# Grade 5 review **Use capture devices**

Your computer can connect to various devices to capture pictures, sound and video and save them as multimedia files.

**Digital camera**

Store your digital photos on your computer.

**Smartphone**

Exchange photographs you have stored with your friends.

You can connect your capture devices via USB to your computer.

**Scanner**

Scan your photographs or documents to store them digitally on your computer. You can also edit them later.

**Microphone Record and save sound clips.**

The microphone needs to be connected to the microphone port of your computer.

**To scan a photo or a drawing:**

- ➢ Put the photo face down on the glass of the scanner and close the lid.
- ➢ Open Windows Fax and Scan.
- ➢ Click New Scan.
- ➢ When your scan is complete, you can save your photo as a JPEG file.

Some video cameras create files in their own custom format. You may need to convert these video files to a standard format like MP4 or WMV to be able to watch them or edit them. But don't worry. Your video camera will provide the program you need to do this conversion. Check on the CD-ROM in the video camera's box or on the company's support website.

When you take photos with your smartphone, tablet or camera, you can import them to your computer. Why should you do that? Well, because you can store thousands of photos on your computer, organize them and keep them safe. If your device breaks, at least you'll still have your photos.

**Bits and bytes**

Every file takes up some space on your computer. Some files are small, some are large and some are huge.

**The size of a text document is small. It is usually only a few kilobytes (KB).**

A picture (an image file) can be some kilobytes (KB) or megabytes (MB), depending on the actual size of the picture and its resolution (how detailed it is).

**A song** (a sound file) is usually a few megabytes (MB).

A video file can be many megabytes (MB) or even gigabytes (1 GB=1000 MB), depending on the length and video quality.

**File extensions**

Each file has a name and an extension, for example myfamily.jpg. In this example, ".jpg" is the extension of the file, which shows what type of file it is. "myfamily.jpg" is a JPEG photo file.

Here are the most common file types for your files:

| | |
|---|---|
| Text file (only text) | .txt |
| Text file (with or without images) | .doc, .docx, .rtf |
| Presentation file | .ppt, .pptx, .pps |
| Data file (numbers and text) | .csv |
| Spreadsheet file | .xls, .xlsx, .csv |
| Image file (picture, drawing or photo) | .jpg, .jpeg, .png, .gif, .bmp, .tif |
| Image file (vector drawing) | .ai, .eps, .svg, .dwg |
| Sound file | .wav, .wma, .mp3 |
| Video file | .wmv, .avi, .mpg, .mp4, .mkv, .3gp, .mov |
| eBook | .pdf, .epub, .mobi |
| Compressed file | .zip, .7z, .rar, .gz |

You already know how to record your own sound clips. Now you will learn how to edit them with Audacity, an audio editing program. Open Audacity and get ready to begin.

**To open a file:**

On the menu bar, click File and then click Open.

Select the file you want to edit or drag your sound file directly from the folder onto Audacity's window to open it.

**To play a specific part of the sound clip:**

Click and drag the mouse pointer to select a part of the sound clip.

Click the Play button or press

the Space Bar

Now let's add some effects and see what happens:

**Select a part of the waveform.**

Click Effect and then click Change Pitch...

Move the slider at the bottom of the window to the right or left.

Click Preview to listen to the change.

If you like it, click OK to apply this effect to the selected part.

**To change the speed of the sound clip:**

Click Effect and then click Change Speed... Move the slider to the right or left

and click Preview 6 to listen to the changes.

If you are satisfied with the result, click OK.

**To mix sounds:**

On the File menu, click Import.

Click Audio...

Locate and select a sound that you want to mix with a previous recording.

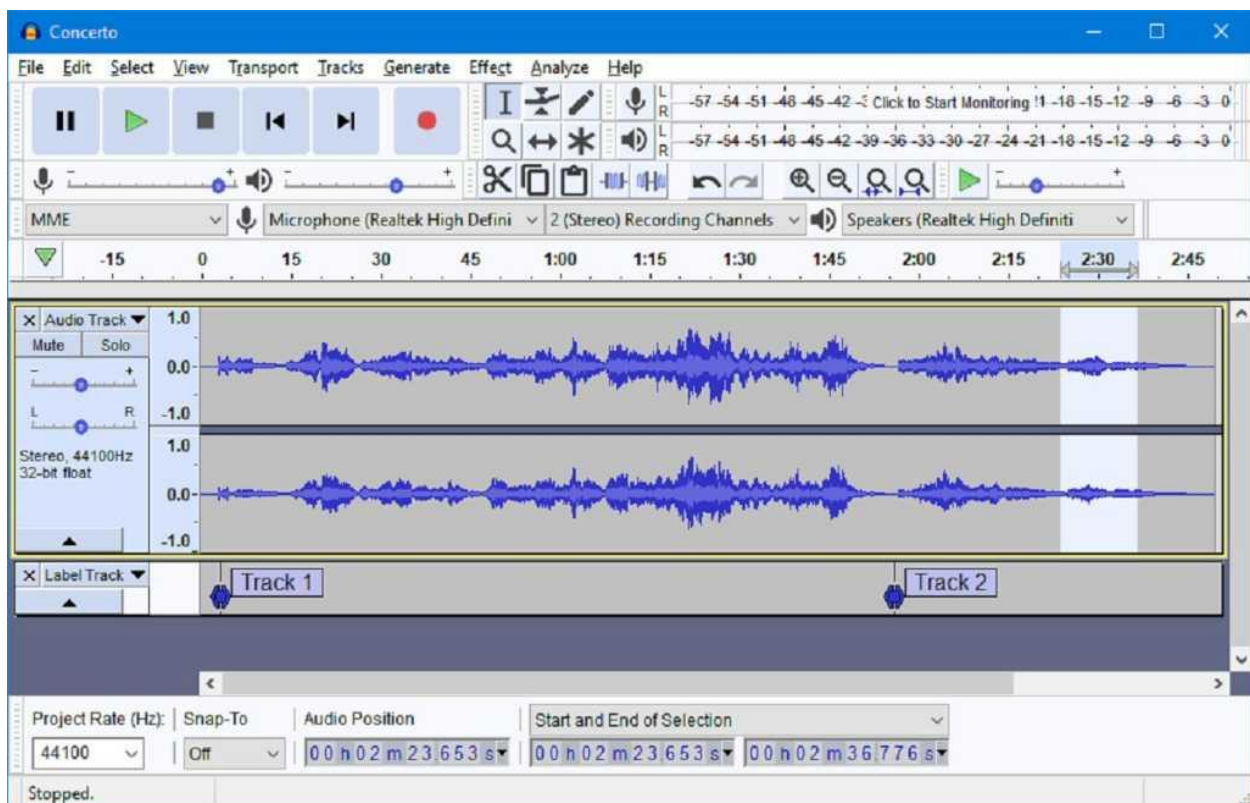A new waveform will appear under the previous recording.

Press the Space Bar to listen to the two sounds together.

While you are listening, use the Gain slider to change the volume.

When you are done making changes, click File and then Export...

Save your file.


In Audacity, you can save your "sound project" as an audio file. To save just the sound in its final form, e.g. for your MP3 player, use Export and select an MP3 file format....

# Finding and use multimedia material

The Internet is an amazing source of information. Sometimes you need material like images and sounds for a homework assignment. It's very easy to find them on the Internet and download them on your computer.

On the right side click on Tools to see some search options, choose the color or size of the images you are searching for. If you want a large image, click Size, choose Large and only large images will appear. Explore the other options.

**If you like a photo and want to save it:**
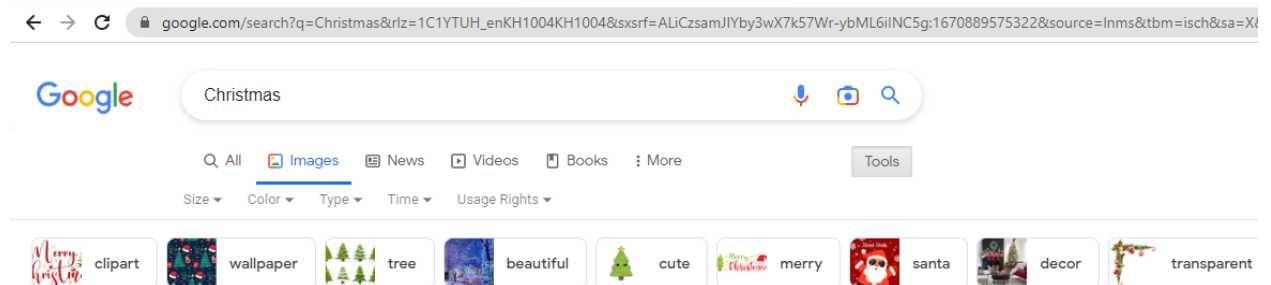
Click it 1 to see the original file and not a small thumbnail.

Right-click the image and click Save picture as 2 to download it.

# Create an animated story

Now let's try to put everything together and create an animated story. For this project, you can use your photos or photos you downloaded from the Internet. You can also add your sound recordings and music. To finish with a nice-looking movie, you can add some visual effects. Start Microsoft Photos and let's have fun!

To create a video:

➢ In the Photos window, click the Folders button and click New.
➢ In the pop-up window select Custom video.
➢ In next window, type a name for your video and click OK.
➢ In the Project library panel click the Add button to add pictures from your PC or from a collection you have created in Photos.

Use the best quality memory cards and don't forget to make copies of your photos and videos.

You can select more than one photo at the same time and add them with one click.

## 3D Effects

You can add 3D Effects to your movie. Do you remember the slide transitions in Microsoft PowerPoint? You can use the same idea here, for videos.

To add 3D effects:

➢ Select the photo you want and drag it to the Storyboard panel.
➢ Click 3D Effects.
➢ In the window that appears, click on the effect that you like the most.
➢ The effect will be applied to the chosen video.

## Pan and Zoom

If you work with photos, you will need motion to bring your story to life.

To apply Motion

➢ Select the photo you want.
➢ Click Motion. In the window that appears, click on the effect you want to apply (e.g. Tilt up) and click Done.
➢ The effect Tilt up will be applied to the selected photo.

You can change the order of the photos by clicking a photo and dragging it to the place you want.

## Music

You can also add music to your movie to make it more exciting

To add music:

➢ In the top toolbar, click Background Music.
➢ In the window that appears you can choose Your music file or Recommended.
➢ Select the music file you like and click Done to add it to your movie.

Notice that the music of the recommended song will automatically adjust to your movie length.

Organize your files by saving them in a folder for each video project.

If you record a video, use different views to make it more interesting.

When you record people or animals always focus on their eyes.

Try to use natural lighting. Avoid the sun or strong lights behind your object.

Use your preferred search engine to find free music or special effects on the internet.

Text

Almost ready! But of course there are no movies without titles or a short introduction about yourself, the director and the casting.

To add text:

- ➢ On the Storyboard panel, click Text
- ➢ A panel with a text box appears where you can type the text you want.
- ➢ Choose an Animated text style to format the text using the effect you like.
- ➢ When you have finished, click Done to save your formatted text.

Save and share

To share your movie, you can select a video service and upload it to the Internet or save your movie as a file on your computer.

To save your movie:

- ➢ In the top toolbar, click the Export video button.
- ➢ Click on the size that you want to save the file
- ➢ The file has been saved. Choose the most appropriate option between the three for your project

You can also save a smaller version of your movie to watch it on a mobile device or to send it as an email attachment.

If you want to create a real animation like the cartoons you watch, draw your own characters and animate them with Pencil2D You can download and use this animation program for free. It takes a lot of time and practice, but who knows? You may become the next Walt Disney!