will help you remember how to stay safe when writing and receiving emails.

Safety Tips for Email Use

Work Use Only
Do not use your work device or work email for personal use. Avoid connecting to free Wi-Fi connections.

Passwords
Keep passwords secure. Change passwords frequently. Do not reuse passwords for multiple devices. Do not share your passwords with others.

Trust Your Source
Do not open emails from someone you do not know or trust. Emails from an untrusted source may contain a virus or malware and could damage your device. Think before you open. Do not share your email address with untrusted sites.

Sensitive Information
Try to avoid sending sensitive information through email. Be mindful that email is not a secure source of communication.

Attachments Bring Viruses
Before opening an attachment, ensure the sender is a known source. Many times malicious emails will appear to be from a known source. Check the email address - is it a trustable email address?

Activity 3: Composing an Email

Now that learners have identified and explored the parts of an email and are familiar with email safety tips, they will learn how to compose a professional email.

As the instructor, you will facilitate the activities as the learners work to compose a professional email.

Activity Setup

Using a large Post-it sheet, write each part of a professional email on a poster and place the posters around the room for the learners to use.

• @ •

Instructional Procedures:

1. Learners should have a basic understanding of the parts of an email. Now, let's combine that understanding with the basic elements of a professional email.

2. Create a Post-it sheet for each of these topics:
   • Professional Email Characteristics
   • Personal Email Characteristics
   • Email Greeting
   • Email Body
   • Email Closing

3. Divide learners into five groups. Have each group write what they know about each poster topic. Use different colored markers or small sticky notes to help distinguish each group.

4. After all groups have had an opportunity to rotate through each poster, discuss each poster with the whole group.

5. It is important to point out the differences between personal and professional emails.

6. As a whole class, compose a professional email.

7. After the whole group email is complete, have learners write a professional email to their current employer. Using the professional Gmail account they created in an earlier lesson, have learners send their professional email to the instructor. Use this email as an assessment tool to provide feedback to the learners.

8. Refer learners to the Composing a Professional Email infographic found in Activity 3 as a reference.

9. Additional resources for students may be found on the Texas Workforce Commission website: https://www.adultedmed.com/workforcetechnology

Activity 3: Composing an Email

Email is a method of exchanging messages between people using electronic devices, like computers, tablets, and mobile phones. In this activity, you composed an email using formatting options, an attachment, and a signature.

Was your email formatted professionally?

Sometimes, it may be appropriate to send a quick, casual email to a co-worker without including a greeting or professional language. However, if you are sending a resume to apply for a job, or if you are sending a formal message to someone, remember to follow the tips below.

☑ **Font:** Make sure to use a readable font that looks professional.
- For Outlook, Arial and Calibri are commonly used fonts in that are acceptable. For Gmail, the default (Sans Serif) is fine.

☑ **Font size:** Make sure the text is large enough (at least 10 or 12 points).

☑ **Email length:** Include all of the necessary information, but keep the email as brief as possible.

☑ **Subject:** Include a subject that summarizes the purpose of your email
- Example: Application for Electrician - John Smith

☑ **Greeting (Salutation):** If you know who the contact person is, address the person directly (for example, "Mr. Smith"). If you do not know who the hiring manager is for a job application, address the email, "Dear Hiring Manager."

☑ **Message body:** Be sure to state who you are and why you are writing, along with thanking them for their time or consideration.

☑ **Closing:** Use a formal closing line, such as "Sincerely" or "Regards."

☑ **Signature:** Include your full name, email address, and phone number so the person you are messaging knows how to contact you.

☑ **Attachments:** Don't forget to attach your resume or other documents.

Activity 3: Tips to Composing an Email

The following tips will help you remember how to compose a professional email.

Composing a Professional Email

Email Structure

- Be direct, clear, and concise.
- Maintain professionalism throughout the email.
- Be sure to include a proper greeting.
- Include a brief but descriptive subject line.
- The email body should quickly address the main point of the email.
- If an attachment is included, it should be mentioned within the body of the email.

Email Greeting

Address the recipient with either Mrs., Ms., or Mr. along with his or her last name.

> *Recipient name: Jennifer Gonzales*
> *Proper Greeting: Dear Ms. Gonzales,*

Email Body

The email body is where you include the main point of the email.

> *I have completed our department's inventory list. Attached is the inventory list for review. Please let me know if you need any further information.*

Email Closing

The email closing should be brief and offer a quick goodbye. Be sure to include your contact information.

> *Sincerely,*
> *Johnathan Doe*
> *JohnDoe@fakeaddress.com*

Professional Elements

- Keep language professional but personable.
- Use carbon copy (cc) when you want to include others without an expected response.
- Be sure to check spelling, grammar, and accuracy of facts, links, and attachments before sending emails.

Activity 3: Email Assessment

Use the space below to handwrite your professional email to your employer.

Professional Email Draft:

Dear Ms. Gonzales ,

I have completed our department's inventory list. Attached is the inventory list for review. Please let me know if you need any further information.

Sincerely ,

Johnathan Doe

JohnDoe@fakeaddress.com

(123) 456-7890

Learner Resources and Assessment Tools

Learner Resources

Learners have been exposed to technology-based vocabulary specific to email within the activities they completed for this lesson.

As a reminder, each lesson contains a vocabulary list to assist learners. Be sure to refer back to these lists and reinforce connections between lessons as you move through the course.

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Assessment (Check Your Understanding)

Now that learners have identified parts of an email, familiarized themselves with email safety tips, and composed a professional email, they will demonstrate their understanding by completing a *Check Your Understanding* assessment.

This assessment is not intended to be graded, but instead used to identify areas of strength and weakness within the learner knowledge.

Option 1 is designed for learners who need more assistance, and Option 2 is designed for learners who may have more familiarity with basic email knowledge and require less assistance.

Option 1	Option 2
Have learners work individually or with a partner to complete the *Check Your Understanding* assessment. Once learners have completed the assessment, go over each question with the whole group. Make sure to clarify misunderstandings or answer questions students may have about the content.	As an Exit Ticket to end the class, have learners complete the *Check Your Understanding* assessment within their workbooks individually. As the instructor, you should review each learner's answers prior to beginning the next class session.

Vocabulary

Some of the vocabulary words you learned in this lesson are listed below.
Refer back to this page if you need help remembering.

Vocab Word	Definition
Attachment	A file that is sent along with an email. This could be a document, photo, etc.
Blind Carbon Copy (Bbc)	Used to send an exact copy of an email to one or more people without allowing any of the recipients to see the address of anyone who has been blind carbon copied.
Carbon Copy (Cc)	Used to send an exact copy of an email to one or more people Other recipients can see who has been carbon copied.
Closing	The phrase used to close the message.
Email	Electronic messages sent from one user to another.
Font	A collection of letters and characters with a similar design. Changing the font alters the look and feel of the text.
Formatting Options	Options that allow text to be altered and displayed in a special style. For example, words can be made bold or underlined.
Greeting	The first part of an email message, used to address (greet) the recipient. Also called a salutation.
Message Body	The main content of an email message.
Recipient	The person the email is intended for (the email address of the person you are sending a message to).
Salutation	Also known as the greeting.
Signature	A block of text used at the end of an email that includes contact information (and often company information and job title if the sender is employed).
Subject Line	The line of text that tells the recipient what the message is about.

Instructor Notes

Check Your Understanding

As a digital citizen, and as an employee in a workplace that uses technology, you will need to know how to send an email from a computer, tablet, or mobile phone.

Reflection

What are two things you learned about email?

....

....

....

....

How might you use email in the workplace or when trying to find a job?

....

....

....

....

Discuss formatting options you can use to highlight important information.

....

....

....

....

Lesson Overview: Word Processing

In this lesson, you will facilitate activities to introduce learners to word processing and the functions of word processing software.

The activities within the lesson will help build the foundation learners need to perform technology-based job tasks and should emphasize word processing as an alternative to pencil and paper tasks, essentially simplifying their tasks. Learners should understand that word processing saves time by improving workers' efficiency and accuracy.

Digitally Literate Adult Learner	
Technical	Computational Thinking
Civic	Investigative
Communicative	Productive
Collaborative	

Group Discussion

Use the following guiding questions to engage learners in a discussion to introduce this lesson. Then proceed to Activity 1.

- Are you familiar with word processing?
- In what ways do you use word processing in your personal or professional life?
- How might word processing make your work life more efficient?

AEL Standards

Reading Foundations
Beginning Reading Skills
- A.1, B.1, C.1, C.2, D.1

Content Area I
English Language Arts
- 1.2 A - Vocabulary Development
- 1.4 B - Print Production
- 1.3 A - Writing Process
- I.6 A - Listening
- I.6 B - Speaking
- I.6 C - Teamwork

Content Area III
English as a Second Language
- III.1 B-G - Listening Skills
- III.2 C, F-H - Speaking Skills

O*NET Elements

- Active Listening
- Attention to Detail
- Critical Thinking
- Cooperation
- Oral Comprehension
- Speaking
- Technology Skills: Operating system software
- Writing

Student View

4. Word Processing

Word processing is the act of using a computer to create, edit, save, and print documents. In this lesson, you will learn about two of the common software applications used to create documents: Microsoft Word and Google Docs. You can use these applications to create and edit a resume to send to potential employers.

In the workplace, you may need to use Microsoft Word or Google Docs to create reports, letters, or other documents.

After completing this lesson, you will be able to:

1 - Demonstrate an understanding of word processing terminology

2 - Open, create, edit, save, and print documents

3 - Modify the page layout of a document

4 - Format text and insert objects

5 - Manipulate documents using functions

6 - Use spelling and grammar checks

7 - Attach a Word document to an email

Activity 1: Intro to Word Processing

As the instructor, you will introduce learners to the two main word processing products on the market: Microsoft Word and Google Docs.

Introduce learners to the basics of Microsoft Word and Google Docs by having them read or view the introductory file, "Word vs. Docs." Once complete, follow the instructional procedures below to guide learners through exploring Word's interface.

Instructional Procedures:

1. Begin with the introductory "Word vs. Docs" infographic and PowerPoint presentation.

2. After learners read or view the materials, allow them to explain the advantages they see in both word processing products based on their experiences and needs.

3. Explain what word processing is used for (to create, edit, save, and print documents, like letters, resumes, and reports).

4. Guide a group discussion about examples for word processing uses in their workplace or future workplace in the construction industry (focus on the aspects of improved efficiency and accuracy).

5. Once the group discussion is complete, open Word and explore Word's interface with the learners. Be sure to emphasize the most commonly used features (font, paragraph, copy, paste, spelling, grammar, etc.)

6. After exploring Word, be sure to open Google Docs to give learners a preview of both applications. Allow learners the opportunity to discuss any differences or advantages they see in each application.

7. Once the discussion is complete, refer learners to Activity 1 to complete individually or in small groups.

Activity 1: Intro to Word Processing

In the workplace, word processing is used to create and edit documents, such as letters, resumes, and reports.

Word vs. Docs

One of the main differences between Microsoft Word and Google Docs is that a paid subscription is required for the full version of Word. However, you can use Google Docs for free, from any device connected to the internet.

What are some other differences? ....

....

....

WORD INTERFACE

In the next activity, you will explore Word.

Part of the interface is shown here.

Cursor
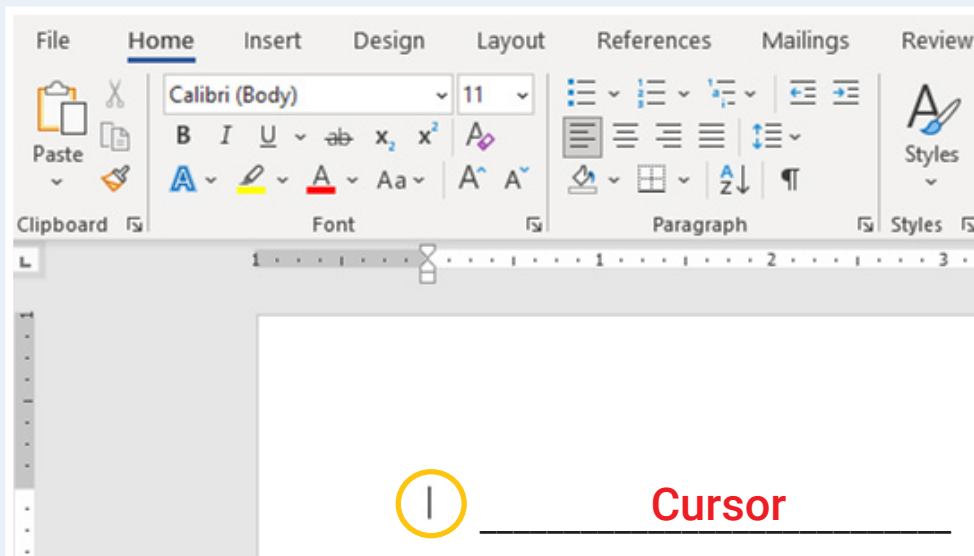
Do you remember what the circled item is called?
Hint: This is where you will begin typing text.

Activity 2: Exploring Word

After discovering the advantages of word processing products, you will now guide learners while they independently explore.

Activity Setup

Make sure all computers are shut down before starting activities so learners can be reminded of the steps learned in previous activities.

- -

Instructional Procedures:

1. Begin the lesson by reminding learners about the advantages of word processing, and highlight the uses of word processing in their industry.

2. Instruct learners to turn on the computer and model the procedures as you navigate to Microsoft Word and open a new file.

3. Move around the classroom to ensure all learners have successfully navigated to Word. If necessary, pair up learners to ensure their success.

4. As you model, walk learners through the main tabs (ribbons) of Word. You should review *File, Home, Insert, Page Design, Review, View, and Help.*

5. Once learners have had a chance to navigate and review each ribbon and its functions, instruct learners to type a paragraph about what they have learned in the course so far and anything they are still confused about. *You can also have learners share out loud what they are still confused about.*

6. Once their paragraph is complete, have learners practice formatting *Font* options: font, font size, bold, italics, underline, highlight, text color.

7. Next, have learners use *Paragraph* options to create bullets or numbered lists, change alignment (left, center, right), and select line spacing (single, double, etc.) and *Page Design* options to adjust the margins and orientation of the page.

8. Learners should then move to more advanced features by adding a table, picture, shape, and link while also practicing *Undo* (ctrl + z), *Cut* (ctrl + c), *Paste* (ctrl + v), and *Print* (ctrl + p).

9. Finally, have learners use the *Editor* function to check their documents for spelling and grammar mistakes (Review > Check Document) and save the file.

10. Once complete, refer learners to Activity 2 as a review activity.

Activity 2: Exploring Word

Word is a word processing application developed by Microsoft. It is used to create documents in a variety of formats, such as letters, resumes, and reports.

In this activity, you created a new Word document. Using the word bank below, identify the labeled font and paragraph options.

Word Bank				
Underline	Shading	Borders	Italic	Font
Numbering	Font Color	Bullets	Font Size	Bold
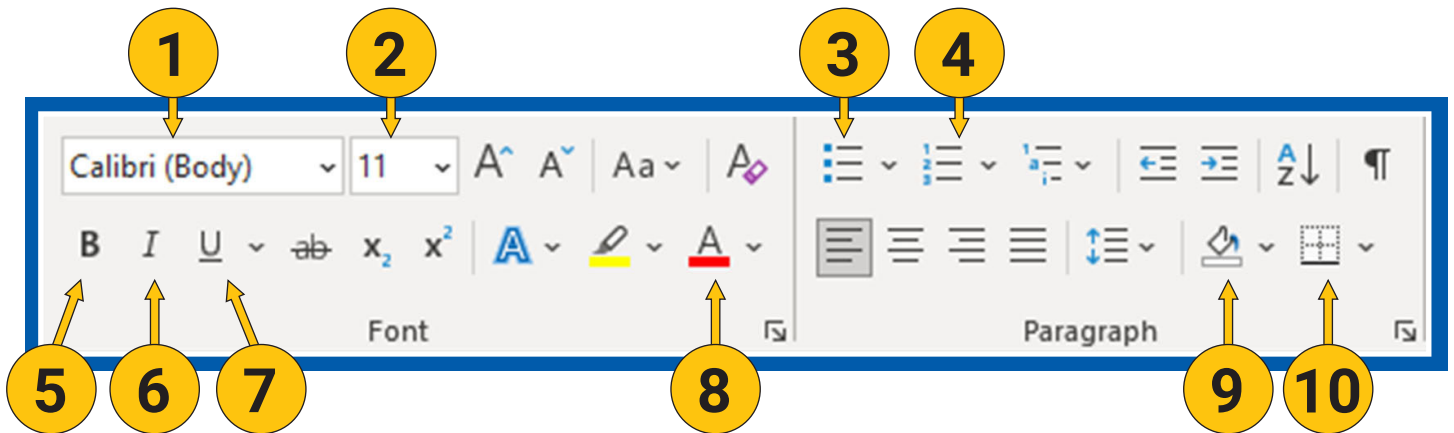
#	Answer	#	Answer
1	Font	6	Italic
2	Font Size	7	Underline
3	Bullets	8	Font Color
4	Numbering	9	Shading
5	Bold	10	Borders

Activity 3: Exploring Docs

Now that learners have explored Microsoft Word, they will take a similar look at Google Docs.

Activity Setup

Make sure all learners have set up a Google account so they are able to access and use Google Docs.

. . . .

Instructional Procedures:

1. Instruct learners to turn on the computer and model the procedures as you login to Google Docs and start a new document (remind learners about Google login procedures).

2. As you model, walk learners through the main functions of Google Docs. You should review *File, Edit, View, Insert, Format, Tools,* and *Help*.

3. Once learners have had a chance to navigate and review the functions, instruct them to type a paragraph about the job they have or want to have in the construction field. Instruct learners to include a job title, a brief job description, and a numbered list of potential job duties for the position (*See Appendix for example paragraphs*).

4. Once their paragraph is complete, have learners share their Doc with a peer.

5. Instruct peers to read the paragraph and a) underline and bold the job title, b) change the numbered list to a bulleted list, and c) use the comment feature to provide feedback about the job descriptions or duties.

6. Next, have learners refer back to their edited Doc and review and resolve the comments left by their peer. Then instruct learners to add a new paragraph about the job skills they still need to gain to obtain their dream job in the field.

7. Instruct learners to practice formatting using Font options (font, font size, bold, italics, underline, highlight, text color) and to use *Paragraph* options to create bullets or numbered lists, change alignment (left, center, right), and select line spacing (single, double, etc.)

8. Learners should then move to more advanced features by adding a table, image ("picture" in Word), shape, and link while also practicing *Undo* (ctrl + z), *Cut* (ctrl + c), *Paste* (ctrl + v), and *Print* (ctrl + p).

9. Finally, have learners use the Spelling and Grammar tool to check their documents for spelling and grammar mistakes (Tools > Spelling and Grammar > Spelling and grammar check).

10. Instruct learners to share the Doc with the instructor (explaining it can also be downloaded as a Word file). Once complete, have learners complete Activity 3.
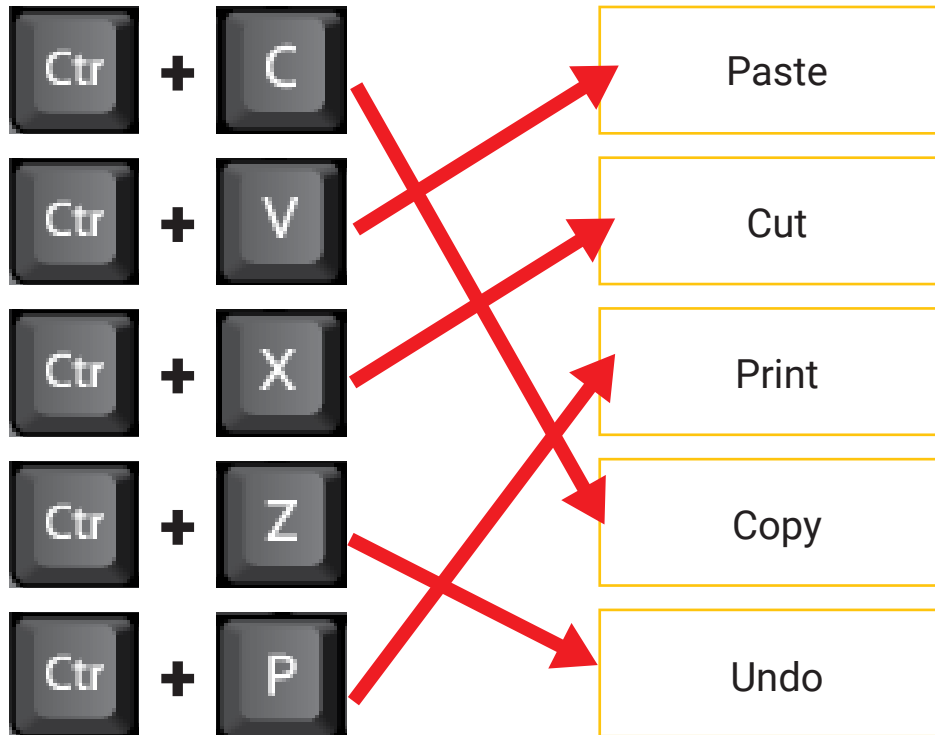
Activity 3: Exploring Docs

Docs is a word processing application developed by Google. It is used in the same way as Microsoft Word: to create documents in a variety of formats. In this activity, you created and shared a Google Doc.

Matching

Match each keyboard shortcut below to its function.

Shortcut	Function
Ctr + C	Paste
Ctr + V	Cut
Ctr + X	Print
Ctr + Z	Copy
Ctr + P	Undo

Reflection

Do you feel comfortable using both Word and Docs? Which do you like using more? Is one more difficult to use than the other? If so, why?

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Activity 4: Exploring Templates

After understanding Microsoft Word and Google Docs, learners will explore templates and develop a resume using a template within Word.

Activity Setup

Make sure the instructor's computer is set up to explore resume templates in Word.

Instructional Procedures:

1. Begin the lesson by reminding learners about the advantages of word processing, and highlight the uses of word processing in their industry, including the help word processing can provide in getting a job.

2. Instruct learners to turn on the computer and model the procedures as you navigate to Microsoft Word, open the template search feature, and search for a resume template.

3. Move around the classroom to ensure all learners have successfully navigated to the resume template search feature. If necessary, pair up learners to ensure their success.

4. Instruct learners to navigate through the resume templates and choose a template they think best fits their needs.

5. Next, instruct learners to think of a job they would like to apply for in the construction field. Learners should fill out their chosen resume template with their actual work experience. Provide learners with guidance on how to search relevant job skills for the position online.

6. As learners complete their resume, make reference to Google Doc templates, which also include resumes.

7. Have learners save the resume document with a relevant title.

8. Once their resume is complete, refer learners to Activity 4, where they will set goals for their job search in the construction industry.
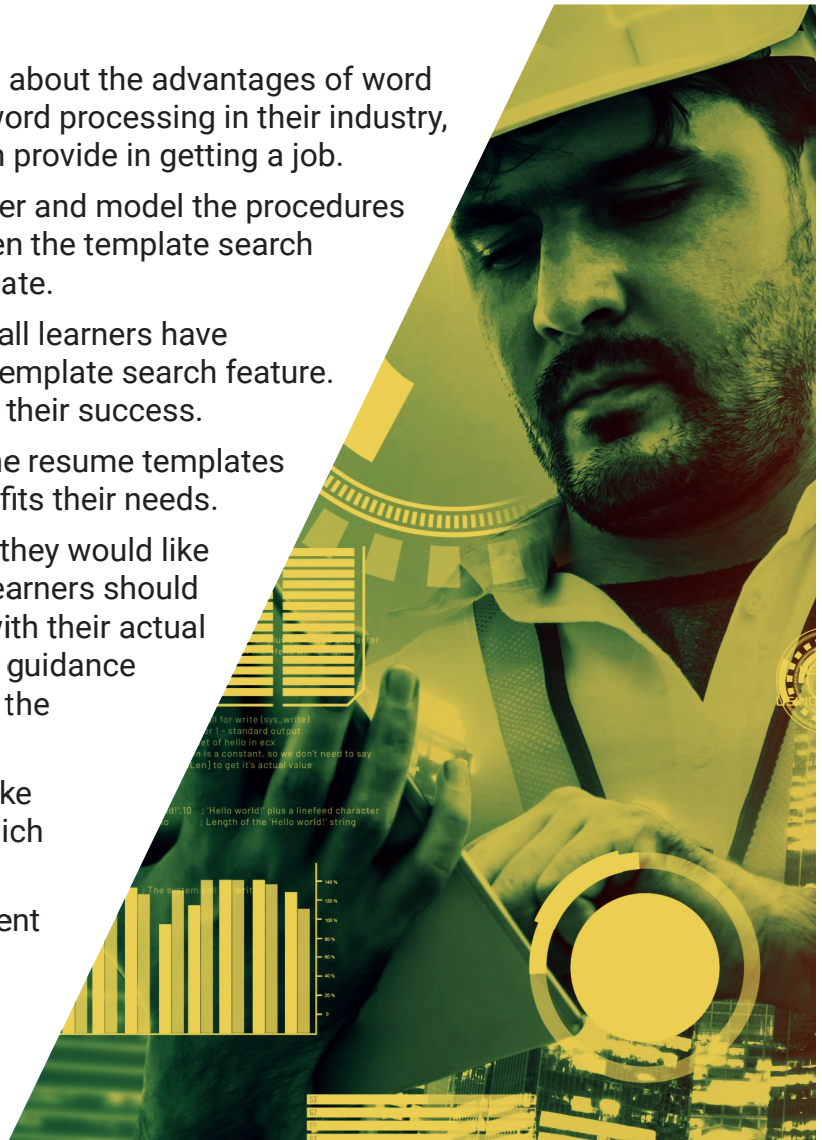
Activity 4: Exploring Templates

A template is a type of document that creates a copy of itself when you open it. Microsoft Word and Google Docs both have template options. In this activity, you searched for and selected a resume template and input your information.

What's in a resume?

A basic resume includes your first and last name, contact information, job experience, and education information. Some employers may ask for references, so it is okay to include them on your resume if there is space.

Tip: Include all of your job-related skills and experience, but try to keep the resume short (one or two pages.)

Setting Goals

What is your ultimate goal in the construction industry? Do you have any skills or experience you need to gain before applying for your next job? What can you do to work toward your goals?

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Remember:

Both Microsoft Word and Google Docs have templates you can use to create a resume, cover letter, business letter, or report. You can even find templates for documents such as fax covers, newsletters, brochures, meeting notes, calendars, and greeting cards.

Assessment: Emailing a Resume

After exploring word processing skills, learners will create a professional email and attach and send their resume.

Assessment Setup

Remind learners they need to access their Gmail account to use the email features.

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Instructional Procedures:
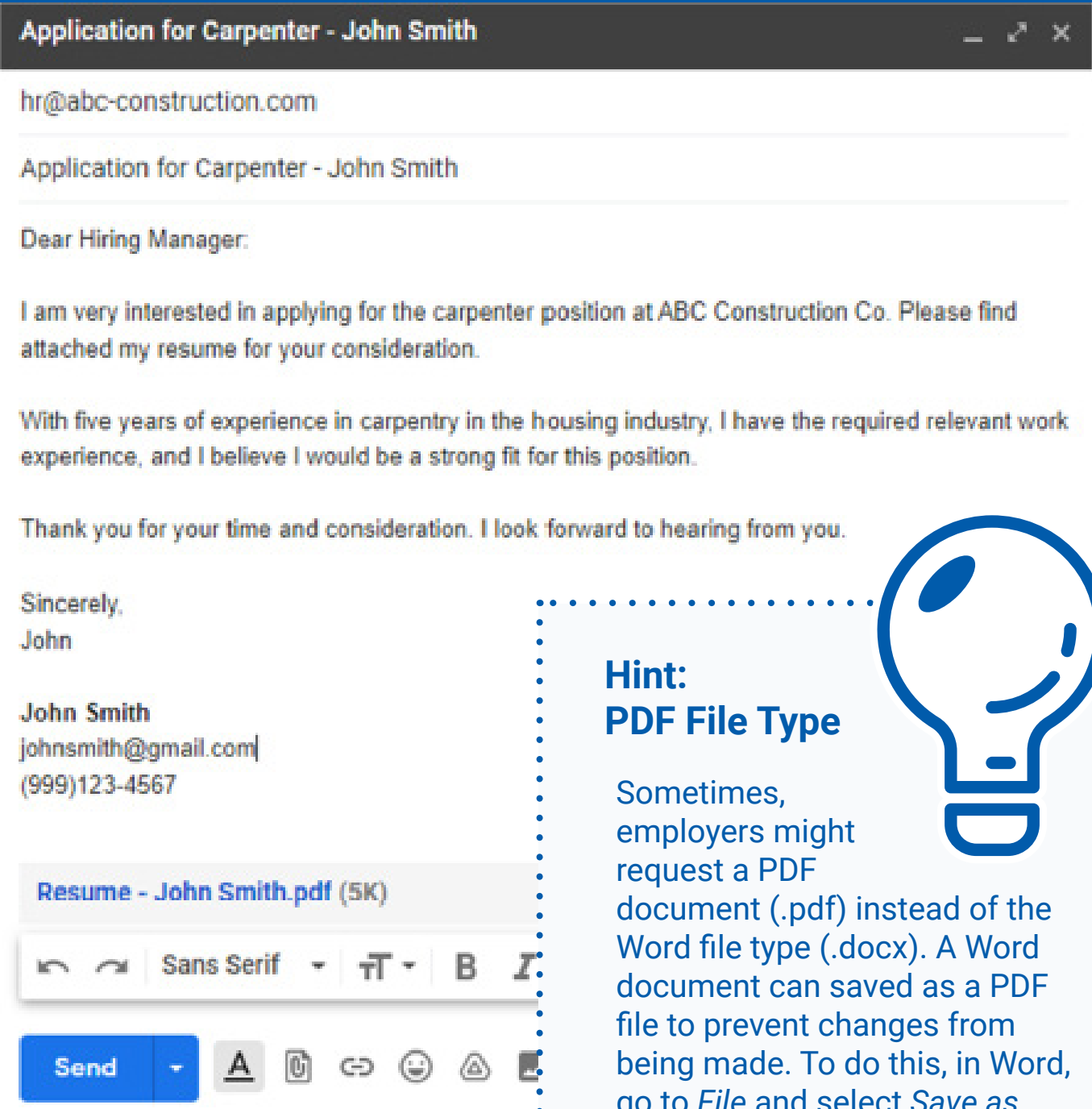
1. Instruct learners to use Gmail to create a professional email with an attached resume.

2. Have learners refer back to email tips for creating a professional email. Remind them to include a relevant subject line and message body.

3. Learners may also use the example email provided in their workbooks.

4. Instruct learners to attach the Word document containing their resume to the email. Mention that some employers require a .pdf format instead of .docx, and refer learners to the Hint portion of their assessment (File, Save as Adobe PDF).

5. Once their email/resume is ready to send, provide learners with your email address so that they can send it to you to be reviewed.

Assessment: Emailing a Resume

For this assessment, you will use the email account you created in an earlier lesson to create a professional email and attach the resume you created.

Use the example below as a guide.

Application for Carpenter - John Smith

hr@abc-construction.com

Application for Carpenter - John Smith

Dear Hiring Manager:

I am very interested in applying for the carpenter position at ABC Construction Co. Please find attached my resume for your consideration.

With five years of experience in carpentry in the housing industry, I have the required relevant work experience, and I believe I would be a strong fit for this position.

Thank you for your time and consideration. I look forward to hearing from you.

Sincerely,
John

John Smith
johnsmith@gmail.com
(999)123-4567

Resume - John Smith.pdf (5K)

Sans Serif · B I

Send

Hint:
PDF File Type

Sometimes, employers might request a PDF document (.pdf) instead of the Word file type (.docx). A Word document can saved as a PDF file to prevent changes from being made. To do this, in Word, go to *File* and select *Save as Adobe PDF.*

Learner Resources and Assessment Tools

Learner Resources

Learners have been exposed to vocabulary specific to word processing within the activities they completed for this lesson.

As a reminder, each lesson contains a vocabulary list to assist learners. Be sure to refer back to these lists and reinforce connections between lessons as you move through the course. For example, font options are used not only in word processing, but also in email, spreadsheets, and many places online.

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Assessment *(Check Your Understanding)*

Now that learners have explored the functions in *Microsoft Word* and *Google Docs*, practiced typing a paragraph and resume, used many of the available features to personalize their documents, and composed a professional email with a resume as an attachment, they will demonstrate their mastery by completing a *Check Your Understanding* assessment.

This assessment is not intended to be graded, but instead used to identify areas of strength and weakness within learner knowledge related to word processing skills.

For this *Check Your Understanding*, learners will reflect on word processing. They will share two things they learned, explain why or how someone might use word processing in the workplace, and discuss formatting options they might use when creating a resume.

As the instructor, you can go over the questions with the whole group or use the completed questions as an Exit Ticket.

Vocabulary

Some of the vocabulary words you learned in this lesson are listed below.
Refer back to this page if you need help remembering.

Vocab Word	Definition
Bold	A font option that makes characters darker and heavier than normal.
Borders	A formatting option that allows you to create a visual outline around an object, such as a table or text box.
Bullets	A formatting option that allows you to create a bulleted list of text.
Document	In word processing, a text-based file that looks the same way whether it is viewed on a computer or printed out.
Font	A collection of letters and characters with a similar design. Changing the font alters the look and feel of the text. *Hint: Many aspects of the font can be changed, such as size and color.*
Insert	An option that allows you to add a variety of objects to a document, such as pictures/images and tables.
Italic	A font option that makes the text *slant to the right*.
Keyboard Shortcut	Keys used together to perform a function, such as copy (Ctrl + C) and paste (Ctrl + V).
Numbering	A formatting option that allows you to create a numbered list of text.
Resume	A document used by a person to present their background and job experience.
Shading	A formatting option that lets you change the color behind text or in the cell of a table.
Template	A sample document that already has some details in place. This type of document creates a copy of itself when you open it.
Underline	A font option that draws a line under a word or phrase.
Word Processing	The act of using a computer to create, edit, save, and print documents.

Instructor Notes

Check Your Understanding

In the construction field, you might not use word processing every day, but it is a useful skill to have. Use the questions below to reflect on why it is important.

Reflection

What are two things you learned about word processing?

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Why or how might someone use word processing in the workplace?

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Discuss formatting options you might use when creating a resume.

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Lesson Overview: Spreadsheets

In this lesson, you will facilitate activities to introduce learners to spreadsheets and the functions of spreadsheet software.

The activities within the lesson will help strengthen the foundation learners are building that will allow them to perform technology-based job tasks in the workplace. Learners should understand that spreadsheets save time by improving workers' efficiency and accuracy.

Digitally Literate Adult Learner	
Technical	Computational Thinking
Civic	Investigative
Communicative	Productive
Collaborative	

Group Discussion

Use the following guiding questions to engage learners in a discussion to introduce this lesson. Then proceed to Activity 1.

- Are you familiar with spreadsheets?
- In what ways do you use spreadsheets in your personal or professional life?
- How can spreadsheets make your work life more efficient?

AEL Standards

Reading Foundations
Beginning Reading Skills
- A.1, B.1, C.1, C.2, D.1

Content Area I
English Language Arts
- 1.2 A - Vocabulary Development
- 1.4 B - Print Production
- 1.3 A - Writing Process
- I.6 A - Listening
- I.6 B - Speaking
- I.6 C - Teamwork

Content Area III
English as a Second Language
- III.1 B-G - Listening Skills
- III.2 C, F-H - Speaking Skills

O*NET Elements

- Active Listening
- Attention to Detail
- Critical Thinking
- Cooperation
- Oral Comprehension
- Speaking
- Technology Skills: Operating system software
- Writing
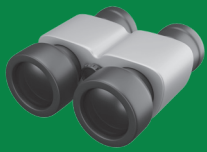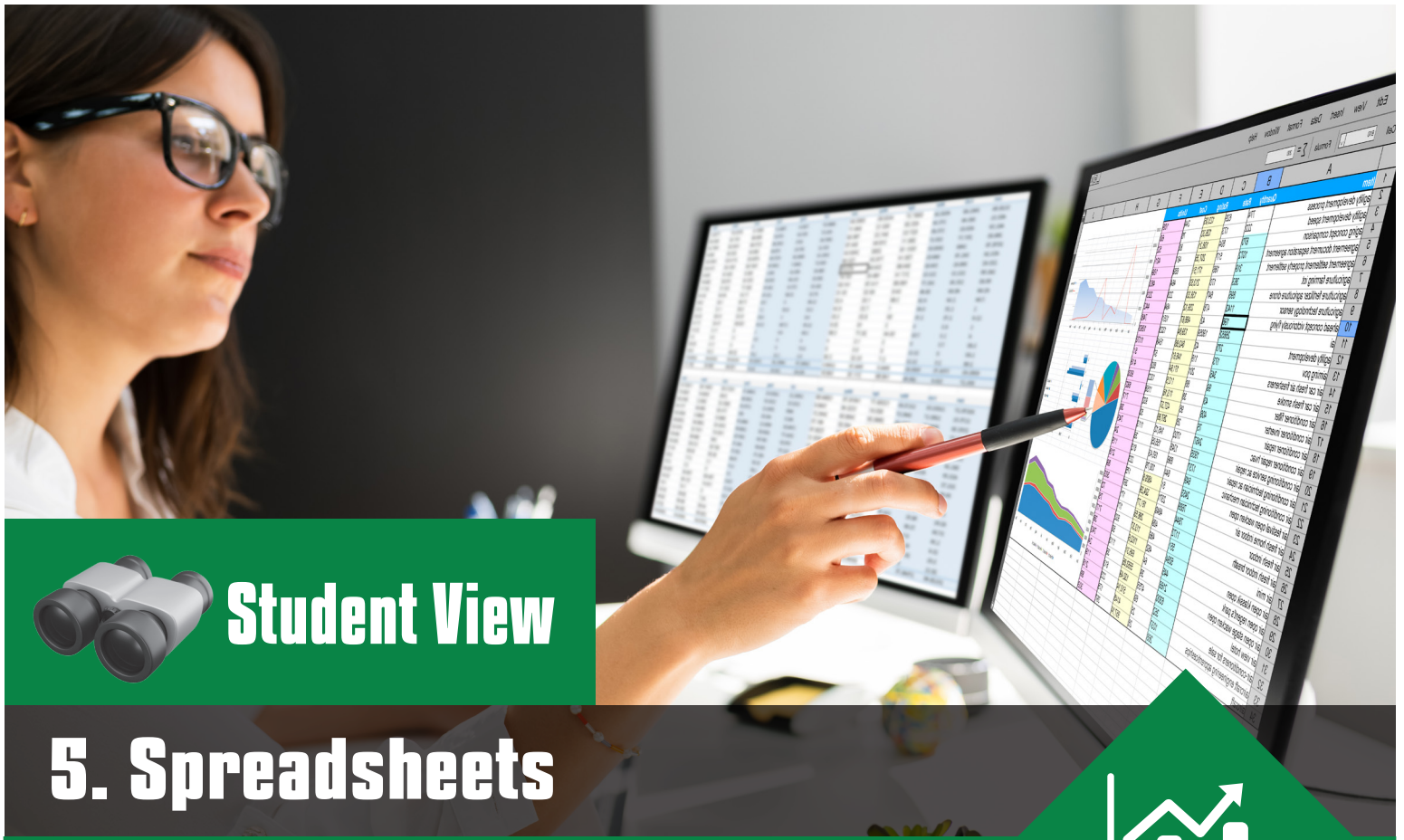
5. Spreadsheets

Spreadsheets are electronic documents used to store, sort, organize, and calculate data. In this lesson, you will learn about two of the common software applications used to create spreadsheets: Microsoft Excel and Google Sheets.

Construction project managers might use Excel to keep track of supplies, cost estimates, daily reports, work orders, or employee work hours.

After completing this lesson, you will be able to:

1 - Demonstrate an understanding of spreadsheet terminology
2 - Open, create, save, and share workbooks
3 - Edit and format cell contents
4 - Insert, resize, and delete rows and columns
5 - Sort and filter data
6 - Attach an Excel file to an email

Activity 1: Intro to Spreadsheets

As the instructor, you will introduce learners to the two main spreadsheet products on the market: Microsoft Excel and Google Sheets.

Introduce learners to the basics of Microsoft Excel and Google Sheets by having them read or view the introductory file, "Excel vs. Sheets."

Once complete, follow the instructional procedures below to guide learners through exploring the interface of Excel.

Demonstrate an understanding of spreadsheet terminology, and identify common uses for spreadsheets in the workplace.

Instructional Procedures:

1. Begin with the introductory "Excel vs. Sheets" infographic and PowerPoint presentation.

2. After learners read or view the lesson, allow them to explain the advantages they see in both spreadsheet products based on their experiences and workplace needs.

3. Explain what spreadsheets are used for:
   - to create, edit, save, and print documents (budget reports)
   - to produce tables, graphs, and charts
   - to store and sort data (invoices, inventory lists, etc.)

4. Guide a group discussion about examples for spreadsheet uses in their workplace (focus on the aspects of improved efficiency and accuracy).

5. Once the group discussion is complete, open Excel and explore the interface with the learners. Be sure to emphasize the most commonly used features (font, copy, paste, spelling, grammar, etc.).

6. After exploring Excel, be sure to open Google Sheets to give learners a preview of both applications. Allow learners the opportunity to discuss any differences or advantages they see in each application.

7. Once the discussion is complete, refer learners to Activity 1 to complete individually or in small groups.

Activity 1: Intro to Spreadsheets

In the workplace, spreadsheets are used to store, sort, organize, and calculate data.

Excel vs. Sheets

Similar to Word vs. Docs, one of the main differences between Microsoft Excel and Google Sheets is that a paid subscription is required for the full version of Excel. However, you can use Google Sheets for free, from any device connected to the internet.

What are some other differences? ....

....

....
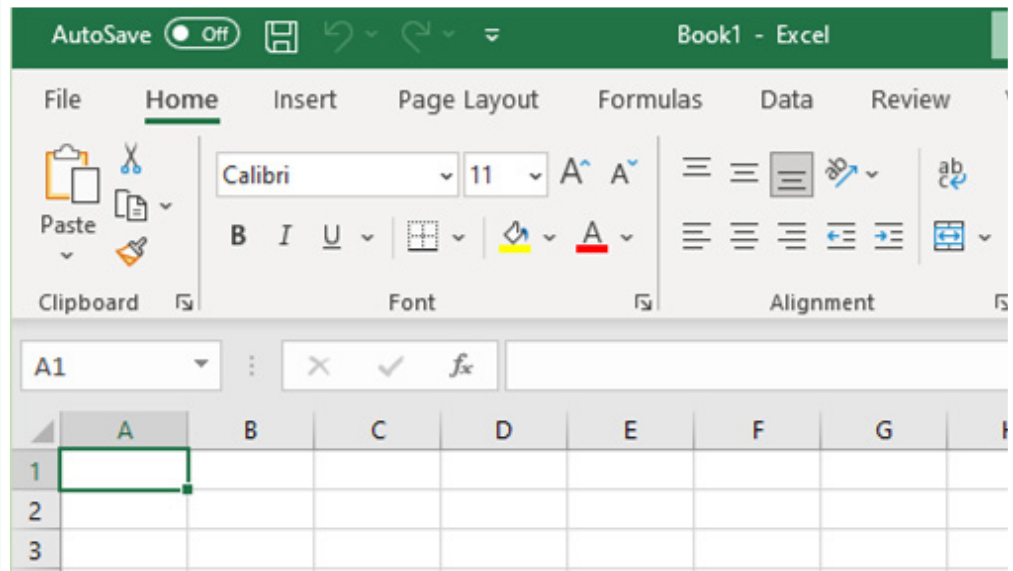
EXCEL INTERFACE

In the next activity, you will explore Excel.

Part of the interface is shown here.

Do you recognize any options that are also available in Word?
Hint: font, font size, etc.

Activity 2: Exploring Excel

After discovering the advantages of word processing products, you will now guide learners while they independently explore Excel.

Activity Setup

Make sure all computers are shut down before starting activities so learners can be reminded of steps in previous activities.

Learner Objectives

Demonstrate an understanding of spreadsheet functions within Microsoft Excel.

. . . .

Instructional Procedures:

1. Begin the lesson by reminding learners about the advantages of spreadsheets, and highlight the uses of spreadsheets in their industry.

2. Instruct learners to turn on the computer and model the procedures as you navigate to Microsoft Excel and open a new file.

3. Move around the classroom to ensure all learners have successfully navigated to Excel. If necessary, pair up learners to ensure their success.

4. As you model, walk learners through the main tabs (ribbons) of Excel. You should review *File, Home, Insert, Page Layout, Review, View,* and *Help.* You should also identify with learners the eight interface items within Activity 2 *(Fill Handle, Row, Name Box, Borders, Cell, Column, Formula Bar, and Active Cell).*

5. Once learners have had a chance to navigate and review each ribbon and its functions, instruct learners to practice typing data within the workbook cells. As reference, have learners create a table with learner information. Include cell titles for Name, Current Field of Employment, and Years of Experience. Have learners work in small groups to collect and create data based on their group's demographics.

6. Once their data has been entered, have learners practice using font options (font size, bold, italics, underline, highlight, text color) and changing cell alignment (left, center, right) and row and column size.

7. Next, have learners practice deleting rows and columns, and remind them of the keyboard shortcuts that can be used when inputting data: Undo, Cut, and Paste.

8. Show learners how to create new sheets within the workbook and change the names on the sheet tabs.

9. Finally, have learners use the Editor function to check their documents for spelling mistakes (Review > Spelling) and save the file.

10. Once complete, refer learners to Activity 2 as a review.

Activity 2: Exploring Excel

Excel is a spreadsheet application developed by Microsoft. It is used to store, sort, organize, and calculate data.

In this activity, you created a new Excel workbook. Using the word bank below, identify the labeled parts of the Excel interface.

Word Bank			
Fill Handle	Row	Cell	Formula Bar
Name Box	Borders	Column	Active Cell
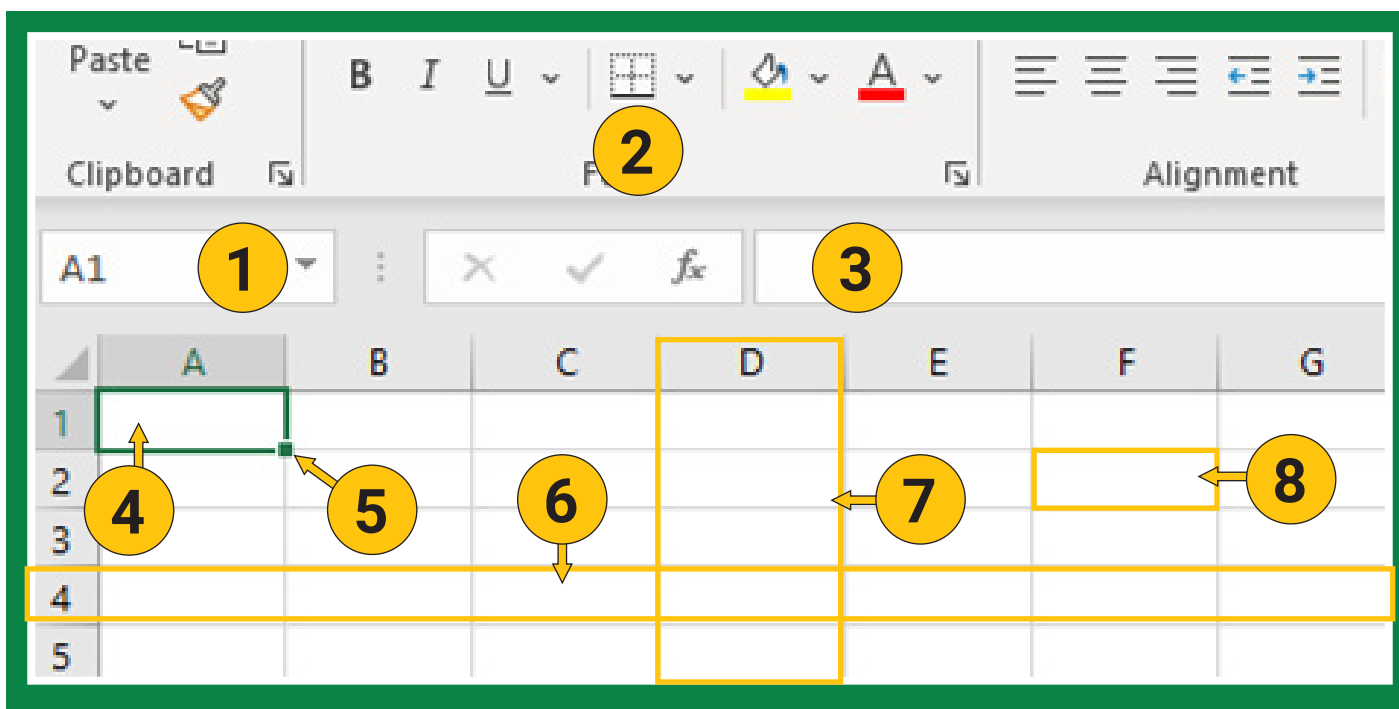
1	Name Box	5	Fill Handle
2	Borders	6	Row
3	Formula Bar	7	Column
4	Active Cell	8	Cell

Spreadsheets
- 77 -

Activity 3: Exploring Sheets

Now that learners have explored Microsoft Excel, they will take a similar look at Google Sheets.

Activity Setup

Make sure all learners have set up a Google account so they are able to access and use Google Sheets.

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Instructional Procedures:

1. Instruct learners to turn on the computer and model the procedures as you login to Google Sheets and start a new workbook (remind learners about Google login procedures).

2. As you model, walk learners through the main functions of Google Sheets. You should review *Active Cell, Sheet, File, Edit, View, Insert, Format, Tools*, and *Help*.

3. Once learners have had a chance to navigate and review the functions, instruct learners to type the data from Activity 3 in the cells of the workbook.

4. Once learners have completed entering the data, have them share their Google Sheet with a peer.

5. Instruct peers to read/review the data and a) underline and bold the headings (Part Number, Part Description, Quantity, Location); b) change the color of the Quantity to red; and c) use the comment feature to provide feedback about the data included within the workbook.

6. Next, have learners refer back to their edited Google Sheet and review/resolve the comments left by their peer.

7. Instruct learners to practice formatting using *Font* options: font, font size, bold, italics, underline, highlight, text color.

8. Next, have learners use change cell alignment (left, center, right) and adjust row and column size.

9. Learners should then create a new tab and rename it.

10. Finally, have learners use the *Spell check* function to check their documents for spelling mistakes (Tools > Spelling and Grammar > Spell check). Remind them that as long as they are online, changes to the Google Sheet are automatically saved.

11. Instruct learners to share the Google Sheet with the instructor (explaining that it can also be downloaded as an Excel file). Once complete, have learners complete Activity 3.

Activity 3: Exploring Sheets

Sheets is a spreadsheet application developed by Google. It is used in the same way as Microsoft Excel: to store a variety of data (information). In this activity, you created and shared a Google Sheet.

Example Sheet - Piping and Plumbing Fitting Inventory

Piping and Plumbing Fitting Inventory

File   Edit   View   Insert   Format   Data   Tools   Exte

100% $ %   .0   .00   123▾   Defa

C6   fx   38

	A	B	C	D
1	Part Number	Part Description	Quantity	Location
2	1001	Adapter	120	B21
3	1002	Elbow	250	B26
4	1003	Coupling	144	B38
5	1004	Union	46	B42
6	1005	Reducer	38	B20
7	1006	Tee	64	B44
8	1007	Cross	66	B45
9	1008	Cap	140	B48
10	1009	Plug	28	B51
11	1010	Barb	78	B23
12	1011	Valve	89	B24

In this example, a plumber has used Sheets to create an inventory list of piping and plumbing fittings.

The part number, part description, quantity, and location is listed for each part. The location "B" refers to bins the parts are stored in.

Using the inventory list, answer the questions below.

1. What is the active cell? __C6_____

2. How many plugs are in stock? __28_____

3. What is the location of the plugs? __B51_____

4. What is the part number for a valve? __1011_____

5. Which item has the lowest quantity? __Plug_____

Activity 4: Creating a Table

After understanding Microsoft Excel and Google Sheets, learners will create a table and input data within Excel.

Activity Setup

Make sure the instructor's computer is set up to demonstrate creating a table and inputting data in Excel.

Learner Objectives

Demonstrate an understanding of how to create a table in Excel and its functions within Google Sheets.

Instructional Procedures:

1. Begin the lesson by reminding learners about the advantages of spreadsheets, and highlight the uses of spreadsheets in their industry.

2. Instruct learners to turn on the computer and model the procedures as you navigate to Microsoft Excel.

3. Move around the classroom to ensure all learners have successfully navigated to Microsoft Excel and have a new workbook open. If necessary, pair up learners to ensure their success.

4. Direct learners to Activity 4 and have them select one of the inventory lists.

5. Learners should input the data into three columns. Ask them to format the table as they wish, but suggest that they bold the column titles and use a border.

6. Have the learners sort the table by quantity, from least to greatest.

7. Demonstrate how to filter data (highlight the row containing the column titles; select Data > Filter).

8. As learners complete their data entry and formatting, have them save the workbook document with a relevant title.

9. Refer learners to *Assessment Activity: Emailing the Inventory List*, where they will be emailing the document to the instructor.

Activity 4: Creating a Table

You have now explored two spreadsheet applications: Excel and Sheets. Some employers use Excel to keep track of supplies. Select a sample inventory list from the options below and create a table in Excel. Use font options to make the column titles bold and add a border around the table.

CARPENTRY SUPPLY INVENTORY
Item, Quantity, Location

- Hammer, 13, Workshop
- Tape Measure, 21, Supply Closet
- Chalk Line, 33, Supply Closet
- Pencil, 120, Supply Closet
- Tin Snips, 15, Supply Closet
- Framing Square, 17, Workshop
- Wood Chisel 1", 38, Workshop
- Level, 13, Workshop
- Circular Saw, 4, Workshop
- Extension Cord, 16, Supply Closet

PLUMBING HAND TOOL INVENTORY
Item, Quantity, Location

- Tubing Cutter, 5, Warehouse
- Hacksaw, 7, Warehouse
- Torch, 8, Warehouse
- Thread Sealing Tape, 9, Supply Closet
- Pliers, 12, Supply Closet
- Flashlight, 15, Supply Closet
- Bucket, 22, Warehouse
- Pipe Wrench, 23, Warehouse
- Faucet Key, 24, Warehouse
- Sink Wrench, 20, Warehouse

ELECTRICIAN TOOL INVENTORY
Item, Quantity, Location

- Pliers, 14, Supply Closet
- Tape Measure, 13, Supply Closet
- Electric Drill, 6, Warehouse
- Wire Strippers, 17, Supply Closet
- Fish Tape, 43, Supply Closet
- Voltage Tester, 21, Warehouse
- Flashlight, 33, Supply Closet
- Conduit Bender, 12, Warehouse
- Reaming Bit, 18, Supply Closet
- Insulated Gloves, 22, Supply Closet

Did you know?

?

You can use formulas and functions in spreadsheets to perform basic math tasks, like adding the data in a column to calculate a total. This will be covered in a later module, but if you want to get a head start, find the *Insert Function* icon in Excel and explore the options.

Assessment: Emailing an Inventory List

Now that learners have created a table and input data within Excel, they will demonstrate their understanding of using email to communicate with the instructor, sharing the newly created inventory list.

Learner Objectives

Demonstrate an understanding of how to communicate using email, attaching files, and composing a professional email.

Instructional Procedures:

1. Begin the lesson by reminding learners about the importance of using email to communicate within the workplace.

2. Instruct learners to open Gmail and compose a professional email to the instructor. This email should include information within the paragraph about the attached inventory list. Refer learners to the sample email included within the *Assessment: Emailing an Inventory List* activity.

3. Move around the classroom to ensure all learners have successfully navigated to their Gmail account and have opened a new email. If necessary, pair up learners to ensure their success.

4. Once learners have completed composing their email, remind them to attach the newly created inventory list to the email before sending it to the course instructor.

5. As the instructor, you may need to provide a reteach on how to attach a document to an email.

For this assessment, you will use the email account you created earlier to write a professional email and attach the spreadsheet you made.

Use the example below as a guide.

Carpentry Inventory List   — ⤢ ✕

boss@abc-construction.com

Carpentry Inventory List

Mr. Jackson,

I have attached the inventory list you requested. Please let me know if you have any questions.

Thank you,
John

John Smith
johnsmith@gmail.com
(999)123-4567

Carpentry Inventory List.xlsx (10K)   ✕

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Remember:

You can use the keyboard shortcuts you learned in almost any software application. For example, you can press *Ctrl + C* to copy information in a cell and *Ctrl + V* to paste it into another cell. If you type the wrong information into a cell, you can press *Ctrl + Z* to undo, which will clear the information.

Learner Resources and Assessment Tools

Learner Resources

Learners have been exposed to vocabulary specific to *spreadsheets* within the activities they completed for this lesson.

As a reminder, each lesson contains a vocabulary list to assist learners. Be sure to refer to previous vocabulary lists and reinforce connections between lessons as necessary. Remind learners that they can keep their workbooks and refer to the vocabulary and other information as needed, even after the course is complete.

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Assessment *(Check Your Understanding)*

Now that learners have explored the functions in *Microsoft Excel* and *Google Sheets*, practiced entering data, created a table, and used many of the available features to personalize their documents, they will demonstrate their mastery by completing a *Check Your Understanding* assessment. This assessment is not intended to be graded, but instead used to identify areas of strength and weakness within the learner knowledge related to *spreadsheet skills*.

For this *Check Your Understanding*, learners will reflect on spreadsheets. They will share two things they learned, explain why or how someone might use spreadsheets in the workplace, and discuss formatting options they might use when creating an inventory table.

As the instructor, you can go over the questions with the whole group or use the completed questions as an Exit Ticket.

Vocabulary

Some of the vocabulary words you learned in this lesson are listed below.
Refer back to this page if you need help remembering.

Vocab Word	Definition
Active Cell	The cell that is currently selected.
Borders	A formatting option that allows you to create a visual outline around an object, such as a table or text box.
Cell	The building block of a spreadsheet; a single data point.
Column	A vertical set of cells. The column number is seen at the top of the worksheet.
Fill Handle	A small box that appears on the active cell that allows you to fill information into other cells.
Filter	A function that helps display relevant data by temporarily hiding the data you do not want to see.
Formula Bar	The bar that shows the contents of the selected cell.
Name Box	The box that displays the cell that is currently selected.
Row	A horizontal set of cells. The row number is seen on the left side of the worksheet.
Sheet Tab	A control used to display the worksheet name and show which worksheet is currently being edited.
Sort	A function that helps organize data (for example, arranging a numerical column from smallest to largest).
Spreadsheet	An electronic document used to store, sort, organize, and calculate data. This is a general term, and it may be used to refer to both Microsoft Excel files and Google Sheets.
Workbook	Another name for an Excel file.
Worksheet	A sheet, or page, within a spreadsheet file.

Instructor Notes

Spreadsheets
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Check Your Understanding

In the construction field, you might not use word processing every day, but it is a useful skill to have. Use the questions below to reflect on why it is important.

Reflection

What are two things you learned about spreadsheets?

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Why or how might someone use spreadsheets in the workplace?

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Discuss formatting options you might use when creating an inventory table.

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