

NOT FOR SALE

Republic of the Philippines
Department of Education
National Capital Region
Division of Pasig City



**Technical-Vocational and Livelihood Track
Information and Communications Technology (ICT) Strand**

Grade
12

Computer Systems Servicing NC II

QUARTER 1

LO 1: SET UP USER ACCESS

SELF- LEARNING MODULE 8 :

Overview of Windows Server 2008 R2

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COC 3 : SET UP COMPUTER SERVERS

Introductory Message

For the facilitator:

Welcome to the Technical Vocational Livelihood Education ICT Grade 12 CSS NC II Module on Set Up User Access: **Overview of Windows Server 2008 R2.**

This module was collaboratively designed, developed and reviewed by educators from Schools Division Office of Pasig City headed by its Officer-In-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin in partnership with the Local Government of Pasig through its Mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) while overcoming their personal, social, and economic constraints in schooling.

This learning material hopes to engage the learners into guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs namely: Communication, Collaboration, Creativity, Critical Thinking and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the learner:

Welcome to the Technical Vocational Livelihood Education ICT Grade 12 CSS NC II Module on Set Up User Access: **Overview of Windows Server 2008 R2**

The hand is one of the most symbolized part of the human body. It is often used to depict skill, action and purpose. Through our hands we may learn, create and accomplish. Hence, the hand in this learning resource signifies that you as a learner is capable and empowered to successfully achieve the relevant competencies and skills at your own pace and time. Your academic success lies in your own hands!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:



Expectation - These are what you will be able to know after completing the lessons in the module



Pre-test - This will measure your prior knowledge and the concepts to be mastered throughout the lesson.



Recap - This section will measure what learnings and skills that you understand from the previous lesson.



Lesson- This section will discuss the topic for this module.



Activities - This is a set of activities you will perform.



Wrap Up- This section summarizes the concepts and applications of the lessons.



Valuing- this part will check the integration of values in the learning competency.



Post-test - This will measure how much you have learned from the entire module.



EXPECTATION

After completing the lesson the learners should be able to:

- A. understand the overview of Windows Server 2008 R2 focusing on its basic interface.
- B. switch in between user account and administrator account using power buttons.
- C. give the importance of Server Manager in Windows Server 2008 R2 Standard.

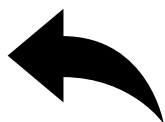


PRE-TEST

IDENTIFICATION :

Directions: Identify the following basic interface of Windows Server 2008 R2. Write your answer on the separate sheet of paper.

- _____ 1. Part of the basic interface that contains tools for systems administrators and advanced users.
- _____ 2. Provides a lists of roles that are installed in the computer (server) in alphabetical order
- _____ 3. Part of configuration that helps you to schedule automated task that perform action on specific time or when certain event occurs.
- _____ 4. Part of the basic interface that lets you decide to either to log off, switch user, lock, restart or shutdown your computer upon selecting on the dropdown menu.
- _____ 5. This area includes a table listing installed features on your computer and provides command links to add and remove features.



RECAP

TRUE or FALSE

Directions: Read each statement below carefully. Write **T** if the statement is correct and **F** if not in the space provided before each number.

- _____ 1. Windows 7 is a guest operating system in VMware.
- _____ 2. Windows 7 Ultimate has a complete features compared to other versions.
- _____ 3. Windows 7 operating system will end its support system by year 2022.
- _____ 4. The process of installing Window 7 on the VMware is almost the same as Windows Server 2008 R2.
- _____ 5. You can rename the computer as CLIENT during the process of installation.



LESSON

Overview of Windows Server 2008 R2

Introduction

Over the years, it has evolved quite dramatically from the early days of Windows NT Server, Windows 2000, Windows 2003, or even Windows 2008. With the release of Windows Server 2008 R2, Microsoft again has introduced a number of new technologies intended to help IT professionals improve their ability to provide network services to the clients they serve.

Windows Server 2008 R2 Standard is another one of Microsoft's entry level server offerings (alongside Windows Web Server R2 2008 and Windows Server R2 2008 Foundation). As previously stated, while the original version of Windows Server 2008 supported both 32-bit and 64-bit versions, the R2 version supports only 64-bit processors. In terms of hardware Standard Edition supports up to 4GB of RAM and 4 processors. Windows Server 2008 is primarily targeted at small and mid-sized businesses (SMBs) and is ideal for providing domain, web, DNS, remote access, print, file and application services.

Our previous discussion on the installation of Windows server 2008 R2 as NOS did not tackle the hardware minimum/maximum requirements since we are using VMware. For this particular discussion, we will focus only on the overview of Windows Server 2008 R2 Standard.

Basic Interface of Windows Server 2008 R2

Now, let's talk about the basic interface of Windows Server 2008 R2 that will later be used to configure and manage the server.

When you hit the start button, this is what it looks like (take note that we are in the user account). The most important part here is the Administrative Tool that contains tools for systems administrators and advanced users. Tools might vary depending on the version you are using.

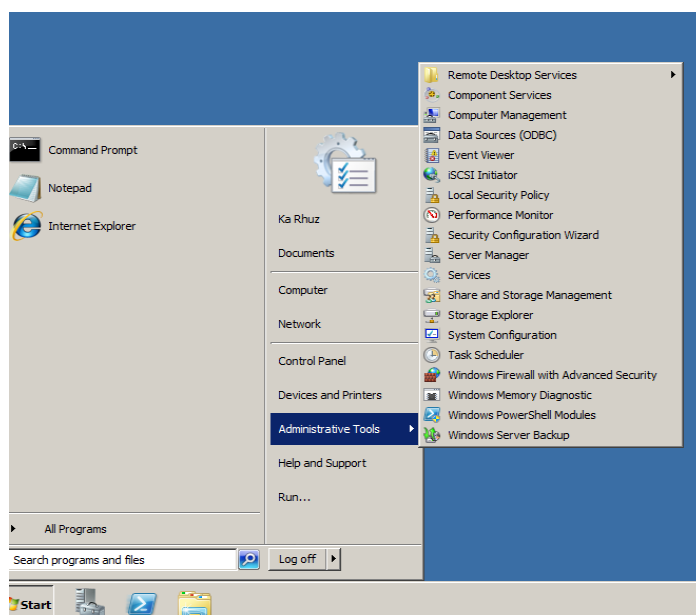
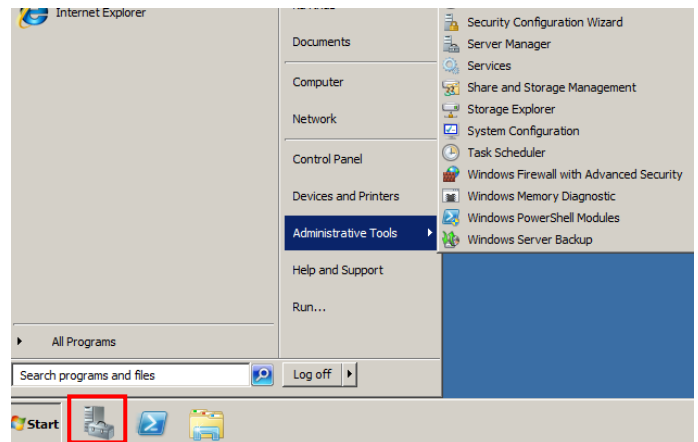


Fig.1. Start button.

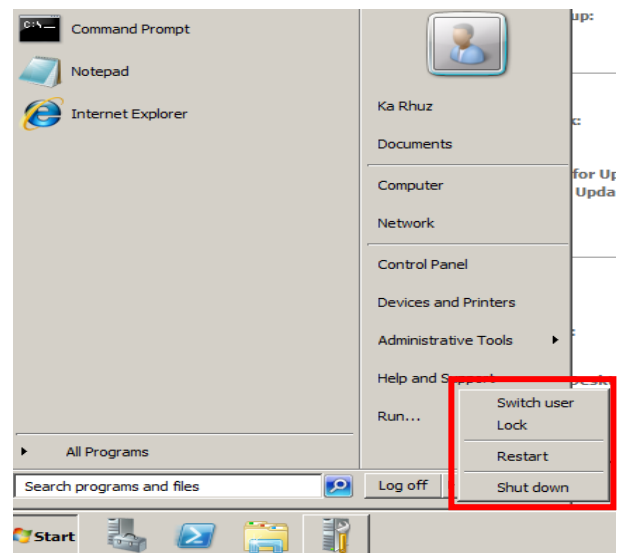
Server Manager can also be accessed in the administrative tools or by clicking server manager icon as shown at the task bar:

Fig. 2. Accessing Server Manager



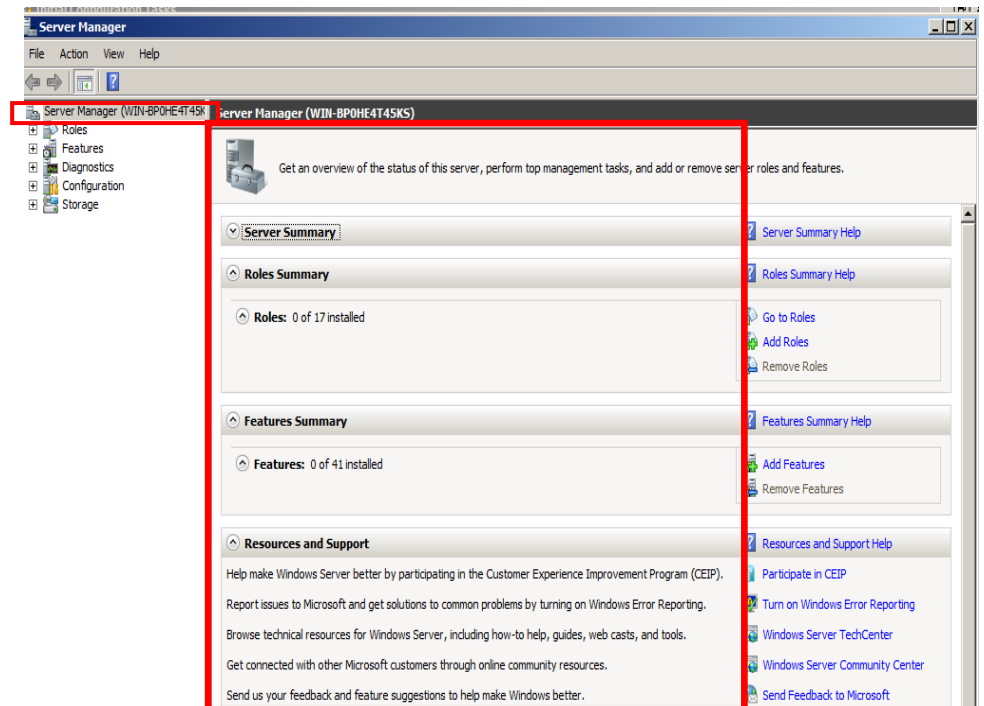
Power Button lets you decide to either to log off, switch user, lock, restart or shutdown your computer upon selecting on the dropdown menu.

Fig. 3. Power button



Upon clicking the server manager appears the Server Manager Main Window as shown above. It allows you to view a detailed snapshot of the server's identity information, selected security configuration options and the installed roles and features.

Fig 4. The Server Manager

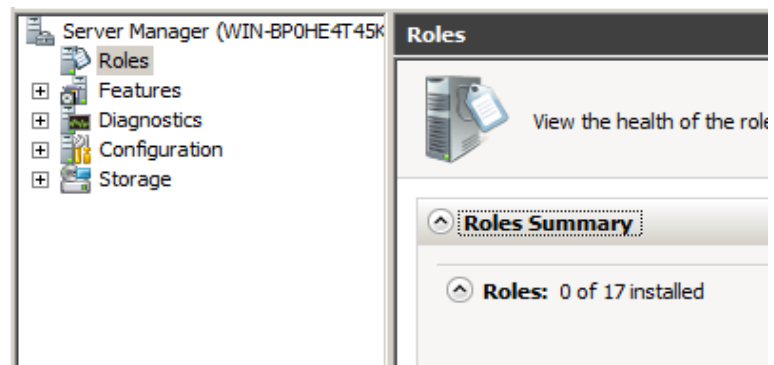


THE SERVER MANAGER

Now , let us discuss the overview of sections under server manager and their functions. Server Manager consists of mainly five (5) sections : Summary Roles, Features, Diagnostics, Configuration and Storage.

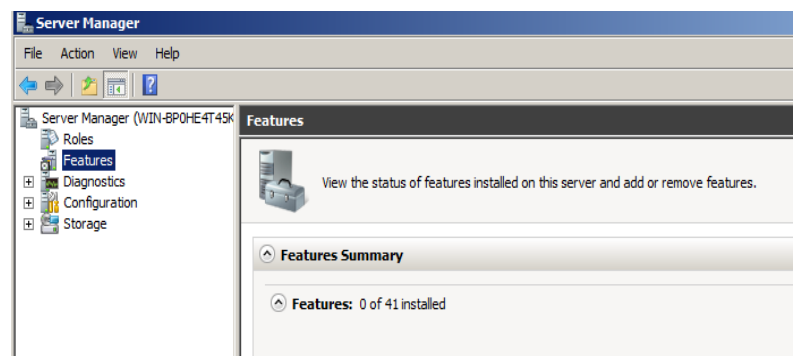
The Summary Roles section lists roles that are installed in the computer (server) in alpha - betical order. To the left of each role is an icon that displays the current operational status of the role.

Fig. 5. Summary roles.



Features Summary area includes a table listing installed features on your computer and provides command links to add and remove features.

Fig. 6. Features summary.



Diagnostics consolidates three different consoles into a convenient locations. These are:

1. Event Viewer- is a Microsoft Management Console (MMC) snap-in that enables you to browse and manage event logs. It is an indispensable tool for monitoring the health of systems and troubleshooting issues when they arise.

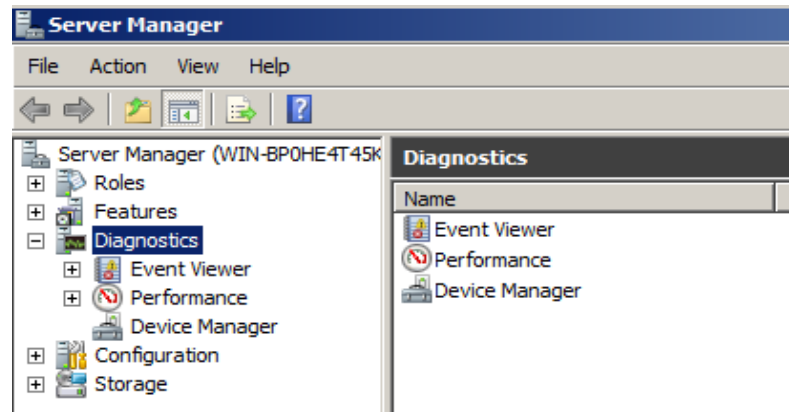


Fig. 7. The Diagnostic page

2. Windows Performance Monitor
 - It examines how programs you run affect your computer's performance, both in real time and by collecting log data for later analysis.
3. Device Manager- you can use this to install and update the drivers for hardware devices, change the hardware settings and troubleshoot the problems.

Configuration consists of the following consoles as shown on the left,

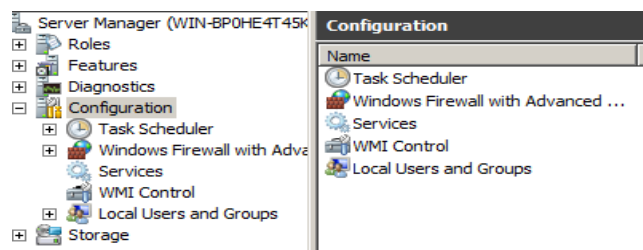


Fig. 8. The Configuration page

1. Task Scheduler – helps you to schedule automated task that performs action on specific time or when certain event occurs.
2. Windows Firewall with Advanced Security – helps you to protect the computers on your network. This includes stateful firewall that allows you to determine which network traffic is permitted to pass between your computer and the network.
3. Service – is an application type that runs in the system background without a user interface.
4. WMI Control – or Windows Management Instrumentation is a tool that enables you to configure WMI settings on a remote or local computer. Using WMI Control, you can perform the following tasks:
 - a. Backup the repository-
 - b. Change the default namespace for scripting
 - c. Authorize users or groups and set permission levels
5. Local Users and Groups- is a collection of administrative tools that you can use to manage a single local computer or remote computer. This can also be used to secure and manage user accounts and groups that are locally stored on your computer.

Storage – consists of two(2) sections:

a. Windows Server Backup – provides a set of wizards and other tools for you to perform basic backup and recovery tasks for the server.

b. Disk management – performs disk -related task such as creating and formatting partitions and volumes and assigning drive letters.

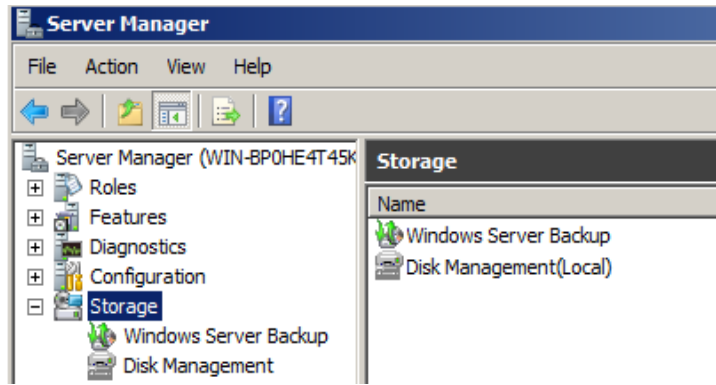


Fig.9 The storage page

Windows Initial Configuration Tasks

Tasks- After you have completed the installation of Windows Server 2008 R2 and before deploying the server, some configurations are required to identify the computer to other computing resources on your network, secure the computer, enable administrators to perform tasks on the computer and customized the computer by adding server roles and features

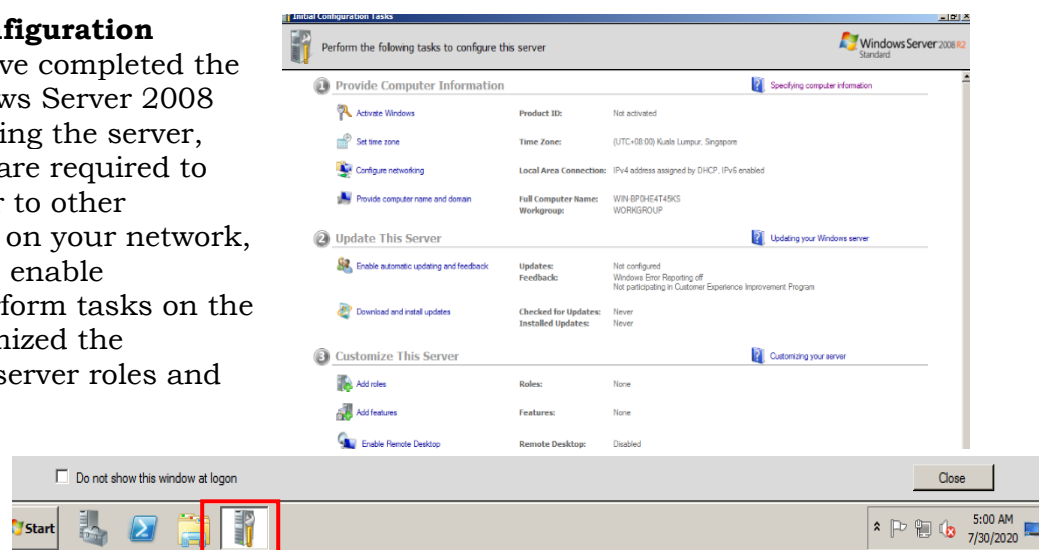
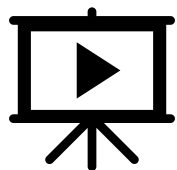


Fig. 10. Initial Configuration Tasks



A C T I V I T I E S

Activity 1. Hands-on Activity

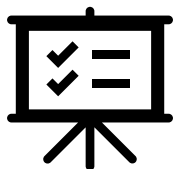
Exploring the basic Interface of Windows Server 2008 R2

Let us try this activity...

1. Uninstall Windows Server 2008 R2. Remember the process of uninstalling this machine. Then fresh install the software. If after installation VMware snap-in tool appears, let it be.
2. From your user account, close the initial configuration task. Click log off button and log on to your administrator account.

3. Close initial configuration task. Log off your administrator account and log on to your user account.
3. Do the same procedure (2 and 3) once more.
4. Now, at this time, from your user account, click SWITCH USER instead of LOG OFF and log in to your administrator account by clicking administrator, enter admin password and click the arrow right button. Then try to go back to user account using switch user.
5. Repeat step 4 once more.
6. Now , from your user account, use LOCK and log in to your administrator account by clicking switch user button while your user is in logged on. Press CTRL+ALT+DEL, press ESC and log on to your administrator account. Do the same procedure to go back to your user account.
7. From your user account, while your administrator account is logged on, restart your user account. Remember the process of restarting/shutting down the account. Click YES to proceed.
8. From the user account, after restarting the machine, log off your account and log in to your admin account. Then shut down the machine. Repeat all the process until you master switching the accounts using different power buttons. You will use this skills for the second quarter later.
9. Don't forget to explore all the consoles under server manager. Again, try to locate and explore the following:
 - a. Server manager button
 - b. Initial Configuration Task button
 - c. Roles
 - d. Summary
 - e. Diagnostics
 - f. Configuration
 - g. Storage

After mastering the basic interface of Windows Server 2008 R2, which later on will be useful in configuring and managing the server, please answer the Self- Assessment Guide (SAG) on your Worksheet provided for this activity.



W R A P – U P

The basic interfaces of Windows Server 2008 R2 are the power buttons that let you decide to either to log off, switch user, lock, restart or shutdown your computer upon selecting on the dropdown menu.

Server Manager has different consoles namely Initial Configuration Task button, Roles, Summary, Diagnostics, Configuration and Storage



VALUING

What is the significance of Windows Server 2008 R2 in the IT world?

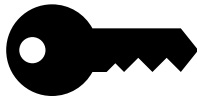


POST TEST

Multiple choice

Directions: Read each statement below carefully. Write only the letter that corresponds to your answer on the space provided before each number. Do this on your worksheet provided for this activity.

- _____ 1. Part of the basic interface that contains tools for systems administrators and advanced users.
- | | |
|------------------------|-------------------------------|
| a. Server manager | c. Configuration |
| b. Administrative tool | d. Initial configuration task |
- _____ 2. Part of configuration that helps you to schedule automated task that perform action on specific time or when certain event occurs.
- | | |
|--|---------------------------|
| a. Windows Firewall with Advanced Security | c. Local Users and Groups |
| b. WMI Control | d. Task Scheduler |
- _____ 3. This area includes a table listing installed features on your computer and provides command links to add and remove features.
- | | |
|------------------|---------------------|
| a. Diagnostics | c. Features Summary |
| b. Configuration | d. Roles Summary |
- _____ 4. Server Manager console having the lists of roles that are installed in the computer (server) in alphabetical order.
- | | |
|------------------|---------------------|
| a. Roles Summary | c. Diagnostics |
| b. Configuration | d. Features Summary |
- _____ 5. Which of the following processor supports Windows Server 2008 **R2** version?
- | | |
|-----------|-----------------------|
| a. 32-bit | c. Both 32 and 64-bit |
| b. 64-bit | d. None of these |



KEY TO CORRECTION

PRETEST : A. Administrative tool B. Summary roles C. Task scheduler D. Power button E. Features Summary	RECAP 1. T 2. T 3. F 4. T 5. T	POST TEST 1. B 2. D 3. C 4. A 5. B
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Can I: 1. Identify the different consoles under Server Manager? 2. Identify the consoles based on their function? 3. Properly distinguish the use of different power buttons? 4. Properly switch from user to administrator account using power buttons? 5. Properly shutdown the machine and use shut down event tracker options?	ACTIVITY Since the activity is a Hands-On activity, give students ample time to self-learn the procedures. After mastering the process, let the students self-assess their knowledge and skills. Rate themselves in the scale from 1 to 5 , 1 as the lowest and five as the highest.
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REFERENCES

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Images:

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Cover Page was designed using Adobe Photoshop 2018 photo manipulation.

<https://www.computerhope.com/jargon/s/server.htm>
(accessed June 20, 2020)

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