

UNIT 21

MP3 PLAYERS

Objectives: at the end of the lesson, students will be able to:

1. describe an MP3 player and its basic features using simple sentences;
2. identify main ideas and specific details in short, easy-to-read passages;
3. create a detailed set of instructions for using an MP3 player or for troubleshooting common problems.

Lead-in: Guess the device

This device is small and portable. You can store many songs on it and listen with headphones. (**MP3Player**)

Discussion: What do students know about the device and how do they use similar devices?

History of MP3 Players

Today, every smartphone also serves as a portable media player; however, prior to the rise of smartphones in the 2007–2012-time frame, a variety of handheld players were available to store and play music. The immediate predecessor to the portable media player was the portable CD player and prior to that, the personal stereo. In particular, Sony's Walkman and Discman are the ancestors of digital audio players such as Apple's iPod.

There are several types of MP3 players:

Devices that play CDs. Often, they can be used to play both audio CDs and homemade data CDs containing MP3 or other digital audio files.

Pocket devices. These are solid-state devices that hold digital audio files on internal or external media, such as memory cards. These are generally low-storage devices, typically ranging from 128MB to 1GB, which can often be extended with additional memory. As they are solid state and do not have moving parts, they can be very resilient. Such players may be integrated into USB flash drives.

Devices that read digital audio files from a hard drive. These players have higher capacities, ranging from 1.5 to 100 GB, depending on the hard drive technology. At typical encoding rates, this means that thousands of songs—perhaps an entire music collection—can be stored in one MP3 player. Apple's popular iPod player is the best-known example.

The first portable MP3 player was launched in 1997 by SaeHan Information Systems, which sold its MPMan F10 player in South Korea in spring 1998. In mid-1998, the South Korean company licensed the players for North American distribution to Eiger Labs, which rebranded them as the EigerMan F10 and F20. The flash-based players were available in 32 MB or 64 MB (6 or 12 songs) storage capacity and had a LCD screen to tell the user the song currently playing.

Vocabulary Building

Key Terms

AAC – is a music file format that is of higher quality than MP3

***Example:** Advanced Audio Coding (AAC) is a standard for lossy digital audio compression originally designed as a successor to the MP3 format.*

Dock – is a device that connects an MP3 player to a computer

***Example:** A dock provides a simplified way to plug-in a mobile device, such as connect common peripherals to a laptop, or charge a smartphone.*

Decode – decode a file is to return it to its original format

***Example:** Decoding is the opposite process -- the conversion of an encoded format back into the original sequence of characters.*

Bitrate – is a measurement of the amount of data that is processed

***Example:** Bitrate, as the name implies, describes the rate at which bits are transferred from one location to another. It measures how much data is transmitted in a given amount of time.*

Freeze – is to become unresponsive and stop functioning

***Example:** In computing, a hang or freeze occurs when either a process or system ceases to respond to inputs. A typical example is when computer's graphical user interface (such as Microsoft*

Windows) no longer responds to the user typing on the keyboard or moving the mouse.

Upload – upload a file is to transfer it from a computer or device to the Internet or to another device, such as an MP3 player

***Example:** Uploading is the transmission of data from a local device to a remote device.*

Capacity – is the amount of space an MP3 player has to store files

***Example:** Storage capacity refers to the amount of data that can be stored in a computer's storage medium, typically measured in bytes.*

Gigabyte – is a unit of measurement of hard drive capacity

***Example:** A gigabyte is a specific unit of data that's equal to about 1 billion bytes of data. The term gigabyte is typically used to describe the amount of stored data or the capacity of a storage device. For example, an HDD might offer 500 GB of raw capacity but is currently storing only 200 GB of data.*

Activity: Choose the correct answer for each question.

1. What does the term "gigabyte" refer to?

- A) A type of music file
- B) A unit of digital information storage
- C) A device to play music
- D) A music player feature

2. What does "capacity" mean in relation to an MP3 player?

- A) The size of the screen
- B) The amount of music it can store
- C) The color of the player
- D) The type of headphones it uses

3. What is the action of "uploading"?

- A) Listening to music on a device
- B) Transferring files from your computer to a device
- C) Removing files from a device
- D) Playing a file on a device

4. What does "bitrate" refer to?

- A) The amount of storage a device has
- B) The speed at which files are transferred
- C) The quality of audio in a file

D) The size of the device screen

5. What is a "dock" used for?

A) To upload files to a device

B) To listen to music

C) To connect and charge the device

D) To increase the volume

6. What does it mean to "decode" a file?

A) To save it onto your device

B) To change it into a format your device can read

C) To delete it from your device

D) To play it on your device

7. What is "AAC"?

A) A type of device

B) A file format for audio

C) A type of headphone

D) A feature of an MP3 player

8. What does it mean when a device "freezes"?

A) It plays music very loudly

B) It suddenly stops working or responding

C) It changes the format of files

D) It downloads files automatically

Reading

Understanding MP3 Players

MP3 players are portable devices designed to store and play digital music files. When choosing an MP3 player, you might encounter terms like gigabyte, capacity, upload, bitrate, dock, decode, AAC, and freeze.

Gigabyte (GB) is a unit of digital information storage. The capacity of an MP3 player refers to how much music it can store. For example, an MP3 player with a capacity of 16 gigabytes can hold thousands of songs. To put new music onto your MP3 player, you need to upload files from your computer.

The bitrate of an audio file affects its quality. Higher bitrate settings usually mean better sound quality, but they also take up more storage space. Some MP3 players come with a dock, a special station where you can connect and charge the device.

MP3 players can decode various audio formats. For instance, AAC is a popular audio format known for providing better quality than MP3 at the same bitrate. Occasionally, you might experience a problem where your MP3 player might freeze, meaning it suddenly stops working and becomes unresponsive.

Activity: Answer the following questions based on the text.

1. What does "gigabyte" measure?

- A) The size of the screen
- B) The amount of music a device can hold
- C) The quality of audio in a file
- D) The speed at which files are transferred

2. What is meant by "capacity" in an MP3 player?

- A) The speed of the processor
- B) The amount of storage available for music
- C) The color of the device
- D) The size of the device's screen

3. What action does "upload" refer to?

- A) Listening to music on the device
- B) Removing files from the device
- C) Transferring files from a computer to the device
- D) Changing the battery of the device

4. How does "bitrate" affect an audio file?

- A) It determines how much space the file takes up and its quality
- B) It changes the format of the file
- C) It increases the volume of the playback
- D) It connects the device to other accessories

5. What is the purpose of a "dock"?

- A) To charge and connect the MP3 player
- B) To play music from the device
- C) To increase the device's storage capacity
- D) To change the device's appearance

6. What does it mean to "decode" a file?

- A) To convert the file into a format that the device can read
- B) To save the file onto a computer
- C) To delete the file from the device

D) To change the file's bitrate

7. What does "AAC" stand for?

A) A type of device

B) An audio file format

C) A type of MP3 player accessory

D) A method of charging the device

8. What happens when a device "freezes"?

A) It suddenly stops working and becomes unresponsive

B) It starts playing music at a higher volume

C) It automatically updates its software

D) It changes the format of its stored files

Grammar Focus: First Conditional

First Conditional: Used for real and possible situations in the future

Example: If my MP3 player **freezes**, I will restart it.

Activity: Create conditional sentences about what you would do if certain problems with your MP3 player occurred.

Sample: If you download music files from the internet, you will have to make sure they are in a compatible format.

If my MP3 player gets wet, it might stop working.

If you connect your MP3 player to your computer, you can transfer songs to it.

If the device does not support a specific audio format, you will need to convert the file before uploading it.

If you download a new music app, it might add extra features to your MP3 player.

If you set the MP3 player to shuffle mode, it will play your songs in a random order.

Home assignment

Research what AAC stands for and how it compares to other audio file formats like MP3 and WAV. Write a brief report (approximately 100-150 words) summarizing your findings. Include information about the advantages and disadvantages of using AAC.