

<u>S.No</u>	Curriculum Topic	Sub-Topic	Details
1	Files and Folders	1)Drives and Folders	Students should be familiar with drives and folders.
		1.a) Creating & renaming a folder, 1.b) Location and usage of standard folders.	Various kinds of files for video (mp4, avi, mpg, etc.), photos (jpg, gif, bmp, png etc.), audio (wav, mp3, mp2,m4a,aac, wma,etc.), documents (docs, odt, pdf etc.)
		1.2)Data Measurement	Bit-Single binary digit, byte-8 bits, KB-1024 bytes,MB,GB,TB,PB,EB...
		1.3)File Size	File size depends on the pixel dimensions of an image and the number of layers it contains. Images with more pixels may require more disk space to store and may take more time to edit
		1.4)Viewing vs. editing files.	There are apps for viewing various files vs editing them. Students need to see the difference. Right click open with.
		1.4.1)Default apps for file extension.	Double click opens files in an app. Change it to open it in a different app by default.

		1.5)Compressed vs. uncompressed file formats	wav vs mp3 (or) jpg vs bmp. Show how huge the size difference it. Just introduce them to the idea of lossy vs lossless compression. Rar vs jpg. Show the compression of rar on text files vs say jpg or mp4 files. Why the huge difference?
			Loss less compression Lossy Compression 1)PNG 1)JPG 2)ZIP 2)MP3 3)GIF 3)MP4
		1.6)Internet	Explain about Internet (Internet helps to share information all over the world) and usage of Wifi and Hotspot.
		1.7)Transferring	
		1.7.1)Wireless (Wifi File Transfer),	Transfer files from Mobile to Mobile(in short distance use SHAREit,Nearby Share.. Etc (use any sharing applications),
			Mobile to pc : Transfer file from Pc to Mobile in short distance(Nearby share, Laptop Data Transfer Software, Via the Cloud , by Email, ect..
		1.7.2)USB File Transfer (With wire)	Mobile to PC using USB cable, Pen drive, External Hard Disk, [CDs, DVDs,Floppys(Old)]
		1.7.3)Google Photos	Mobile to PC

		1.7.4)E-mail	If distance is longer to transfer, we can use E-mail (Id-Creation, sending, forwarding, replying.)
		1.8)Downloading	Through browsers like Google Chrome, Mozilla Firefox, Internet Explorer, Microsoft Edge, Safari 1)Opening a web page, e-mail, watching/viewing video and audio files. 2)Whatsapp web : we can also download files information through this app on our computer.
		1.9)Format Converter	Converting files like images, documents, audio & video from one format to another format using format factory, movavi, vlc , VSDC Free Audio Converter, ect...
		1.10)uploading	transmission of data from local device to a remote device (Google drive, When we convert files from one format to another format)
2	Photos and Editing	2.1)Digitisation	Generating digital images to edit and post on the web.
		2.1.1)Pixels	Digital image size is measured in pixels

		2.1.2)Aspect ratio	The aspect ratio is the proportions of the Height and Width of an image.It is represented as W:H.(W means width & H means height) . An image's ratio will define its overall shape: vertical, horizontal, square, etc
		2.1.3)Resolution	Resolution helps to measure the visual quality of digital images, photos and videos. A higher resolution signifies the picture contains more pixels, which means it can display more visual information. As a result, a high-resolution picture is sharper and clearer than a low-resolution one
		2.1.4) Compression	Image compression minimizes the file's size in bytes without degrading image quality
		2.1.5)Megapixel	Megapixels are commonly used to describe the resolution of a digital camera and still images. And they are important in maintaining the resolution of printed images.
		2.1.6)Vector images	Vector images : EPS, AI, PDF, SVG are formed by curves and paths dictated by mathematical formulas.:eg. Logos)
		2.2.0) Installation and Screen Layout,	How to installed Photopea app and it's layout explanation.

		2.2.0.1) Importing images.	How to import images to the photopea app.
		2.2.1) 4S : Selection, Sharpening, Softening & Saturation	Image editing features
		2.2.2) 2C : Cropping and Cloning,	Basic operations
		2.2.3) rotate, resize	Basic editing
		2.2.4) Brightness, contrast, exposure, etc.	Basic operations
		2.3) Erase, manual retouch, clone, editing background etc.	Erasing, duplicate objects, background correction and eliminating blemishes from a person and create an unbelievable look.
		2.4) Photo Manipulation, photo Stitching	Manipulate images, collection of pictures are put together to make a single picture.
		2.5) Photo patch, Clipping mask , Remove BG & Custom shapes.	Patching an image, clipping an image to a text , remove BG & add custom shapes.
		2.6) Text in different forms and download fonts.	Download fonts from websites for Photopea and displaying text in different forms.
		2.7) Create own designs & usage of templates	creating own design pages and editing pre defined templates and its uses.
		2.7.1) Saving it in different extensions	Saving files with different extensions.(like pdf, jpg, svg, png, gif and pptx).

3	Videos and editing	3.1)Basics - frames	Resolutions (SD, HD, UHD etc.), frames/sec.
		3.2)Compression	How does mp4 compression work?
		3.3)Getting the video	Screen recording, recording from phone, download from net, download a stream.
		3.4)Trim, move, split, delete visual gaps, duplicate,filters, colours, volume, fade and speed.	Basic video operations with videos.
		3.5)Brightness, contrast, exposure, etc.	Basic operations
		3.6)Closed captions, inserting images/audio, Text overlap, transitions, more advanced editing options	closed captions - make video accessible to deaf and hard of hearing by providing a time-to-text track as a supplement to, or as a substitute for, the audio.
		3.7)Text-to-Speech	We can make our own text to speech (audio) for our videos.
		3.8)Green Screen filter	It removes the green colour from the video clips and blend with another video or image.
		3.9)Turning videos into GIFs	Create a gif from a video.
		3.10)Youtube shorts, video memes.	How do we create youtube shorts and video meme.

		3.11) Lighten, darken and sharpen the particular area of an image.And also creates smooth transition for colors.	How to hide or show and blur or sharpen the details of an image,creates smooth transition for colors.
4	Audio	4.1)Basics	Bits/sample, samples/sec, no of tracks. Phone quality -- 8 bits, 8000 samples/sec, mono. CD quality -- 16 bits, 43000 samples/sec (why?), stereo.
		4.2)Compression	How does mp3 compression work?
		4.3)Creating an audio file	Using voice recording or importing an audio
		4.3.1)Detaching an audio from the video	Segregating an audio from a video.
		4.4)Merge, cut, insert, trim	Audio editing process tools
		4.5)Amplify, reduce noise, speed up/slow down.	Improving the quality of the audio content
5	Bringing it all together	5.1)Documentation tools	Tools that allow mixing of text documents, video, audio, photos etc. to generate videos or active pages.(Presenting)
		5.2) Exporting	How to complete the video for further usage.
		5.3) Media Course Project.	Model projects for students

6	Drones	6.1) Introduction of Drone	Add the introction of drones.
		6.2) Install drone usage app	How to install the app to control the drones.
		6.3) Photos and videos by Drone	How to use the app to take photos and videos by drone.