

MODULE 9 ESP FOR INFORMATIC ENGINEERING

Multimedia

STARTER

A. Study this diagram which explains MP3. Answer these questions:

1. How does MP3 reduce the size of music files?
2. What can you obtain from www.mp3.com?
3. How can you listen to MP3 files?

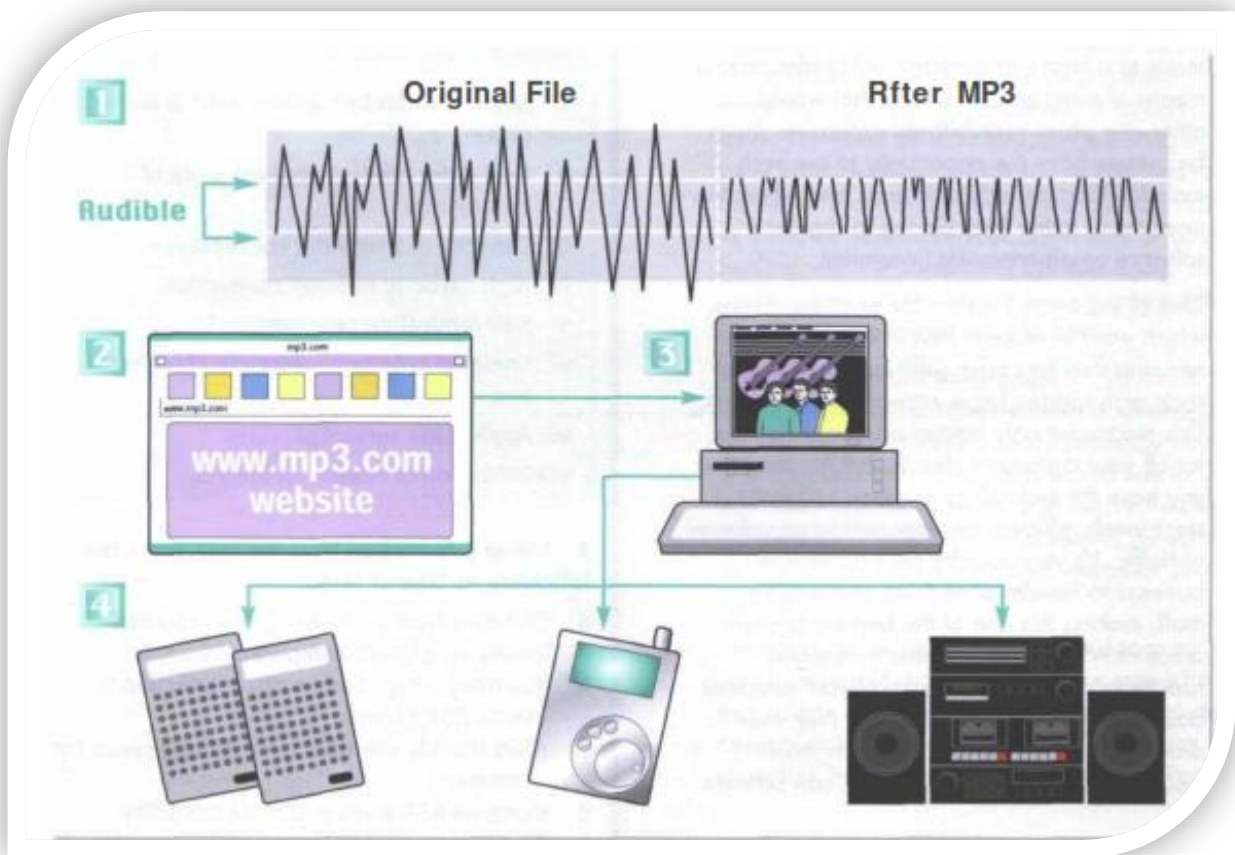


Figure 1: MP3

Let's read

B. Read the text and understand the vocabulary contextually then fill the meanings of vocabularies in the box.

Understanding MP3

The name comes from MPEG (pronounced EM-peg), which stands for the Motion Picture Experts Group. MPEG develops standards for audio and video compression. MP3 is actually MPEG Audio Layer 3.

MP3 competes with another audio file format called WAV. The key difference is that MP3 files are much smaller than WAV files. An MP3 file can store a minute of sound per megabyte, while a WAV file needs 11 or 12 megabytes to hold the same amount. How does MP3 achieve this compression? CDs and audio files don't reproduce every sound of a performance. Instead, they sample the performance and store a discrete code for each sampled note. A CD or WAV file may sample a song 44,000 times a second, creating a huge mass of information.

By stripping out sounds most people can't hear, MP3 significantly reduces the information stored. For instance, most people can't hear notes above a frequency of 16 kHz, so it eliminates them from the mix. Similarly, it eliminates quiet sounds masked by noise at the same frequency. The result is a file that sounds very similar to a CD, but which is much smaller. An MP3 file can contain spoken word performances, such as radio shows or audio books, as well as music. It can provide information about itself in a coded block called a tag. The tag may include the performer's name, a graphic such as an album cover, the song's lyrics, the musical genre, and a URL for more details.

C. Read this text to find the answers to these questions.

- 1. How do you play MP3 files?
- 2. What does the Windows Media Player file do with an MP3 file?
- 3. What is a standalone player?
- 4. What special features can players offer?
- 5. What information can you obtain by clicking on the track info button?
- 6. What does a skin enable you to do?
- 7. How do you play music from a CD-ROM on an MP3 player?
- 8. What hardware and software do you need to make your own audio CDs?

GLOSSARY			
Stand for	:	Reduce	:
Hold	:	Eliminate	:
Achieve	:	Contain	:
Huge	:	Performance	:
Significantly	:	Include	:

Let's speak

D. Work in pairs, A and B. explain to your partner one aspect of multimedia.



Figure 2: Multimedia

LANGUAGE WORK

-ing clauses (2) cause and effect

Study this sentence.

1. Using MIDI, computers can communicate with synthesisers.

It contains two clauses. An -ing clause:

Using MIDI

and a main clause:

Computers can communicate with synthesizers

We can use an -ing clause, as in example 1, to explain how something happens. The -ing clause explanation can be placed before, or after the main clause as in example 2.

2. DVD drives read DVD disks (by) using blue laser light.

We can also use -ing clauses to link a cause and effect.

3. A WAV file may sample a song 44, 000 times a second, *[cause]* creating a huge mass of information. *[effect]*

E. Match each cause and effect. Then link them with an –ing clause.

Cause	Effect
<ol style="list-style-type: none">1 Computers with MIDI interface boards can be connected to MIDI instruments.2 Each side of a DVD can have two layers.3 MP3 removes sounds we can't hear.4 You can download single tracks.5 Each MP3 file has a tag.6 MP3 players contain several devices.7 You can download a skin program.8 You can legally download some music.	<ol style="list-style-type: none">a This permits extra information to be stored on the performer and other track details.b You can create your own compilation.c This allows you to sample a new group before buying their CD.d This gives an enormous storage capacity.e This allows the music being played to be stored by the computer and displayed on the monitor.f This enables you to change the appearance of your player.g These allow you to control the way the music sounds.h This produces much smaller files.

Let's write

F. Study the diagram, Figure 2, which illustrates how MIDI operates. Then link each set of sentences into one complex sentence to form a continuous paragraph. You may add, omit and change words.

1. Most modern music is mixed.
This uses computers.
2. Musicians record their music into a computer system.
This system is called a Musical Instrument Digital Interface (MIDI).
3. MIDI was developed as a standard interface.
MIDI is for linking music synthesizers and instruments together.
4. Computers can be connected to MIDI instruments.
These computers are fitted with MIDI interface boards.
This allows the music to be stored on computer.
This allows the music to be displayed on the monitor.
The music is being played.
5. The music can be displayed as a musical score.
The music can be edited.
This uses all the features of a mixing desk.

The PC Setup

What goes where in a typical PC music set-up

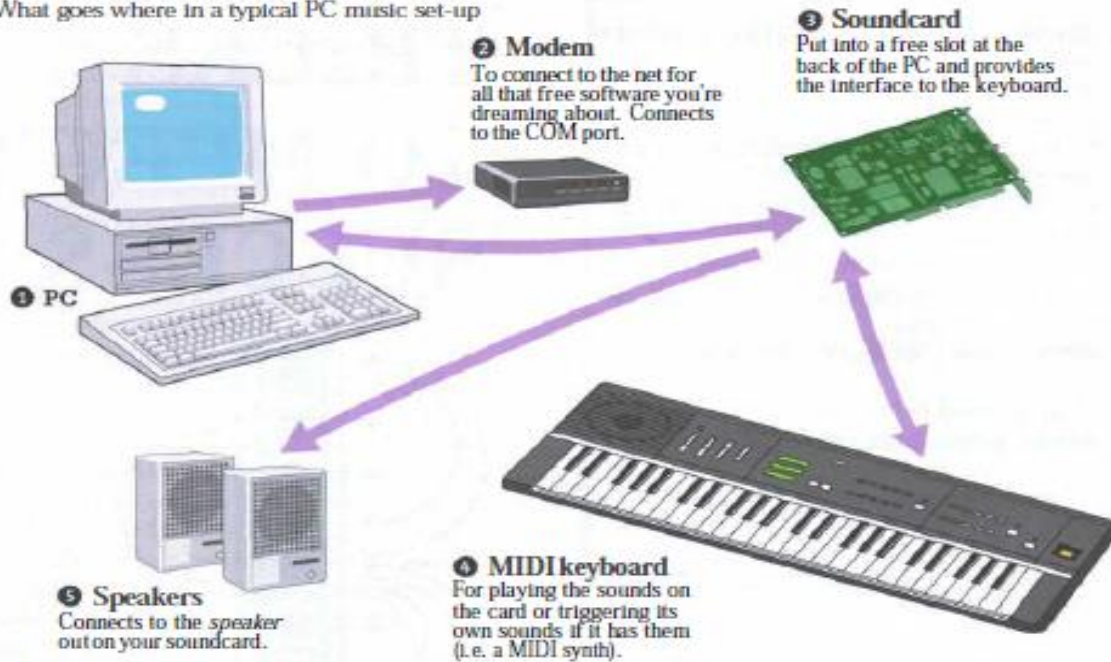


Figure 3: The PC Setup

Let's have fun

Complete the sentences.

① It's _____ today.



② It's _____ today.



③ It's _____ today.



④ It's _____ today.



5

It hot today. is

6

is It windy today.

7

today. is It cold

8

cloudy today. is It
