Unit 4-3 Operating Systems

Technology Concepts
Important lesson background and teaching tips for instructors

In this lesson, learners will become familiar with the distinction between **hardware** and **software**. They will also learn identifying features of the two major computer **operating systems** - **Windows** and **Mac OS** - in order to distinguish between the two.

Teaching Tips:
- If most of your learners have smartphones, consider adding an activity where learners compare different smartphone **operating systems**. For example, learners who own iPhones can pair with Android users and compare the similarities and differences.
- If you have access to a **Mac** computer, consider projecting and sharing the desktop with learners as a visual example to compare to **Windows**.

Unit 4-3 Operating Systems

4-3 Learning Objective Standards

    1. Identify the operating system used by a computer.

    2. Identify the parts of the Windows 10 interface (desktop, taskbar, etc.).

4-3 Vocabulary

Dock	**Peripherals**
Firmware (chip)	**Software**
Hardware	**Task Bar**
Mac OS	**Utilities**
Operating system	**Windows**

Unit 4-3-A Reference DESKS: (Compare)
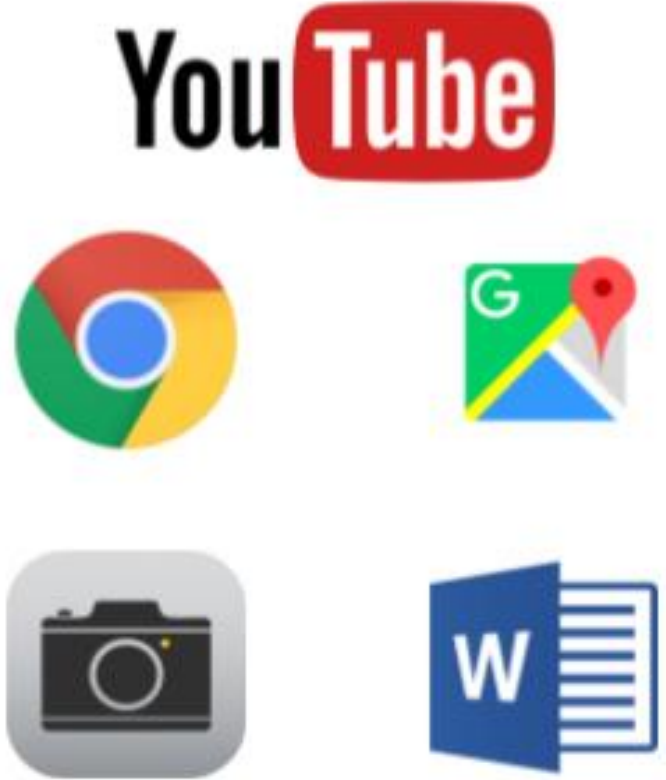
DESK 1

DESK 2
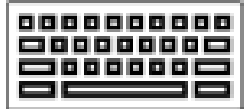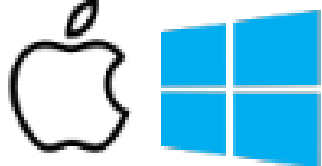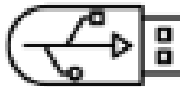
Unit 4-3-B Reference Hardware and Software

Hardware	Software

Printer

Scanner

Camera

Speakers

Keyboard

Hard Drive

Virtual Reality

Robotics

Unit 4-3-B Reference Hardware and Software

Hardware vs Software - Practice

Directions: Examine each item below. Decide: Is it hardware or software?

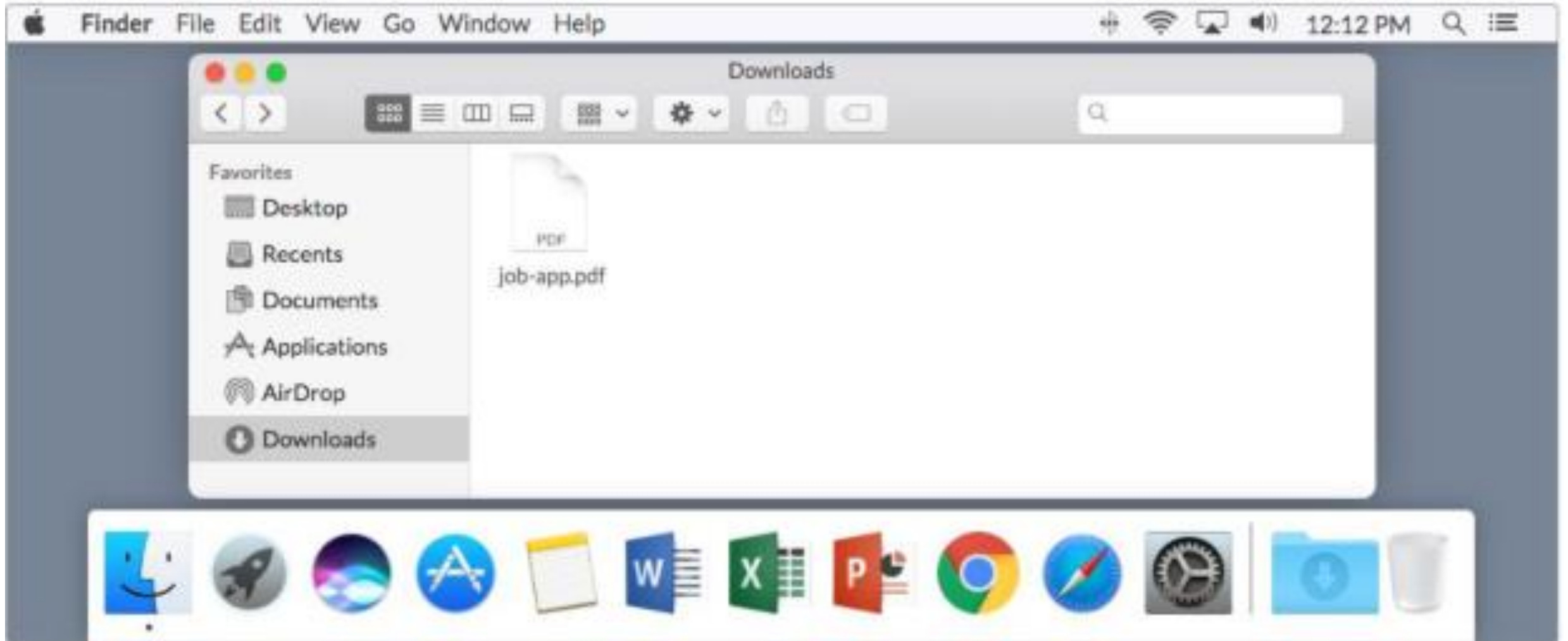|			
Mouse	Program/Application	Keyboard	Operating System
Screen	Flash Drive	Laptop	Email

Unit 4-3-D Reference Operation Systems

#1 Windows or Mac
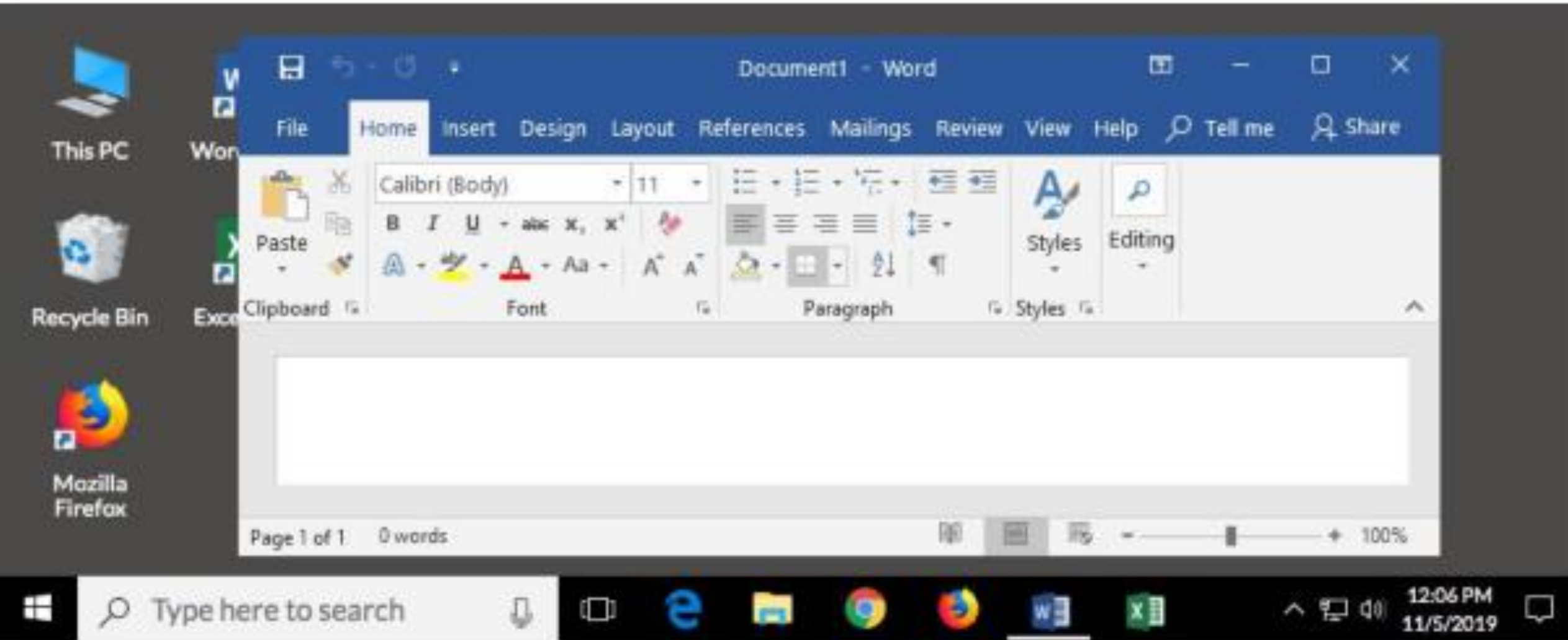
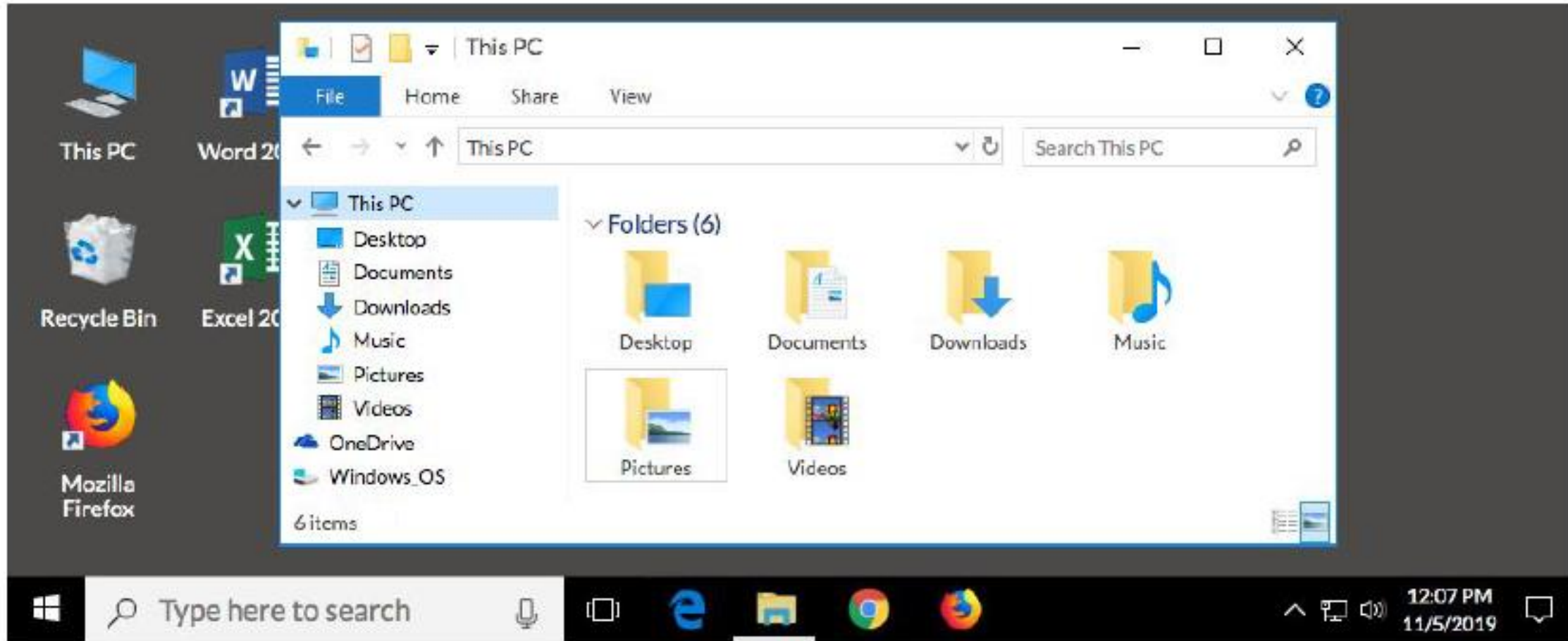# Unit 4-3-D Reference Operation Systems

#2 Windows or Mac

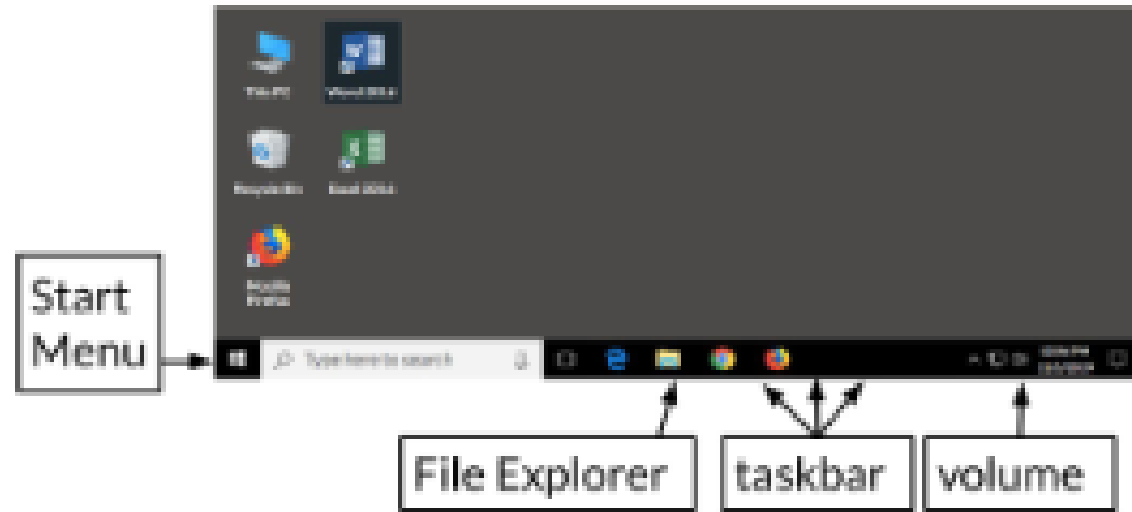# Unit 4-3-D Reference Operation Systems

#3 Windows or Mac

Unit 4-3-D Reference Operation Systems

#4 Windows or Mac

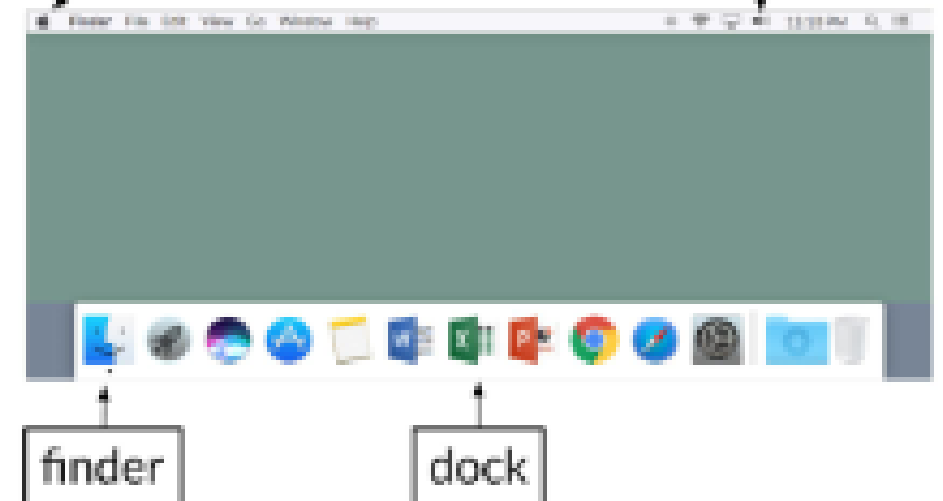# Unit 4-3-C Reference Key

Unit 4-3-A Handout (Icons)

12:10 PM	🔊	📶	🔍
Time	Volume	WiFi	Search

Mac
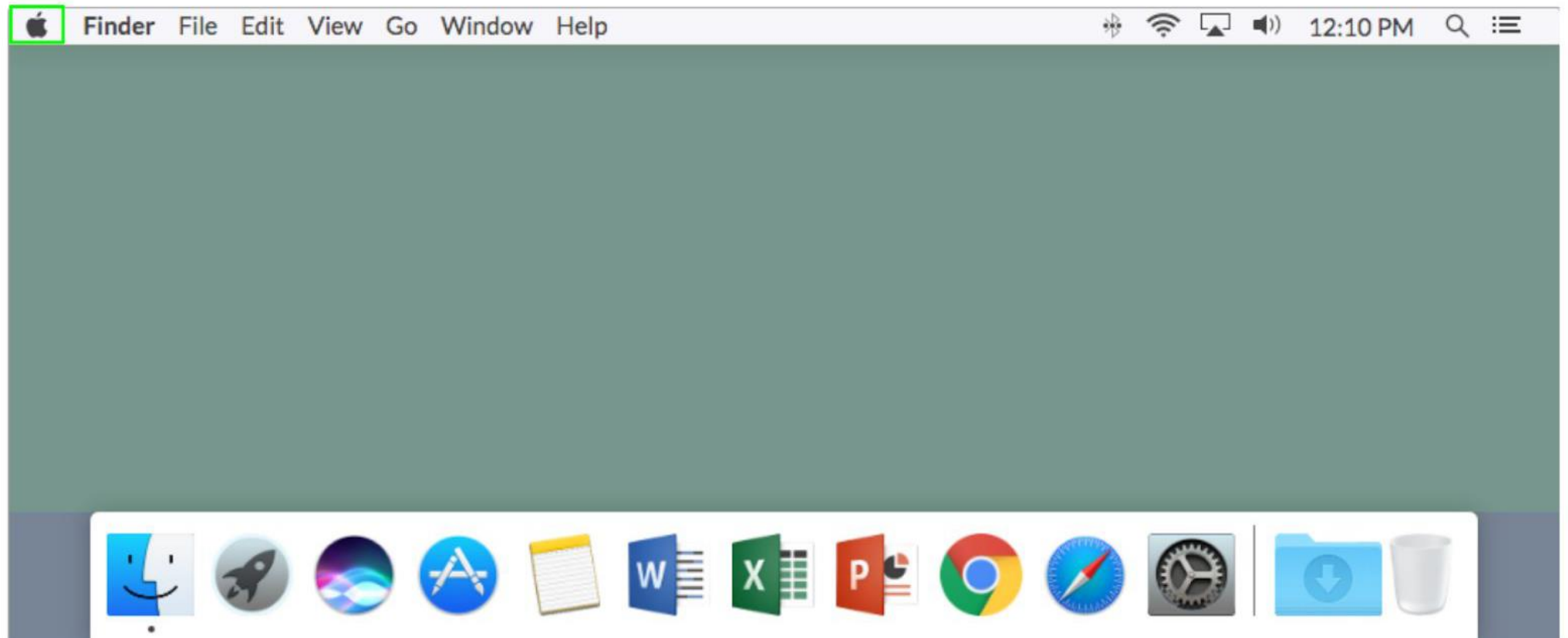
4-3 Windows and Mac (Same and Different)

- Volume: "On both computers you can change the volume."
  - **Windows**: lower right corner.
  - **Mac**: upper right corner (depending on user settings).
- Programs: "Both have programs. Programs are computer tools you can use to type documents, use the internet, or listen to music."
  - **Windows**: on the taskbar.
  - **Mac**: on the dock.
- Sign out: "You can sign out of both computers."
  - **Windows**: in the Start Menu.
  - **Mac**: in the Apple Menu.
- Files: "Both computers have files. Files are items on your computer like documents, papers, schedules, and songs."
  - **Windows**: in the File Explorer.
  - **Mac**: in the Finder.
- Brand icons: "To tell the difference between the two **operating systems**, look for the brand icons (small picture)."
  - **Windows**: **Windows** icon in the bottom left.
  - **Mac**: Apple icon in the top left.

Unit 4-3-B Handout (Compare Windows and Mac)

Apple Menu	Programs	Taskbar	Files
File Explorer	Time	WiFi	Start Menu
Search	Finder	Volume	Dock

Windows	Both	Mac

KEY

Windows	Both	Mac
Start Menu Taskbar File Explorer	Files Programs WiFi Volume Time Search	Dock Apple Menu Finder

Unit 4-3-C Handout (Software and Hardware)

Directions: Sort the words in the table below. Is it **hardware** or **software**?

mouse	keyboard	Operating System	Program
Screen	Application	Email	Laptop

Hardware	Software

KEY

- Mouse (**hardware**)
- Program/application (**software**)
- Keyboard (**hardware**)
- **Operating System (software)**
- Screen (**hardware**)
- Flash Drive (**hardware**)
- Laptop (**hardware**)
- Email (**software**)

Directions: Label the icons of the two **operating systems** below.