

The Monthly Newsletter

of the

# SUN CITY SUMMERLIN

## **COMPUTER CLUB**

www.scscc.club

January, 2021

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#### **Issue Contributors**

Tom Burt Kathy Kirby Jeff Wilkinson Peggy Cushman David Kretchmar Jim Cerny



## President's Message

by Jeff Wilkinson Looking Back at 2020

Happy New Year to all, we look forward to making this year much better than last year and invite all our readers to join us!

2020 was a very different year for us all and this included your computer club. We suspended in person seminars and classroom presentations in March and rearranged the seating in our classroom to facilitate social distancing for our Tuesday repair SIG. Signs were posted with the new protocols required for entry to our facilities, cleaning supplies and hand sanitizer became available. Our never-ending coffee pots were unplugged and of course no more treats were available.

We continued our weekly Repair SIG using the adjoining computer lab to allow spacing users the proper social distance so repairs and instructions could be given.

We initiated a reservation system for the Repair SIG so we could ensure we didn't exceed the capacity limit.

We initiated online meetings, first on WebEx and then settled on Zoom. We established a Zoom account with a 100 person per meeting capacity and setup admin accounts and recurring meeting schedules.

We attempted hybrid Zoom meetings so those who were unable to connect via Zoom could participate in meetings in the classroom but found using multiple cameras and microphones wouldn't really work without installing costly upgrades. Of course, the end of the pandemic was "just around the corner" so we opted not to do it!

We continued implementation of our Windows 10 file server located in our classroom closet. Our club database, club financials, seminar handouts, Gigabyte Gazette issues, historical data and club information files are all being migrated to this central location with scheduled backups and remote access for board members.

We initiated online dues payments using a PayPal account which allows online payment using a credit card or PayPal account. This was integrated into our club database system and has been well received with more members opting for this convenience daily. This is particularly welcome for those who would normally visit the club to drop off their annual \$10 dues.

Upon the retirement of our long-time club Treasurer, we elected a new Treasurer and co-Treasurer and began the training involved in acclimating them to our new PayPal payments, Quicken and club database and how they all fit together. A procedure manual was written and used in the training sessions which were conducted on Zoom and remotely logging into our classroom server. Our new treasurer is working on implementing online bill payments and remote deposit as we continue to streamline our operations.

We migrated our Yahoo groups accounts, which ended and shut down for good on December 15<sup>th</sup>, to groups.io accounts. Members were invited to subscribe and moderators were chosen and messaging began. The SCSCC-Help group has over 70 members and the SCSCCNews group has all 735 members of the club as of this writing.

We began using multiple avenues to announce club functions: online emails with our new groups.io account, community wide eblasts, weekly newsletters and link magazine announcements.

We also began using the resources of APCUG, a group we have been members of for many years. They have a multitude of videos and offer guest speakers. We have used both for our club meetings and of course they are conducted via Zoom.

While we were unable to hold our annual volunteer luncheon this year, be assured that this club is what the volunteers make it and the members appreciate it very much.

So, despite our reduced member activities, your board and volunteers have been busy. This coming year will bear the fruit of our labors beginning with a resumption of the Apple User Group in late January.

Happy New Year!!

Stay safe and healthy

Jeff Wilkinson, President (702) 527-4056 <u>pres.scscc@gmail.com</u>

### **General Membership Meeting**

Our January General Meeting will be held at **2 PM on Thursday, January 7th** via Zoom webcast. Our program will feature a video presentation by Judy Taylor from APCUG on **"Digital Asset Estate Planning: Even After You've Died Your Identity Isn't Safe."** 

For Club information: go to <u>www.scscc.club</u>, contact Jeff Wilkinson, President at (702) 527-4056 or email him at <u>pres.scscc@gmail.com</u>.

## January 2021 Printable Calendars

To view this month's classroom and lab calendars, click the following hyperlink: http://www.scscc.club/Calendars/scscc\_calendar\_2021-01Jan.pdf

## **Submissions Welcome**

We are always looking for new information to share with our club members. If you have computer or technical information you would like to share with members of the club, send your articles to editor **Tom Burt** at <u>tomburt89134@cox.net</u>. Thank you to everyone for your contributions.

## **SCSCC Board of Directors Actions**

## The Computer Club Board of Directors took the following actions on December 9, 2020

Tom Burt made a motion that the **minutes of the November 11, 2020 Board Meeting be approved as submitted.** The motion was seconded by Howard Verne and unanimously approved by the Board

Irene Burt moved that the 2021 bank resolution authorizing signatories for bank checks and withdrawals be approved. Chuck Wolff seconded. The motion was approved unanimously.

Chuck Hagen made a **motion** that the meeting adjourn. Howard Verne Tom Burt **seconded** the motion, and it was unanimously **approved** by the Board. The meeting was adjourned at 10:30 AM.

## Welcome New Members

The following new members have joined the Computer Club from November 29<sup>th</sup> to December 28<sup>th</sup>.

> Hugh Darling Iris Darling

Judith Laing Judith Morgan

As of December 29<sup>th</sup>, the club has 614 paid memberships for 2020 and 279 paid memberships for 2021.

## **Special Interest Groups (SIGs)**

Currently, all seminars, SIGs, Q&As and Kaffee Klatches are being conducted as Zoom webcasts. Unless explicitly stated, advance registration is not required for SIG sessions.

Special Interest Groups (SIGs) provide a forum for general discussion on a specific computer related subject. Admission to all SIGs is on a first-come, first-seated basis and is subject to the maximum allowed by fire code regulations. All of the following meetings are held in the Classroom. <W>, <M> or <H> indicate whether a SIG would be of interest to a Windows, Macintosh or Hand-held Device user.

#### Apple Q&A <M/H>

3rd Monday, 10 a.m. (new date/time) Next meeting: January 18<sup>th</sup> Gail Weiss

Bring your Apple iPhone, iPad, Watch or MacBook to get one on one help with your questions about how to use any Apple device and popular iOS or MacOS apps.

#### Genealogy Q&A <W/M> DARK

4<sup>th</sup> Saturday, 9 a.m. to noon in the Lab Next session: TBA Karen & Ray Ristic (702-749-6489)

Genealogy is one of America's most popular and rewarding hobbies. With billions of records now available online, researching your family tree has never been easier – if you know where to look and which keywords you'll need to use to create an accurate family tree from start to finish.

Karen and Ray Ristic have been doing family history research for over 40 years, teaching classes, members and officers of genealogy societies, and have published two family history books.

#### Hardware / Software Repair Lab <W/M >

#### **Reservation Required**

*Every Tuesday, 12:30 p.m. to 3:30 p.m.* Chuck Wolff (702-233-6634) and Chuck Hagen (702-418-2614)

The Repair Lab provides **CLUB MEMBERS ONLY** with no-cost assistance for those having upgrades and / or hardware and software problems with their computers. Bring in only your PC tower, your Mac or your laptop and your problems. Our TECH team will give you our best effort. *Be sure to mark your cables so you can re-connect when you get home*.

#### Internet Investing <W/M/H> via Zoom

*3rd Thursday, 9:00 a.m. in even months* Next meeting: February 18<sup>th</sup> Tom Burt (702-341-7095)

The Internet Investing SIG provides a forum for members interested in using Internet resources for researching and managing investments to meet, discuss, and learn more about the topic. The SIG's target audience is members with intermediate computer skills and investment experience, but all members are welcome.

#### Networking SIG <W/M/H> via Zoom

2<sup>nd</sup> Thursday at 9 a.m. Next Meeting: January 14<sup>th</sup> Robert Ambrose (<u>rna@muttsoft.com</u>) This SIG is a discussion forum on computer network technology including modems, routers, firewalls, protocols and ISPs.

#### Windows 10 SIG <W> DARK

First and Third Saturdays, 9:30 a.m. Next Meeting: TBA Bill Wilkinson (702-233-4977)

If you are a novice or near-beginner computer user, or if you just want some refresher information together with a refreshing cup of coffee, then jump-start or recharge your computing knowledge by attending these Win 10 SIG / Q&A sessions. At each session, attendees will explore several topics of interest to beginners and near-beginners. Topics are always announced a couple of days in advance via email to SCSCC members who have subscribed to the club's SCSCCNews mailing list. Each topic is presented in a stepby-step manner and is supported by "how to" notes that can be easily and conveniently downloaded from the SCSCCBKK.org web page. Following each "up front" presentation of one or more topics (approximately 60 minutes in duration), an informal openended Question and Answer period takes place for those who wish to participate, listen, reflect, or inquire.

## Kaffee Klatch

Currently, all Seminars, SIGs, Q&As and Kaffee Klatches are being conducted as Zoom webcasts. Advance registration is not required for Kaffee Klatch sessions.

<W> or <M> or <H> indicate whether a SIG would be of interest to a Windows, Macintosh or Hand-held Device (iOS or Android) user.

#### Kaffee Klatch <W/M/H> via Zoom

*Every Tuesday, 8:30 a.m.* Jeff Wilkinson (702-527-4056)

This Kaffee Klatch is an open, free-form discussion group for all users, from beginning to advanced. KK discussions are not restricted to any one subject, computer platform or computer-knowledge level but should be computer or technology related. We will try to answer your questions, help you keep your systems updated and provide some useful "tips and tricks."

Since our SCSCC is built on "neighbor helping neighbor," if you have a tip or information, we encourage you to bring it in and share. The fellowship is great, and the education received from the KK attendees is priceless. Join in on Tuesday morning.

## **Seminar Offerings**

Currently, all Seminars, SIGs, Q&As and Kaffee Klatches are being conducted as Zoom webcasts. Unless explicitly stated, advance registration is not required for Seminar sessions.



#### Tax Preparation Software – Tax Year 2020

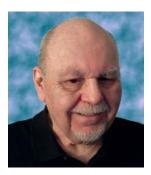
Wednesday, January 27<sup>th</sup> 9:30 AM – 11:00 AM *via Zoom* Presenter: Tom Burt Location: Zoom Webcast

Two of the most popular programs for preparing your personal income tax return are **H&R Block** and **Turbo Tax**. You can run these programs on your PC or Mac or you can work with the online versions. Purchase one of these software programs (or go to the maker's website), install it on your PC and answer the step-by-step questions that are presented to you. When you've finished, either program will provide you with a finished tax return ready for filing. You can even choose to file your return electronically! Happily, for 2020 the tax law changes are few and minor.

In this year's seminar we will discuss both programs briefly and then do a demonstration of the excellent H&R Block Deluxe program. We will create a 2020 tax return for a fictitious senior couple who have typical financial transactions such as: wage income or retirement benefits, interest and dividends, social security benefits, capital gains, itemized deductions, required minimum distributions, etc. You may be surprised how easy it is to prepare and file your own tax return. We'll also look at how to set up electronic payments on the IRS web-site.

2020 presentation notes will be available about January 24<sup>th</sup> at: <u>http://www.scscc.club/smnr.</u>

## Tom's Tech-Notes



## Creating Windows 10 Bootable Setup Media

Updated from June 2016

#### Tom Burt, SCSCC Vice-President

Windows 10 has now been out for 5+ years. As I write, the latest version is V20H2. You can install that upgrade via the "Get Windows 10" tool or via Windows Update. You can also install it from a setup on a USB flash drive or on a DVD. The "install from setup" approach can be appealing if you have a number of PCs to upgrade because you only need to download the 3.5 GB of setup files once and then generate the USB or DVD setup.

The key to creating a setup USB flash drive or DVD is the free **Windows 10 Media Creation Tool**. Download it from: <u>https://www.microsoft.com/en-us/software-download/windows10</u>. The tool runs on Windows 7, 8.1 or 10. It does not need to be installed; just run it.

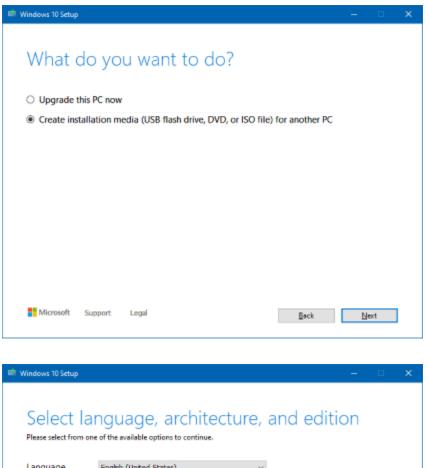
As an aside, the free upgrade to Windows 10 from Windows 7 and Windows 8.1 systems, while not promoted, is still available; just enter your old Windows 7 product key when the Windows 10 Setup requests a product key.

The Media Creation Tool will walk through a succession of screens, as shown in the following series of screen shots with comments.

Windows 10 Setup		12		,
Applicable notices and license	e terms			
Please read this so you know what you're agreeing to.				
MICROSOFT SOFTWARE LICENSE TERMS			^	
MICROSOFT MEDIA CREATION TOOL				
IF YOU LIVE IN (OR ARE A BUSINESS WITH A PRINCIPAL PLACE STATES, PLEASE READ THE "BINDING ARBITRATION AND CLASS BELOW. IT AFFECTS HOW DISPUTES ARE RESOLVED. These license terms are an agreement between you and Microsoft Cr They apply to the software named above and any Microsoft services extent such services or updates are accompanied by new or additions different terms apply prospectively and do not after your or Microsoft software or services). IF YOU COMPLY WITH THESE LICENSE TERMS, BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS.	S ACTION WAIVER" : orporation (or one of or software updates ( al terms, in which cas 's rights relating to pr	SECTION its affiliates) (except to th ie those e-updated	e	
1. INSTALLATION AND USE RIGHTS.				
<ul> <li>General. You may install and use one copy of the software t anninations, and solely for use on Windows. You may make a Privacy statement</li> </ul>			÷	
Microsoft Support Legal	Decline	Accept	ŧ	

First up is the "License terms" screen.

Read the license if you wish and then click the Accept button.



Next up is the "What do you want to do? Screen.

Click the bullet for "Create installation media for another PC".

Then click the Next button.

🛤 Windows 10 Setup	- 🗆 🗙
	nguage, architecture, and edition
Language	English (United States) $\vee$
Edition	Windows 10 ~
Architecture	64-bit (x64) v
Use the recommen	ded options for this PC
Microsoft Sup	port Legal <u>B</u> ack <u>Next</u>

Next up is the screen for specifying the Language, Windows 10 version and CPU architecture.

By default, these match those of the system you're running the Media Creation Tool on. Uncheck the box to change the selections.

The final setup media is capable of upgrading either a "Home" or "Professional" edition of Windows 7 or 8.1. Be sure that the architecture setting (32-bit or 64-bit) matches that of the

Windows OS on PC you plan to upgrade. 32-bit is now quite rare.

When settings are the way you desire, click the Next button.

🛤 Windows 10 Setup —		×
Choose which media to use If you want to install Windows 10 on another partition, you need to create and then run the media to instal	it.	
USB flash drive It needs to be at least 8 GB.		
<ul> <li>ISO file</li> <li>You'll need to burn the ISO file to a DVD later.</li> </ul>		
Microsoft Support Legal	Next	

😂 Select a path		×
← → × ↑ 🔤 « HDD → Windows 10 Setup v Ö Searc	h Windows 10 Setup	0
Organize - New folder	822 <b>-</b>	•
Desktop ^ Name ^	Date modified	Туре
Documents Windows10_V1903_x64_en-us.iso	5/21/2019 2:26 PM	Disc I
👌 Music		
Fictures		
🚟 Videos		
Local Disk (C:)		
HDD1 (D:)		
EDRIVE (E:)		
TOMBURTS (F:)		
👳 Finance (\\irene-desktop)		
TOMBURTS (F:)		
V <		>
File name: Windows10 V20112 x64 en-us.iso		~
Save as type: ISO File (*.iso)		$\sim$
A Hide Folders	<u>Save</u> Cancel	

Next up is the "Choose which media to use" screen.

Older PCs may not support booting from a USB flash drive. New PCs, especially laptops and tablets, often lack DVD drives.

For the USB flash drive option, you will need at least an 8 GB flash drive. All data on that flash drive will be overwritten, so make sure you save it somewhere else before using it. Click the bullet for whichever type of bootable media you desire.

If you choose ISO file as your bootable media, the tool will display a File > Save as dialog to let you select the folder and file name for the ISO file.

**Warning!** For V20H2, the DVD image is too large to burn to a single-layer (3.7 GB) DVD. You will need a dual layer (8.4 GB) DVD.

📾 Windows 10 Setup - 🗆 🗙					
Select a USB flash drive					
The files on your USB drive will be deleted. To keep these files, back them up now to another save location	n.				
Refresh drive list					
Removable drives - F: (TOMBURTS)					
- H: (ESD-USB)					
Microsoft Support Legal	Nex	•			
Dack	Tiex	t			

If you have selected USB flash drive as your bootable media, the tool will ask you to select the USB flash drive from any that are plugged in.

Make that selection and click Next.

The tool will download the Windows 10 setup files and use them to create the bootable USB drive or the ISO image of the bootable DVD. This will take 30 to 60 minutes. While working, the tool will display a "Creating Windows 10 Media" progress dialog. When the media creation is finished, you will see a final completion screen.

Bit Windows 10 Setup	-		×
Burn the ISO file to a DVD			
D:\Windows 10 Setup\Windows10_V20H2_x64_en-us.iso Open DVD burner			
Microsoft Support Legal Esck	Ei	nish	

If you chose to make an ISO file (a DVD image), you will be offered the option to use the Windows DVD burner (Win 8 or 10) to burn the image to a physical DVD.

On Win 7, you will need to use a third-party tool to burn the ISO to a physical DVD.

The finished bootable setup media will install (or upgrade to) the latest version of Windows 10 (20H2 as I write this).

It can also be used as a bootable recovery medium if your Windows PC fails to boot or if you need to do a clean reinstall of Windows 10 later.



## Kretchmar's Korner

**'Tis the Season for Fraudulent Email** By David Kretchmar, Computer Technician

You have probably already received emails that appear to come from a bank or other online service requesting that you verify account credentials. You might have been asked to provide personal information including account and credit card numbers and passwords. This is a

"If	you	can't	spot	а
phis	shing e	email, y	νου ςοι	ıld
be t	the ne	xt victir	n."	

standard **phishing** technique; oddly, the sender is asking for information they should already have. Unfortunately, during the COVID-19 pandemic, we've seen once again that phishing lures are mutating and they're often hard to recognize.

Phishing is a form of social engineering email attack in

which the sender tries to gain access to login credentials, to get confidential information, or to deliver a virus. This is accomplished by tricking humans like you and me.

Scammers know there's a good chance that any message will be scanned for malicious content by the security software of your browser and mail provider. Google, Edge, and most other browsers are pretty decent about stopping known spam, but plenty still gets through. Scammers are obviously constantly changing techniques.

Since the coronavirus pandemic started to unfold, fraudsters have wasted no time in trying to profit from the uncertainty and fear connected to the crisis. In March 2020, when this all



started, there was a flood of COVID-19 themed spam, spreading malware, phishing for sensitive information or offering bogus products.

According to Google, scammers were sending 18 million phishing emails about COVID-19 to Gmail users every day in March, which Google blocked. In April Google was blocking more than 100

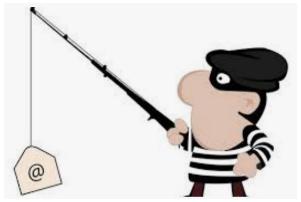
million phishing emails a day. And these are just the phishing emails the tech giant blocked. Yet some still appear in your Inbox, and If you can't spot a phishing email, you could be the next victim.

It is no surprise that the coronavirus pandemic has become a top subject for attackers. The appearance of any crisis brings new circumstances that provide a new environment for cyber criminals to innovate. At the same time, phishing attacks have also benefited from the number of new remote workers.

#### So how do you recognize suspicious emails?

#### Look at the sender email address

The sender's email address is the first place to look. If it looks "funny" or unfamiliar be careful with that message. You can check the email address by hovering your mouse over the 'from' address *but don't click*. Scammers' email addresses used to be anonymous or had very generic



names with many numbers. Sometimes the sender's email address wouldn't match the sender's name or the body of the message.

Receiving emails about a problem with your account from financial institutions with whom you have no relationship is obviously a laughable tell. But if you do get an email claiming to be from your bank, closely review the email address. The email address is sometimes the only sign of a scam, due to how professional the

messages look. If you feel the email might be legitimate, check your account the way you would normally access it (not a link provided in the email).

Keep in mind that any big outfit is going to have an eponymous address i.e., you contact PayPal at an address that includes paypal.com.

#### Be suspicious of attached files or unfamiliar links

Cyber criminals' email might contain malware or send you to a malicious web destination. If you are at all suspicious, don't click. Legitimate service providers don't send messages requesting you to log in via an embedded link. Also pay special attention to attached files – once they are opened, these attachments can install malware to give someone else control over your computer. They can then initiate attacks other computers, including by sending spam (often infected) to every contact in your address book.

#### Watch for poor English

Poor grammar or words used in an unusual way are possible indications of phishing. Always be suspicious; looking for unusual language and vocabulary, or misspelled words can help prevent you from becoming the next victim. Poor spelling and other grammar mistakes are common with phishing emails that have been translated from other languages. This kind of clue is less common today because the quality of social engineering has improved, so you are likely to receive a more professional presentation. Another thing that can signal an attempted attack is generic greetings such as "Dear recipient" or " Dear friend".

There's actually sometimes a purpose behind misspellings and poor syntax. Cyber criminals most successfully prey on uneducated computer users, knowing them to be less observant and therefore easier targets.

#### Is it too good to be true or is it frightening?

Social engineering focuses on two human weaknesses, fear and greed. Does the email promise you a windfall of cash? Does it suggest you inherited a fortune or will be paid a fortune to help someone move money out of their country? Here's an idea: Google for the same message, or a



key phrase from that message. (highlight, right click, search Google). You'll often see that many other people have received the same or similar fraudulent message.

Would-be cyber criminals using social engineering methods are very opportunistic. For example, this time of the year the names of shopping websites such as Amazon and Mayfair are used in sending out millions of emails claiming issues with your account or recent order and asking for personal information. They know consumers are most likely to have made purchases this time of the year.

The scammer wants to panic you into doing something. Don't be threatened by an email. Does the message urgently ask for help or otherwise appeal to your emotions? These are common techniques. Do not respond to an email threatening to suspend your account if you do not answer in a short time.

#### Homoglyph attacks

Homoglyph attacks rely on replacing characters in addresses with ones that look similar, or are the same, but belong to different alphabets. These attacks are extremely dangerous for users because there is a very limited chance of detecting the trick. Like the attack on PayPal users in which the address contained the "correct letters" taken from our Latin alphabet – with two exceptions. The attackers replaced both instances of the letter P with a "P" look-alike letter, but from a different alphabet. This "P" look-alike letter was taken from the Russian alphabet, where it is equivalent to the letter R. With this kind of attack, you are dependent on the other clues discussed in this article to protect yourself.

## **APCUG Guest Article**

#### **Helpful Memory Bytes**

## By Jim Cerny, Help Desk Host, The Saratoga Users Group July 2020 STUG Monitor

#### www.thestug.org jimcerny123 (at) gmail.com

Let's review and explore what we really need to know about basic computer storage (bits and bytes) and how it helps us get an idea of the data space needed to save and backup our stuff.

Suppose you landed on a planet and the aliens there only had one hand and only one finger on it (not ten fingers like we do). All they could do is flash a single digit or none at all (hence, a zero or one). How high could they count? Could they do basic math?

All computers use the binary system (a single digit of 1 or 0) – that is, they store and work with data saved in memory as zeros and ones. But there is NO LIMIT to how high you can count – you just keep adding on more zeros and ones. For example, the digits we know in our numbering system such as 1, 2, 3, 4, 5, 6, 7, 8, 15, 16, 31, 32, 33, etc. would be the following in binary = 1, 10, 11, 100, 101, 110, 111, 1000, 1111, 10000, 11111, 100000, 100001, etc. So, adding a new digit to the left doubles the size of the memory (or number). Believe it or not, math gets a lot simpler with only two digits.

A single binary digit is called a BIT. Eight bits together form a BYTE of data. Eight bits allow for 256 different combinations, enough to cover not only our 26-character alphabet but special characters and more. Every keystroke on your keyboard enters one byte into memory!

I love the old science fiction movies – where the spacecraft command center was filled with gauges and dials! To read a value on a dial you had to look closely and see where the arrow was. It showed measurement on a scale of lines and it was up to you and your eyesight to see the amount or "reading." But with binary digits, you don't care about "how much" you only need to know if it is there or not there -- a one or a zero. To get more accuracy, you just add more binary digits. So, you will need a lot of them, but they are cheap and much easier for use in electronics.

One KILO-byte of memory is 1024 bytes, but when we start dealing with really large amounts of computer storage, we round it off and call it a thousand.

One MEGA-byte of data is one million bytes or one-thousand kilobytes. Those old 3.5-inch computer disks (remember them?) held about one and a half megabytes or about 220 pages of text. A CD-ROM (computer disk) could hold about 700 megabytes, that's over 400 of those old floppy disks and about 90,000 pages of text. It is good to remember that photos, depending upon the number of pixels in them, can be from 10 or 20 kilobytes up to 2, 12, 24, or more megabytes each! So, is a picture worth a thousand words? You bet, and more!

One GIGA-byte is one billion bytes or one-thousand megabytes. Now we are talking serious (and very inexpensive) memory! You can buy a small portable USB drive (called a "thumb" drive or "flash" drive) in various gigabyte sizes – I tend to like the 32 or 64-gigabyte size because it can easily hold all my photos and documents as my backup. Just one gigabyte can hold almost

700,000 pages of text. That's a den full of books. One HD (high definition) movie can take 2 to 5 gigabytes of memory. Movies and videos are moving pictures, of course, several pictures (or "frames") per second. Fortunately, the data used to store photos and movies are "compressed" or coded to take up much less space than you would expect.

One TERA-byte is one thousand gigabytes. For us normal people, this is a HUGE amount of memory! You can get a one-terabyte drive for about \$50. It can hold 300,000 photos or about 500 hours of movies. And, unlike my memory, it will never forget anything.

The next memory size up is the PETA-byte -- yup, one-thousand terabytes! And, no, they are not going to run out of prefixes. All just to store ones and zeros.

I use a nice little thumb drive I use to back up my memory, but I seem to forget where I put it!



## Lab Monitor Schedule

## Facial coverings and social distancing of 6 feet required.

The Open Lab session is held once per week: 9 am to noon on Saturdays.

January 2021	Monitor Schedule
Closed	Saturday
Closed	1/2/2021
Fred Cohen	Saturday
Gail Weiss	1/9/2021
Marilyn Gramms	Saturday
John Zuzich	1/16/2021
Karen Ristic	Saturday
Ray Ristic	1/23/2021
Kathy Kirby	Saturday
	1/30/2021