# T.C. MİLLÎ EĞİTİM BAKANLIĞI

# BİLİŞİM TEKNOLOJİLERİ

# YABANCI DİLDE DONANIM KAVRAMLARI 222YDK118

- Bu modül, mesleki ve teknik eğitim okul/kurumlarında uygulanan Çerçeve Öğretim Programlarında yer alan yeterlikleri kazandırmaya yönelik olarak öğrencilere rehberlik etmek amacıyla hazırlanmış bireysel öğrenme materyalidir.
- Millî Eğitim Bakanlığınca ücretsiz olarak verilmiştir.
- PARA İLE SATILMAZ.

# **CONTENTS**

AÇIKLAMALAR	iii
INTRODUCTION	
LEARNING ACTIVITY-1	
1. HARDWARE UNITS	7
1.1. Internal Hardware Units	7
1.1.1. Motherboard (Mainboard)	7
1.1.2. CPU (Central Processing Unit)	7
1.1.3. RAM (Random Access Memory)	8
1.1.4. Disc Drives	8
1.1.5.Card Reader	10
1.1.6. Floppy Disk	10
1.1.7. Cards	
1.2. External Hardware Units	15
1.2.1. Input Devices	15
1.2.2. Display Units	18
1.2.3. Printers	
1.2.4. Image Processor Devices	20
1.2.5. Other Output Devices	
1.2.6. External Storage Devices	21
APPLICATION ACTIVITY	
MEASURING AND EVALUATION	
LEARNING ACTIVITY-2	
2. HARDWARE TERMS	25
2.1. Genaral Terms	
2.2. Motherboard Terms	27
2.3. Processor Terms	30
2.4. Hard Disk Terms	
2.5. Other Terms	
APPLICATION ACTIVITY	
MEASURING AND EVALUATION	
MODULE EVALUATION	37
ANSWER KEY	39
RESOURCES	40

# **AÇIKLAMALAR**

KOD	222YDK118		
ALAN	BİLİŞİM TEKNOLOJİLERİ		
DAL/MESLEK	Alan Ortak		
MODÜLÜN ADI	Yabancı Dilde Donanım Kavramları		
MODÜLÜN TANIMI	Bu modül; yabancı dilde donanım birimlerinin ve kavramlarının karşılıklarını kullanmak için temel bilgi ve becerilerin kazandırıldığı bir öğrenme materyalidir.		
SÜRE	40/24		
ÖNKOŞUL	Bu modül için ön koşul yoktur.		
YETERLİK	Donanım kavramlarının yabancı dildeki karşılıklarını kullanmak		
MODÜLÜN AMACI	Genel Amaç Öğrenci, bu modül ile gerekli ortam sağlandığında; ihtiya duyulan donanım birimlerinin ve kavramlarının yabandıdıdeki karşılıklarını kullanabilecektir.  Amaçlar  1. Tekniğine uygun olarak donanım birimlerinin yabandıdıdeki karşılıklarını okuyup kullanabilecektir.  2. Tekniğine uygun olarak donanım kavramlarının yabandıdıdeki karşılıklarını okuyup kullanabilecektir.		
EĞİTİM ÖĞRETİM ORTAMLARI VE DONANIMLARI	Ortam: Yabancı dil laboratuarı. Donanım: Bilgisayar, Projeksiyon cihazı.		
ÖLÇME VE  DEĞERLENDİRME  Modül içinde yer alan her öğrenme faaliyetind verilen ölçme araçları ile kendinizi değerlendireceks Öğretmen modül sonunda ölçme aracı (çoktan sed doğru-yanlış vb.) kullanarak modül uygulam kazandığınız bilgi ve becerileri ölçer değerlendirecektir.			

# **INTRODUCTION**

### **Dear Student**;

Nowadays, knowing of foreign language is a fact that cannot be ignored. And everyone knows this fact. It has become an important part of people's daily lives. If people know a foreign language, they can find a job easily. In addition, It is possible to achieve better wages.

We live in the time period described as the information age. The information age has accelerated the development of technology. In addition, information life and of time the validity is short increasingly. Therefore, the information obtained must be kept up to date. At this point, you need to know a foreign language in order to be a step ahead.

Today, English has been adopted by the whole world and was accepted as a world language. All issued information are translated into English and are published.

The computing sector is developing very fast. The highest using of technological developments has become an industry branch. Therefore, if people work in this area, they need to know Technical English.

This module is about information technology in the computing sector. This module includes English equivalents and usage patterns of the basic definition and terms. With this module you will follow the developments in the field of information technology and will have the knowledge of technical English.

# **LEARNING ACTIVITY-1**

# **AIM**

Students will be able to explain the hardware definitions according to the technique.

# **RESEARCH**

- Research the basic definitions and terms of hardware units.
- Research the latest developments in hardware technology.
- Make a presentation to your teacher and your friends in your classroom.

# 1. HARDWARE UNITS

# 1.1. Internal Hardware Units

# 1.1.1. Motherboard (Mainboard)

The motherboard provides connections for all parts of a computer. The memory, CPU, hard drives, optical drives, sound card, video card and other ports and expansion cards all connect to the motherboard directly or via cables.

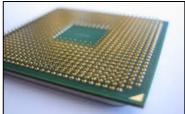


Picture 1.1: Motherboard "Back Bone" of the computer.

# 1.1.2. CPU (Central Processing Unit)

The central processing unit (CPU) is the portion of a computer system that carries out the instructions of a computer program, to perform the basic arithmetical, logical, and input/output operations of the system.

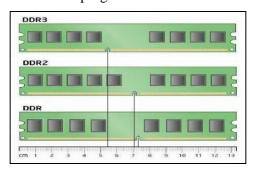




Picture 1.2: CPU (Central Prossesing Unit)

# 1.1.3. RAM (Random Access Memory)

Random Access Memory (RAM) maintains temporary computer data storage. Also RAM increases your process speed according to its data transfer rate. Double data rate RAMs are known to be the fastest RAMS. (ex: DDR, DDR2, DDR3). The faster your RAM is the more you can cope with various programs at the same time.



Picture 1.3: Distinguishing features of DDR RAMs; key notch positions

#### 1.1.4. Disc Drives

### 1.1.4.1. Hard Disk Drive

It is a storage device with very large capacity, which ranges from 1GB to Terabytes in the modernscenario. It is placed in side the cabinet of CPU. It is not a removable drive in normal circumstances. It is hidden inside the computer and cannot be seen by us. There can be one or more hard disk in the system unit of a computer.



Picrure 1.4: Structure of a hard disk



Picrure 1.5: 3.5" Hard disk

# 1.1.4.2. Optic Drives

# > CD-ROM – CD RW

CD-ROM (Compact Disk Read Only Memory) reads that data in the CD.

 $\mbox{CD RW}$  (Compact Disk Read Write) not only reads the data in the  $\mbox{\sc Cd}$  but also writes data in the  $\mbox{\sc CD}.$ 



Picrure 1.6: CD ROM Drive

### **▶** DVD – ROM – DVD RW

 $\ensuremath{\mathsf{DVD}} - \ensuremath{\mathsf{ROM}}$  (Digital Versatile Disc Read Only Memory) reads the data in the CD and DVD.

DVD-RW (Digital Versatile Disc Read Write) not only reads the data in the CD but also writes the data in CD veya DVD.



Picrure 1.7: DVD – ROM

# 1.1.5.Card Reader

It is a hardware unit that enables the data in the memory cards to be processed.



Picrure 1.8: Card Reader

# 1.1.6. Floppy Disk

It is a smaller capacity removable storage device. It is made up of thin and flexible plastic material. This thin plastic film is coated with a magnetic material known as iron oxide for recording data and is protected by a hard outer cover.



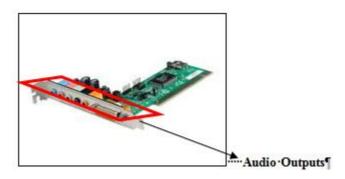
Picture 1.9: Floppy Disc

### 1.1.7. Cards

Cards are components added to computers to increase their capability. When adding a peripheral device make sure that your computer has a slot of the type needed by the device.

### **1.1.7.1. Sound Cards**

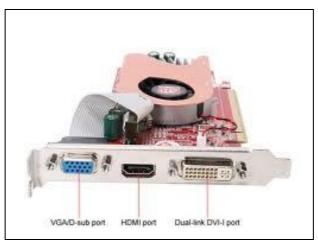
Sound cards allow computers to produce sound like music and voice.



Picture 1.10: A basic sound card

# **1.1.7.2. Video cards**

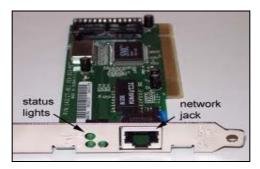
Allow computers to display video and animation. Recent video cards mostly have HDMI support.



Picture 1.11: Video card jacks

### 1.1.7.3. Network cards

Allow computers to connect together to communicate with each other and maintains a network jack for ethernet cable connection.



Picture 1.12: Network card

# 1.1.8. Power Supply

A power supply unit (PSU) supplies direct current (DC) power to the other components in a computer. It converts general-purpose alternating current (AC) electric power from the mains to low-voltage DC power for the internal components of the computer (220 V to 240 V at 50 Hz).





Picture 1.13: Inside of a PSU

Picture 1.14: A standart PSU

### **1.1.9. PC Ports**

### 1.1.9.1. Parallel Port

Parallel ports can be used to connect a host of popular computer peripherals like:

- Printers
- Scanners
- CD burners
- > External hard drives
- > Removable drives
- Network adapters
- Tape backup drives

The standard parallel port is capable of sending 50 to 100 kilobytes of data per second.



**Picture 1.15: Parallel Port** 

# 1.9.1.2. Serial ports

A serial port is commonly used to connect external modems, scanners or the older computer mouse to the computer.



Picture 1.16: Serial Port

# 1.9.1.3. USB (Universal Serial Bus) Port

USB is an industry Standard developed in the mid-1990s that defines the cables, connectors and protocols used for connection, communication and power supply between computers and electronic devices. A sample list of USB devices that you can use today includes:

- Printer
- Scanner
- Microphone
- Joystick
- Digital camera
- ➤ WebCam
- Scientific data acquisition device
- ➤ Modem
- > Speaker
- > Telephone
- Video phone
- Storage device such as Zip drive
- Network connection



Picture 1.17: USB Port

#### 1.9.1.4. Firewire Ports

This port was originally created by Apple and standardized in 1995 as the specification IEEE 1394 High Performance Serial Bus and is very similar to Universal Serial Bus (USB). The key difference between FireWire and USB is that FireWire is intended for devices working with a lot more data -- things like camcorders, DVD players and digital audio equipment.



**Picture 1.18: Firewire Ports** 

#### 1.9.1.5. PS / 2 Port

It is also called a mouse port. It is used to connect a computer mouse or keyboard. Nowadays few computers have two PS/2 ports, one for keyboard (purple) and one for Mouse (green).



Picture 1.19: PS / 2 Port

#### 1.9.1.6. Monitor Port

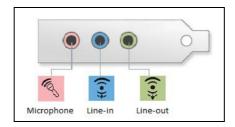
This connector is used to attach a computer display monitor to a computer's video card. The connector has 15 holes.



Picture 1.20: Monitor Port

### 1.9.1.7. Audio/Speaker and Microphone Socket

At the back of the computer system we can find three small sockets of blue, green and pink colours used to connect speakers, audio input devices and microphones to the PC respectively. The connectors for microphone and speakers look like as shown in the adjacent figure. They are colour coded to help in troubleshooting.



Picture 1.21: Audio / Speaker and Microphone Socket

#### 1.9.1.8. Ethernet Port

Is a family of computer networking technologies for local area networks (LANs) commercially introduced in 1980.



**Picture 1.22: Ethernet Port** 

# 1.9.1.9. HDMI (High-Definition Multimedia Interface) Port

HDMI is a compact audio/video interface for transmitting uncompressed digital data. It is a digital alternative to consumer analog standards, HDMI connects digital audio/video sources to compatible digital audio devices, computer monitors, video projectors, tablet computers, and digital televisions.



Picture 1.23: HDMI Port

# 1.2. External Hardware Units

# 1.2.1. Input Devices

### 1.2.1.1. Keyboard

Most important input device "keyboard" functions as typing alphabets, numbers and operators, besides it controls the cursor seen on the screen. Another popular type of keyboard is the wireless keyboard. It may be preferred for its practical usage. A basic keyboard and a wireless keyboard may seem as below:



Picture .1.24: A standard "Qwerty" keyboard design

### 1.2.1.2. Mouse

The basic function of mouse is pointing to a specific position on the screen. To execute or select different processes on top are two or three buttons. Because of the sound heard when pressing the buttons the pressing operation is called clicking. The mouse should be placed on a flat surface and moved around to control the arrow seen on screen. The arrow indicating the place of the mouse is called "mouse pointer". Left button executes the operation related to it. Right and middle (scroll) buttons are responsible for private operations in different situations.



Picture 1.25: A standard Cable mouse

# 1.2.1.3. Other Input Devices

# **▶** Light Pen

Used in conjunction with the computer monitors for drawing pictures, pointing and for directly controlling screen operations.



Picture 1.26: Usage of light pen

# > Joy Stick

Used to control cursor on screen. Normally it is used in Games and specially designed simulation software.



Picture 1.27: A multifunctional joystick

# > Microphone

It is a device used to accept audio inputs from the user.



Picture 1.28: A standart PC microphone

### > Touch Pads

A touch-sensitive device that allows user to interact with the computer system by touching an area on the screen and also used for technical drawings.



Picture 1.29: Touch Pad

# 1.2.2. Display Units

### 1.2.2.1. Monitor

The output or the processed result and the typed information are displayed by the monitor. Display types can be classified as:

- > Cathode ray picture tube
- ➤ Liquid crystal
- Plasma panel
- Touch panel





Picture 1.30: Cathode ray picture tube

Picture 1.31: Liquid Crystal

# 1.2.2.2. Projeksiyon

Magnifying the PC or TV images, it reflects these images to a wall or a screen.



Picture 1.32: Liquid Crystal

### 1.2.3. Printers

Produces paper copy (hard copy) for a document, pictures etc. It gives an output on the paper what we see on the monitor. We can classify printers in two groups as impact printers and non-impact printers.

### Dot Matrix Printer

Uses dots through inked ribbon, very economic and needs very less maintenance cost.



**Picture 1.33: Dot Matrix Printer** 



Picture 1.34: An example of a dot matrix printer output.

# > Inkjet/Deskjet/Bubblejet Printer

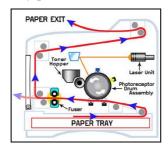
Despite their low prices they have high maintenance costs. Using the liquid ink technology they print the image using circuit-controlled jet of ink. An inkjet sprays the ink onto the paper in tiny droplets to form text and graphics.



Picture 1.35: Inkjet Printer and cartridges

### **Laser Printer**

It has a technology on combination of laser and Xerox. Dry powder based ink is adhered to a drum through magnetic force and when the paper reaches the drum the ink is realesed on the paper. These types are the fastest devices among the category and have a high-speed quality prints.



Picture 1.36: Working principle of a Laser printer



Picture 1.37: Laser printer

# 1.2.4. Image Processor Devices

### 1.2.4.1. Scanner

Captures digital images of printed documents, graphics or other printed media.



Picture 1.38: A satndart scanner

### 1.2.4.2. Web Camera

The device used During a web-based video conferencing for transfer of images is called "web camera". Generally web cameras have low resolution rates.



Picture 1.39: Webcam

# 1.2.5. Other Output Devices

# > Headphones

Headphones are a pair of small loudspeakers, or less commonly a single speaker, held close to a user's ears and connected to a signal source such as an audio amplifier, radio, CD player or portable Media Player. They are also known as stereophones, headsets.



Picrure 1.40: Headphones

### > Speakers

Speakers are used to play sound. They may be built into the system unit or connected with cables. Speakers allow you to listen to music and hear sound effects from your computer.



Picrure 1.41: Speakers

# 1.2.6. External Storage Devices

#### > Flash Drive

This is a type of flash memory storage device of the size of a thumb and can plug into the USB port of the computer. USB flash drives are more compact, generally faster, hold more data, and are more reliable (due to their lack of moving parts) than disk storage.



Picture 1.42: Flash Drive

### > External Hard Drives

External removable hard disk drives offer independence from system integration, establishing communication via connectivity options, such as USB.

External hard disk drives are available in two main sizes (physical size), 2.5" and 3.5". While 3.5" external hard drives have DC adaptors, 2,5" external harddrives maintain electricity from the pc it is connected.





Picture 1.42 Exrernal Hard drive

# APPLICATION ACTIVITY

Prepare a banner showing hardware units.

Steps Of Process	Suggestions		
	➤ You can make use of an open PC		
➤ Place the internal hardware units on the the	case.		
banner.	➤ You can access the hardware		
	images from the internet.		
➤ Place the input units on the banner	➤ You can access the hardware		
Frace the input units on the banner	images from the internet.		
➤ Place the output units on the the banner	➤ You can access the hardware		
I face the output units on the the banner	images from the internet.		
<ul><li>Place the display units on the the banner</li></ul>	➤ You can access the hardware		
I face the display units on the the banner	images from the internet.		
➤ Place the printers on the the banner	➤ You can access the hardware		
Frace the printers on the the banner	images from the internet.		
➤ Place the display processing devices on the	➤ You can access the hardware		
the banner	images from the internet.		
➤ Wirte the names of the hardware units on the	➤ You can make use of the Internet		
banner in Turkish and English.	and glossary of terminology.		

# **CHECKLIST**

If you have behaviors listed below, evaluate yourself putting (X) in "Yes" box for your earned skills within the scope of this activity otherwise put (X) in "No" box.

	Evaluation Criteria	Yes	No
1.	Were you able to define the internal hardware units in the case?		
2.	Were you able to define the input units on the computer system?		
3.	Were you able to define the output units on the computer system?		
4.	Were you able to define the display units on the computer system?		
5.	Were you able to define printers on the computer system?		
6.	Were you able to define the image processing units on the computer system?		

# **EVALUATION**

Please review your"No" answers in the form at the end of the evaluation. If you do not find yourself enough, repeat learning activity. If you give all your answers "Yes" to all questions, pass to the "Measuring and Evaluation".

# MEASURING AND EVALUATION

Read the questions below carefully and fill in the blanks.

1.	The provides connections for all parts of a computer.
2.	CPU is the shortened form of
3.	Random Access Memory (RAM) maintains computer data storage.
4.	is a storage device with very large capacity.
5.	to provide support for placing and running CDs.
6.	A is very similar to a CD, but it has a much larger data storage capacity
7.	is used to connect a computer mouse or keyboard
8.	The basic function of is pointing to a specific position on the screen.

# **EVALUATION**

Please compare the answers with the answer key. If you have wrong answers, you need to review the Learning Activity. If you give right answers to all questions, pass to the next learning activity

# **LEARNING ACTIVITY-2**

# **AIM**

Students will be able to acquire the basic vocational terms about hardware according to the technique.

# **RESEARCH**

- Research the hardware terms from the internet.
- Prepare a report of your findings.
- Make a presentation to your teacher and your friends in your classroom.

# 2. HARDWARE TERMS

# 2.1. Genaral Terms

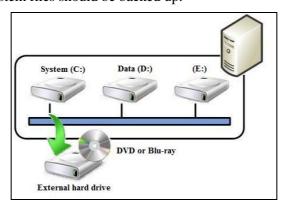
### > Adapter

It is an interdevice required to connect two maladjusted device sor connection types.

# **▶** Back Up

Having a copy of the current state of the system in an external hard drive, DVD or a blu-ray disc in case of a system failure or crash in any means.

As a priority system files should be backed up.



Picture 2. 1: Back up process and tools

#### **Bandwidth**

It is defined as the bitrate transferred in a second. Bandwith affects the whole system's velocity.

# > BPS (Bits Per Second)

The unit used to measure the speed of data transfer.

#### > Cable

It is tool we use to physically connect our computers to other units.

# Capacity

It is the possible highest transmission rate on a communication channel, circuit or hardware.

# > Chip

The name given to the unit made of a semiconductor material and carries thousands of electronic circuit on it.



Picture 2. 2: Chip

### Device

The name given to a piece of hardware that can be processed.

### > Interface

A device that provides connection between two different sections.

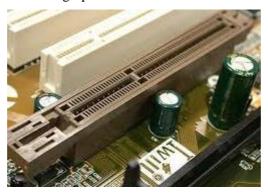


Picture 2. 3: Interfaces

# 2.2. Motherboard Terms

# > AGP (Accelerated Graphics Port)

It is a connection unit produced by the motherboard manufacturers to maintain more efficiency from three dimensional graphic cards.



Picture 2. 4: AGP Slot

# > ATA (Advanced Tecnology Attachment)

It is a connection standard used for harddisks.



Picture 2. 5: ATA Interface

# **▶** BIOS (Basic Input Output System)

The software on the system run by the microprocessor. This software the system to begin working.



Picture 2. 6: BIOS

### > Bus

The name given to the path the data is transferrded in the computer.

### Databus

The name given to the paths those provide data transfer between processor and memory.

# > DIMM (Dual In-Line Memory Module)

RAM memory module slots installed on the motherboard.



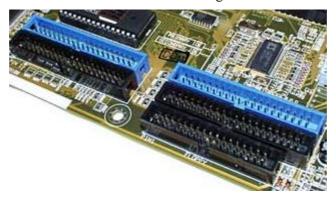
Picture 2. 7: DIMM Slot

# > FSB (Front Side Bus)

Name given to the bus between the processor and memory.

# > IDE (Intelligent Drive Electronics)

Name given to the interfaces used for connecting the harddisks to the computers



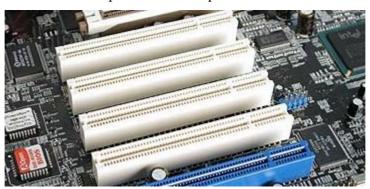
Picture 2. 8: IDE Port

# North Bridge

The chip that connects the memory, AGP and South bridge on the computer to processor.

# > PCI (Personal Computer Interconnect)

The interface that is 32 bites and supporting up to 64 bites allows installation of additional devices and components on acomputer.



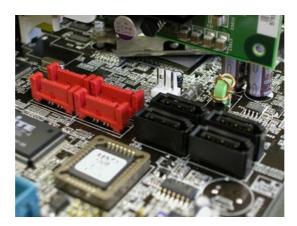
Picture 2. 9: PCI Slots

# > ROM (Read Only Memory)

Only readable type of memory.

# > SATA (Serial ATA)

A type of connection that performs fast data transfer.



Picture 2. 10: SATA

### > Socket

Name given to the interface the processor is installed on the computer.

### > South Bridge

The name of the chip that allows low-speed output and interfaces such as paralel, serial, USB, PS2 to connect to the processor via North Bridge.

# 2.3. Processor Terms

# > Cache Memory

The name given to the buffer momory. The momories have the fast access speed.

### > Overclock

It is the process of running the CPU, graphic card and memory faster than their real speeds.

### > Level

The term used for levelling the processor memory.

# 2.4. Hard Disk Terms

### Bad Sektor

The name given to the sectors on hard drive or floppy disks those became unusable because of disruption.

### Boot Sector

Boot sector is the system information part of hard drives and floppy disks.

### Cluster

. The name given to the sector group on hard drive.

# > Jumper

The metal bridge used for determining priority in harddisks.



Picture 2. 11: Jumper

# Logical Drive

Despite percieved as a drive by user it is a portion of the drive structure.

# > RPM (Return Per Minute)

It specifies the rotation speed of harddisk drives per minute.



Picture 2. 12: Jumper

# 2.5. Other Terms

# Cartridge

The ink storage unit used in inkjet printers.



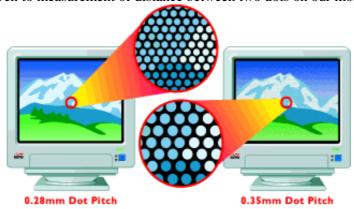
Picture 2. 13: Cartridge

# > DPI (Dots Per Inch)

It is the number of dot in an inch. It is a unit of measurement became Standard for printers and scanners.

#### > Dot Pitch

The name given to measurement of distance between two dots on our monitors.



Picture 2. 14: Dot Pitch

# **➢ GPU** (Graphics Processing Unit)

It is a chip that performs image calculations and image processing without transferring them to the microprocessor.



Picture 2. 15: GPU and Fan System

# > PPM (Page Per minute)

It specifies the number of printer outputs per minute.

# > Resolution

The number of horizantal and vertical pixels on the screen.



Picture 2. 16: Resolution Effect

# APPLICATION ACTIVITY

Prepare a harware crossword puzzle consisting at least ten words using the example below.

					С	A	С	Н	Е				
					A					-			
					В	Α	D	S	Е	С	T	О	R
					L		P						
D	Е	V	I	С	Е		I						

Steps Of Process	Suggestions
> Determine the terms that you will use in the	➤ Pay attention to use common letters
crossword puzzle.	in words.
➤ Put the terms according to the crossword	➤ Coinciding common letters in the
puzzle.	crossword puzzle is enough.
➤ Add a number coming to the first letters of	➤ If you continue in specific order,
the terms.	you can prevent confusion.
➤ Write corresponding definitions of terms into	➤ If you continue in specific order,
the numbers.	you can prevent confusion.
➤ Delete the terms on the crossword puzzle.	➤ Pay attention not to leave empty
Defete the terms on the crossword puzzle.	spaces on the crossword puzzle.

# **CHECKLIST**

If you have behaviors listed below, evaluate yourself putting (X) in "Yes" box for your earned skills within the scope of this activity otherwise put (X) in "No" box.

Evaluation Criteria	Yes	No
1. Can you define the general hardware terms in english?		
2. Can you define the motherboard terms in english?		
3. Can you define the processor terms in english?		
4. Can you define the hardisk terms in english?		
5. Can you define other hardware terms in english?		

# **EVALUATION**

Please review your"No" answers in the form at the end of the evaluation. If you do not find yourself enough, repeat learning activity. If you give all your answers "Yes" to all questions, pass to the "Measuring and Evaluation".

# MEASURING AND EVALUATION

# Write true or false in parentheses if the sentences below correct or incorrect.

1.	each other is called adapter.
2.	( ) Interface that is made of semi-conductor substance is carrying thousands of electronic circuit on it.
3.	( ) BIOS starts after the system sets up.
4.	( ) Datapath between Ram is called FSB processor.
5.	( ) DIMMs are RAM memory module slots installed on the motherboard.
6.	( ) Cache processor is a concept which is used for levelling the memory.
7.	( ) Jumper is a metal bridge to determine the priority.
8.	( ) PPM refers the number of printer output in seconds.

# **EVALUATION**

Please compare the answers with the answer key. If you have wrong answers, you need to review the Learning Activity. If you give right answers to all questions, pass to the next learning activity

# **MODULE EVALUATION**

### Read the questions carefully and choose the correct option.

- 1. Which of the following is the hardware unit that hardware such as memory, CPU and harddisk are connected to?
  - A) Motherboard
  - **B**) Graphic card
  - C) Sound card
  - **D**) Monitor
- 2. Which of the following is the hardware unit only capable of reading and writing CD?
  - A) CD ROM
  - B) CD RW
  - C) DVD ROM
  - D) DVD WR
- **3.** To which port is the keyboard connected?
  - A) Parallel Port
  - B) Serial Port
  - C) Firewire Port
  - **D**) PS/2
- **4.** Which of the following is the display device that magnifies and reflects the image on PC or TV to a wall or a screen?
  - A) Monitör
  - **B**) Projection
  - C) Scanner
  - **D**) Camera
- **5.** Which of the following is the bit rate transferred per second?
  - A) PPM
  - **B**) Bandwidth
  - C) Capacity
  - **D**) FSB
- **6.** Which of the following is a connection unit produced by the motherboard manufacturers to maintain more efficiency from three dimensional graphic cards?
  - A) PCI
  - B) FSB
  - C) AGP
  - D) ISA

- 7. Which of the following is the interface used for connecting the harddrives to the PCs?
  - A) IDE
  - B) SATA
  - C) ATA
  - **D**) PCI
- **8.** Which of the following is the name given to the sector group on harddisk?
  - A) Jumper
  - B) Bad Sector
  - C) Boot Sector
  - **D**) Cluster
- **9.** Which of the following is the number of dots in an inch?
  - A) DPI
  - B) Dot Pitch
  - C) PPM
  - **D**) Resolution
- **10.** Which of the following is the number of printer output per minute?
  - A) DPI
  - **B**) Dot Pitch
  - C) PPM
  - **D**) Resolution

### **EVALUATION**

Please compare the answers with the answer key. If you have wrong answers, you need to review the Learning Activity. If you give right answers to all questions, please contact your teacher and pass to the next module.

# **ANSWER KEY**

# **LEARNING ACTIVITY - 1**

1	Motherboard
2	<b>Central Processing Unit</b>
3	Temporary
4	Hard Disk Drive
5	CD-ROM
6	DVD
7	PS/2 Port
8	Mouse

# **LEARNING ACTIVITY - 2**

1	True
2	False
3	True
4	True
5	False
6	False
7	True
8	False

# MODULE EVALUATION

1	A
2	В
3	D
4	В
5	В
6	C
7	A
8	D
9	A
10	C

# **RESOURCES**

- ➤ J. PARSONS June, OJA Dan. **Practical PC**, 6th Edition, Publihed by MediaTechnics Corporation, Boston, USA. 2011.
- ➤ Dr. GOLDSMITH Mike, JACKSON Tom, **Eyewitness COMPUTER**, DK Publishing, New York, USA. 2011.
- ➤ B. SHELLY Gary, E. VERMAAT Misty, **Discovering Computers** Fundamentals, Published by Course Technology, Boston, USA. 2011.
- COLLIN S.M.H, Dictionary of Computing, Bloomsbury Publishing, London, England. 2004.