DIVISION OF GEN. TRIAS CITY

Project ISuLAT – ACTIVITY SHEETS in Technology and Livelihood Education 10 (TLE)
(Intensified Support to Learning Alternatives Through Activity Sheets)

COMPUTER SYSTEM SERVICING G10
QUARTER 3–WEEK 4: DISK MANAGEMENT

Name of Learner: _____   Date: _____

Grade & Section: _____   Teacher: _____

MOST ESSENTIAL LEARNING COMPETENCY (MELC): 4.2 Carry out variation to application software in accordance to customer/ client requirements.
Code: TLE_IACSS9-12ICCS-IIIa-e-31

Objectives:
1. Identify the features and functions of Windows disk management software.
2. Learn how to perform basic disk management on your pc.
3. Develop the student's decision-making skills by challenging the student's thinking skills on why and when to perform disk management protocols.
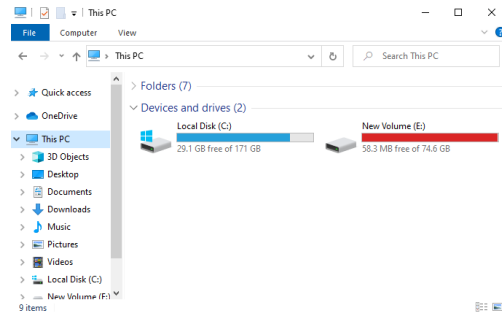
TEACH ME

Learning Task 1:

Disk Management is an essential part of your operating system to assure the proper functioning and maintenance of the disk drives present in your PC. We need to be aware of this to maximize the capability of our computers. Let us start exploring these disk management tools.

In picture below, how many drives are present?
Answer: _____

What are the drive letters presented?
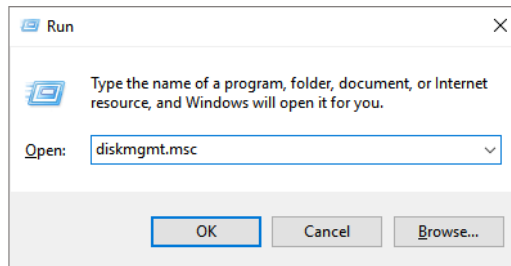
Answer: _____

Learning Task 2:

Disk management focuses on the advanced storage task in Windows Operating System. It enables users to manage the disk drives (and the different partitions) installed in their personal computers. It was first introduced in Windows XP as a substitute for the fdisk command. Now it is applied to several Windows OS like:
1. Windows 10
2. Windows 8.1
3. Windows 7
4. Windows Server (Semi-Annual Channel)
5. Windows Server 2019
6. Windows Server 2016
7. Windows Server 2012 R2
8. Windows Server 2012

Disk management can be used in several ways in your PC such as initializing a new drive, extending a basic volume, shrinking a basic volume, and changing a drive letter.

Here are some ways on how to open disk management in your PC.

1. Use Windows+R to open Run, type diskmgmt.msc in the empty box, and tap "OK".
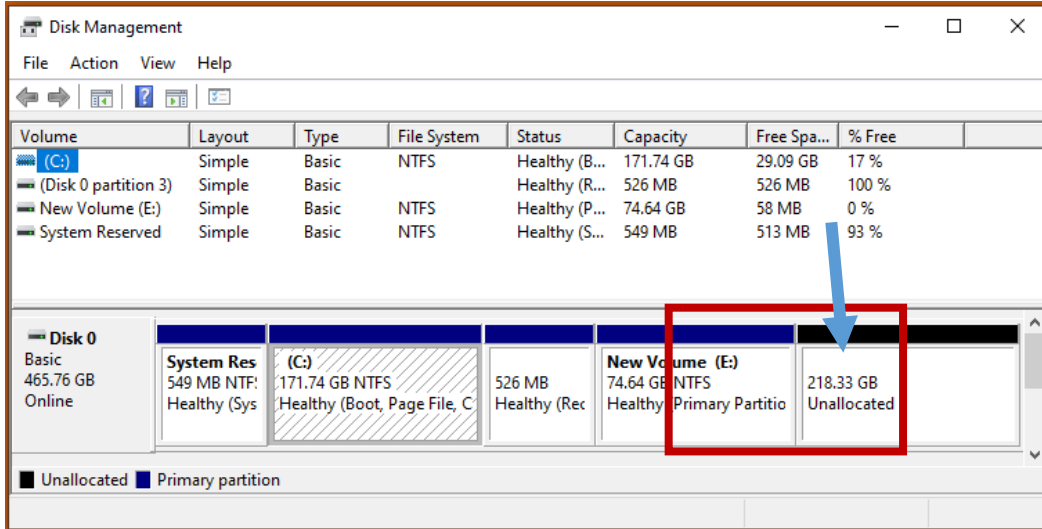

2. Right-click the Start button and choose "Disk Management" on the left.

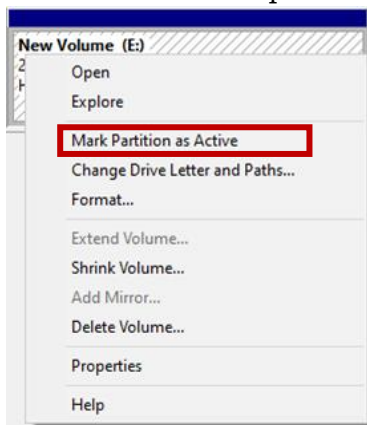3. Type disk management in the search box on the taskbar.

Extend a basic volume

   You can use Disk Management to add space to an existing volume, extending it into empty space on the drive, but only if the empty space doesn't have a volume on it (it's unallocated) and comes immediately after the volume you want to extend, with no other volumes in-between, as shown in the following image. The volume to extend also must be formatted with the NTFS or ReFS file systems.
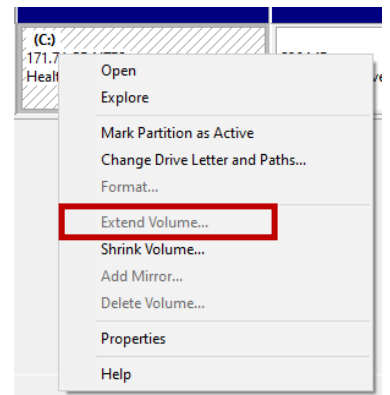

Shrink a basic volume

   You can decrease the space used by primary partitions and logical drives by shrinking them into adjacent, contiguous space on the same disk. For example, if you discover that you need an additional partition but do not have additional disks, you can shrink the existing partition from the end of the volume to create new unallocated space that can then be used for a new partition.

Change a Drive Letter

If you wish to change the letter of the drive in your PC, you can do it with the disk management function. Just beware that if you change the drive letter wherein the Windows OS or apps are installed, it might have trouble running or finding the drive. In this case, it is not suggested to change the drive letter where the OS is installed.

   This is the process of changing drive letters.
1. Open Disk Management with administrator permission.
2. Right-click the volume for which you want to change or add a drive letter.
   3. Select Change Drive Letter and Paths.
   4. Follow the instructions provided.

   Aside from the said function of disk management, there are common tasks you might want to do in relation to disk management and maintenance.
1. Disk Cleanup - It allows users to remove files that are no longer needed or that can be safely deleted.
2. Disk Defragmentation - the process of consolidating fragmented files on the user's hard drive by which it breaks the data apart so that it will fit into available space.
3. Make multiple hard drives and pool them together, like a RAID.

   There is also disk management software available online for download which extends the capability of the default windows disk management. Below are the examples of other available software online.
1. EaseUS Free Partition Manager
2. Macrorit Disk Partition Expert
3. Paragon Partition Manager
4. AOMEI Partition Assistant
5. MiniTool Partition Wizard
6. Gparted
7. Cute Partition Manager
8. Active Partition Manager

   Some of the extended features of these software are merge partitions, migrate OS to SSD/HDD, recover lost partition, and copy disk partition.

LEARN MORE

Learning Task 3:

Direction: Encircle the words/phrases that are NOT related with the term disk management.

Computer	Clean up	Defragment	Virus	OS
Android	Partition	EaseUS	AOMEI	Drive letter
Extend	Mouse	Hard disk	Shrink	Keyboard
iOS	SSD	Fdisk	Windows	Paragon

Learning Task 4:

Direction: List down 3 situations wherein you will be prompted to use the disk management tools.

Situation **1**

Situation **2**

Situation **3**

EVALUATE NOW

SUMMATIVE ASSESSMENT

A. WRITTEN TASK
I. Direction: Read each question and their corresponding answers carefully and completely. Choose the answer that best fits the statement.

_____1. What enables users to manage the disk drives installed in their personal computers?
        a. computer management
        b. business management
        c. disk management
        d. OS management
_____2. All are operating systems that support disk management EXCEPT _____.
        a. Windows 8.1
        b. Windows Server 2012
        c. Windows 10
        d. Windows XP
_____3. All are ways to open disk management in your PC EXCEPT _____.
        a. click File Explorer and select the option disk management.
        b. use Windows+R button and type for diskmgmt.msc.
        c. use the search to open for disk management.
        d. right-click the start button and select disk management.
_____4. What allows users to remove files that are no longer needed or that   can be safely deleted?
        a. disk defragmentation
        b. disk cleanup
        c. disk management
        d. disk RAID system
_____5. What is the process of consolidating fragmented files on the user's hard drive by which it breaks the data apart so that it will fit into available space?
        a. disk defragmentation
        b. disk cleanup
        c. disk management
        d. disk RAID system

*B. Write **TRUE** if the statement is correct and **FALSE** if otherwise.*
_____1. It is recommended not to change the drive letter where the OS is installed.
_____2. Windows Vista is included in the list that supports updated disk management tools.

_____3. It is always a safe deletion of the unwanted data in your PC with disk cleanup.
_____4. You can open disk management by opening run and typing diskmgmt.msc
_____5. You can decrease the space used by primary partitions and logical drives by shrinking them into the same disk.

B. PERFORMANCE TASK
Direction: Make a short VLOG discussing disk management. Focus on the importance, the function, and process of accessing it through PC. It is okay for you not to demonstrate through an actual computer as long as you discussed it accurately through oral presentation/ reporting. *For those who do not have enough ICT resources, write an essay discussing the same topic.

Performance Rubrics			
Criteria	**5 points**	**3 points**	**1 point**
Following directions	All directions and processes were discussed.	some directions and processes were discussed.	None of the directions were followed.
Creativity	You used your own words and ideas	You used some words and ideas of your own.	You did not use your own words and ideas at all.
Effort	You took your time and worked hard	You put a small effort	You rushed through and did not work hard
Quality of work	Very clear, complete and concise.	Mostly clear and could be a little more concise	Unclear, incomplete, and not concise

References:

https://docs.microsoft.com/en-us/windows-server/storage/disk-management/overview-of-disk-management

https://docs.microsoft.com/en-us/windows-server/storage/disk-management/extend-a-basic-volume

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