



GRAND COMPUTERS CLUB

February 2, 2022

General Meeting

Call to Order

WELCOME!

TODAY'S AGENDA:

CLUB & BOARD BUSINESS

FEATURE PRESENTATION:

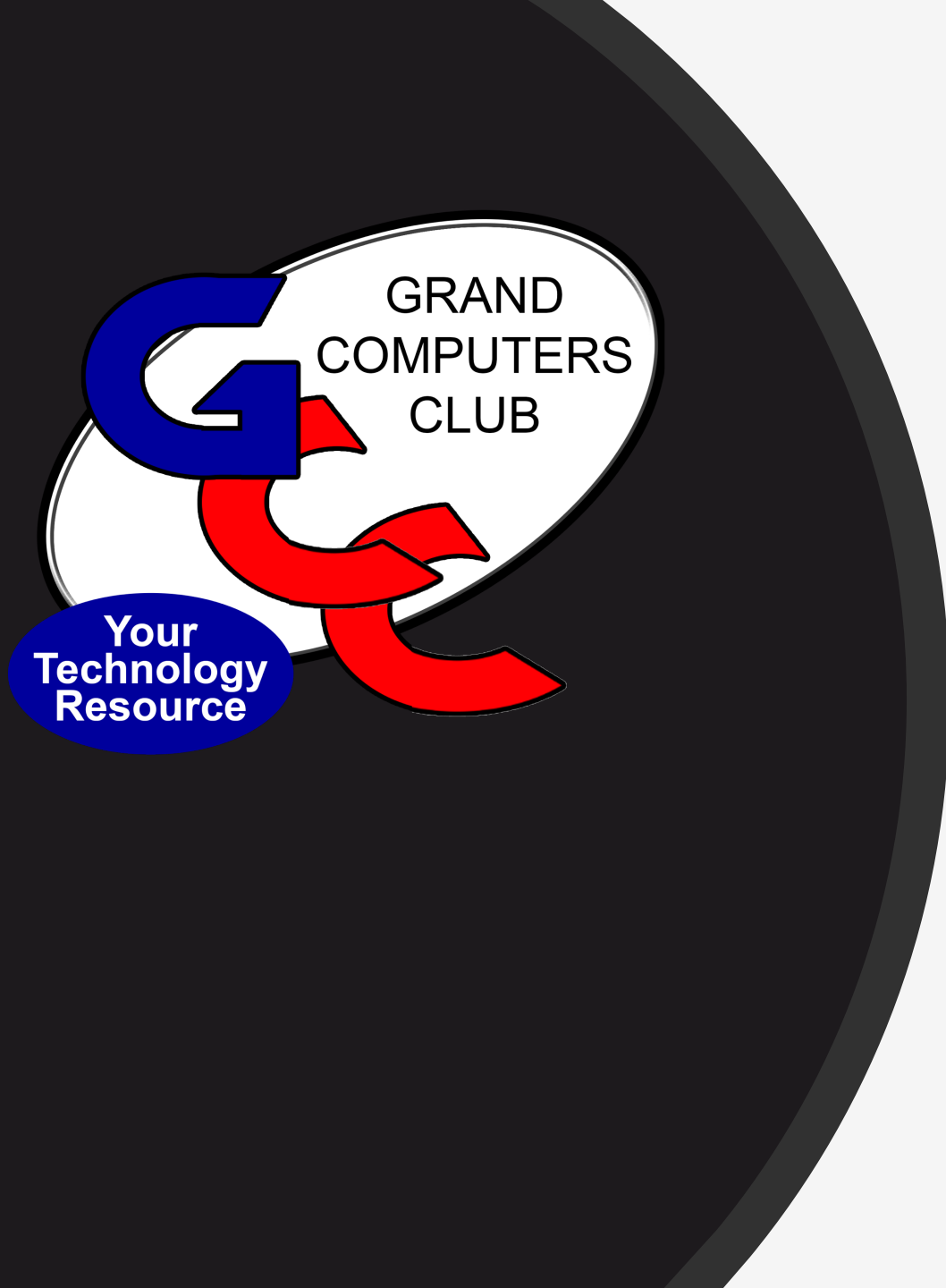
"Considering buying a computer? Laptop?
Desktop? Mini? Mac? PC? Key
considerations."



QUESTIONS RE: CLUB REPORTS?

Zoomers place questions in "Chat"

In Person – raise your hand



Approve Minutes of January 5 Meeting

- Minutes have been posted to Club Website
- Any corrections to the minutes?

President's Report

2022 Executive Board

President – Barbara Vivian

Vice President – Susan Lucas

Treasurer – Debbie Meyer

Secretary – Gaile Brinkman

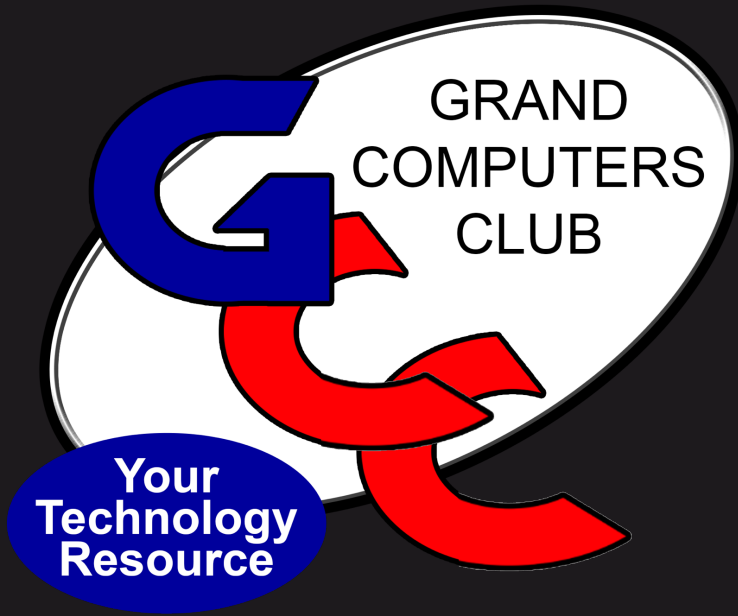
Education Director – Marie Frasca

Monitor Director – Steve Etherton

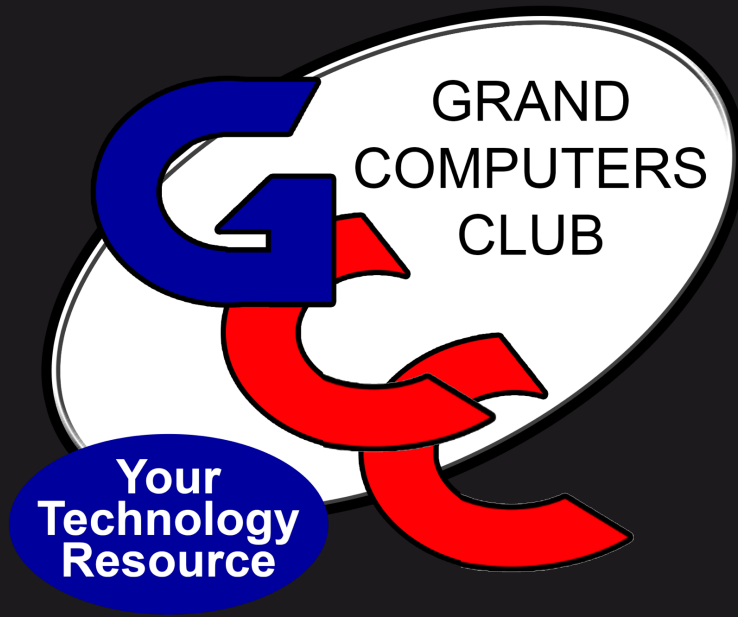
Membership Director – Nancy Collins

Technical Director – Ted Gray

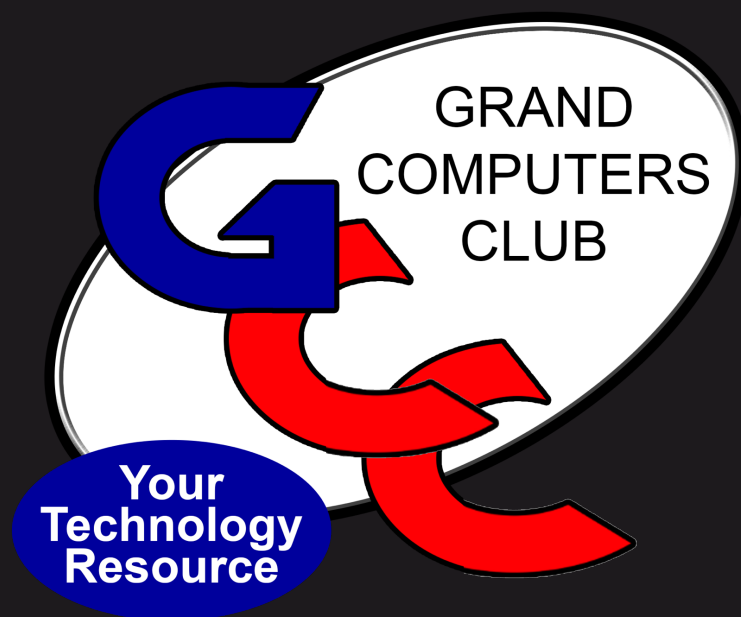
Tech Help Director – Dan Wallen



President's Report



- Club Open House
 - Saturday, February 5
 - 9:00 am – 1:00 pm
 - Club Tours
- Room Assignments are now complete
 - Please check the website for info
 - Some meetings Zoom only, some In-Person only, some Hybrid



Vice President's Report

Susan Lucas



VICE PRESEIDENT REPORT

COFFEE CHAT- Presentation on Creating a Smart Home by Tony Spata.

- Attended by a total of 47 people; 23 in person & 24 via Zoom.

New Member Orientation- 99 invitations were sent and 23 people attended.

- Nice to see many new faces and people interested in our club.



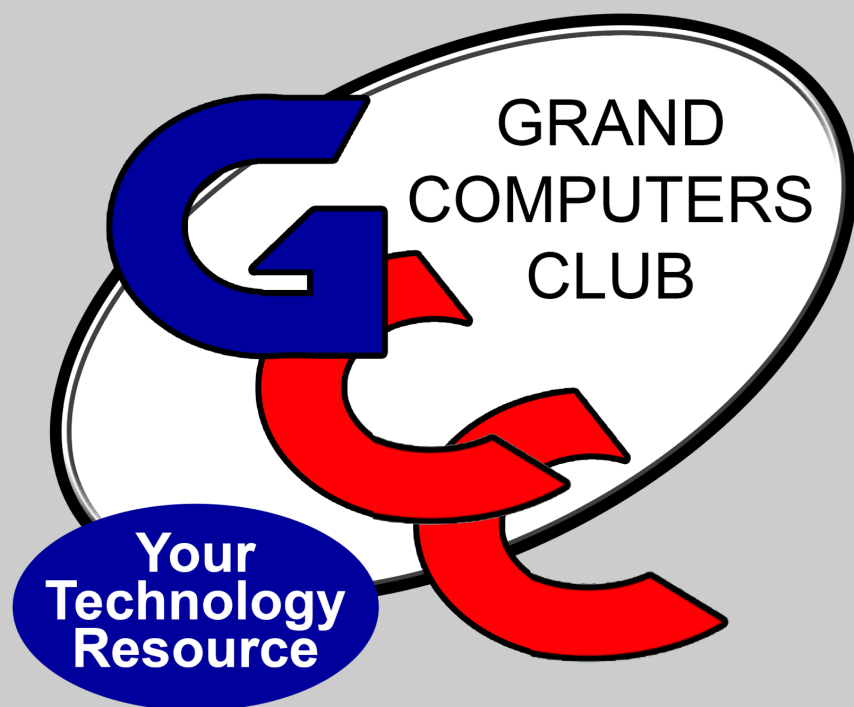
MEMBER UPDATES

COFFEE CHAT- February cancelled.

- Next Coffee Chat is **March 10th, 8:30 - 10:00-** topic is “How to Avoid Robocalls”

New Member Orientation-February orientation is cancelled.

- The next member orientation will be held on **March 18th at 3:30.**
- An invitation will be sent to all new members & all members are invited.



Treasurer's Report

Debbie Meyer



Income	1/22/2022
Class Registration	1,080.00
Membership Dues	4,110.00
Supplies & Printing	64.00
Banquet Guest Meals	0
Interest Income	.27
Total Income	\$5,254.27

Grand Computers Club

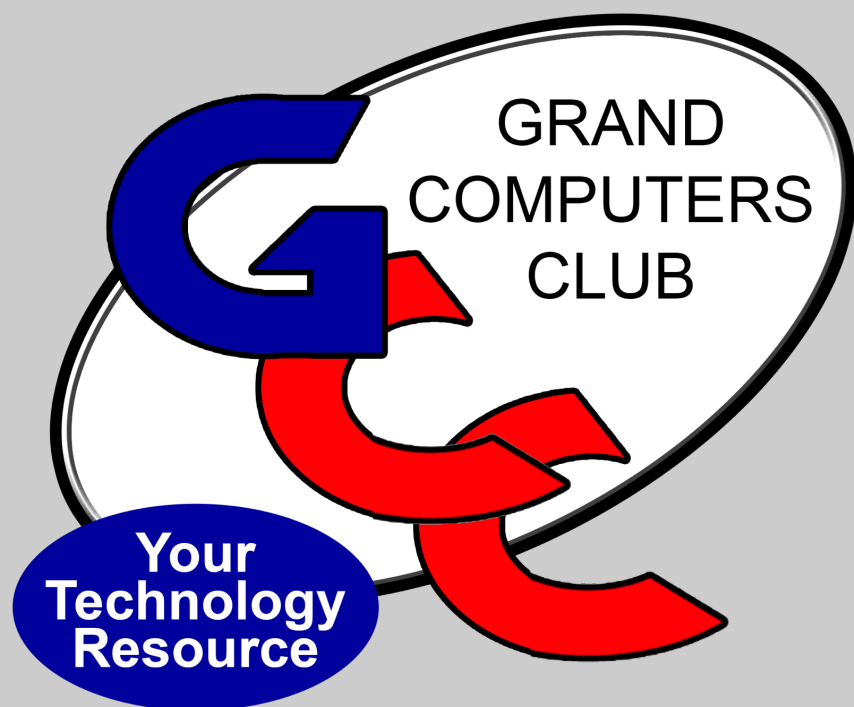


Expenses	1/22/2022
Advertising	383.00
Fees & Charges-Bank, PayPal, Refunds	174.06
Equipment/Software	714.77
Meeting	64.31
Office Supplies	317.18
Printing and Reproduction	.00
Total Expense	\$1,653.32

Grand Computers Club



Account Balances	1/22/2022
Checking Account	\$16,950.56
Savings Account	
Includes Equipment Reserves	25,000.00
Actual Savings	8,560.26
Total in Accounts	\$50,510.82

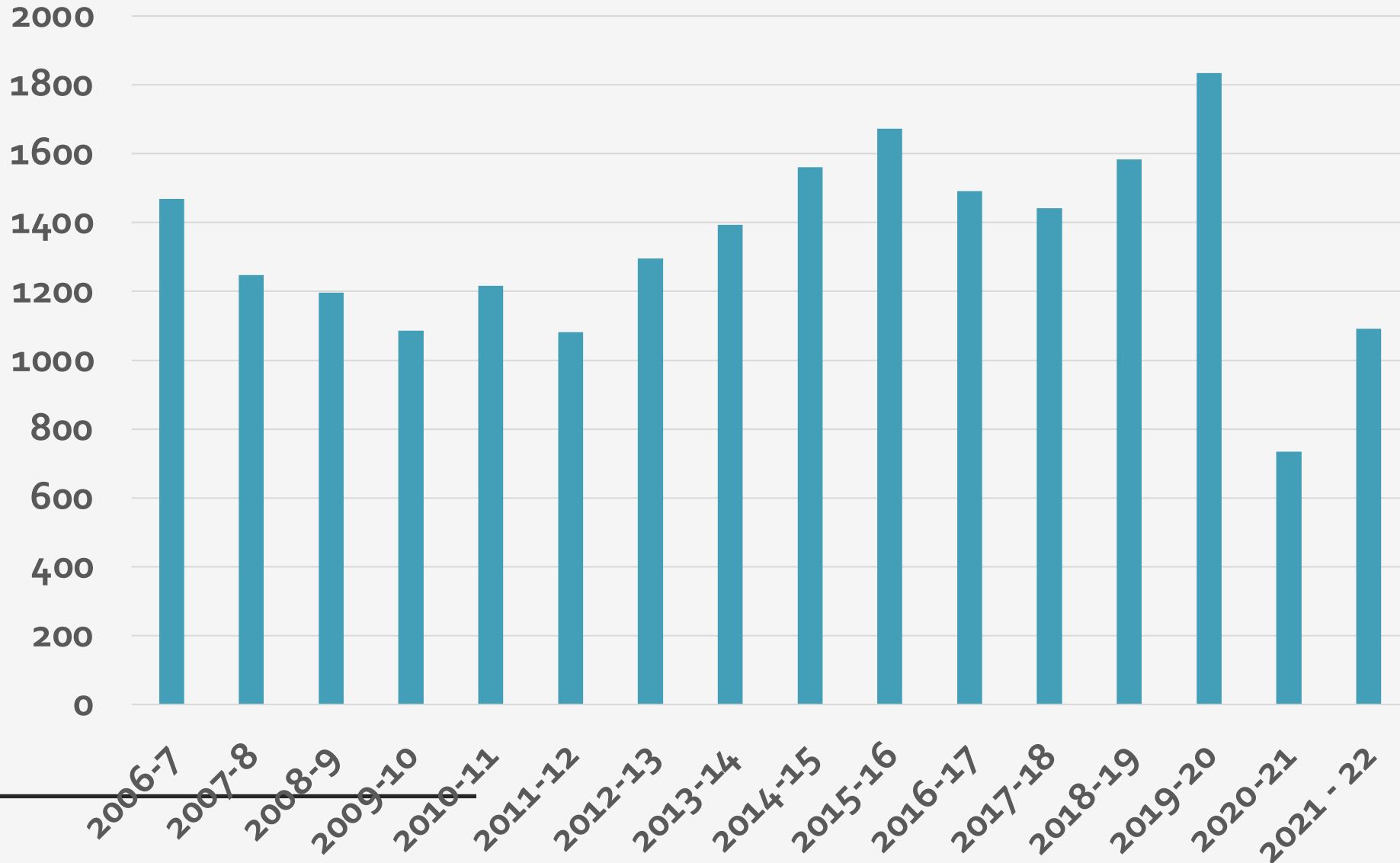


Membership Report

Nancy Collins



Active Member Participation 2006 – January 2022



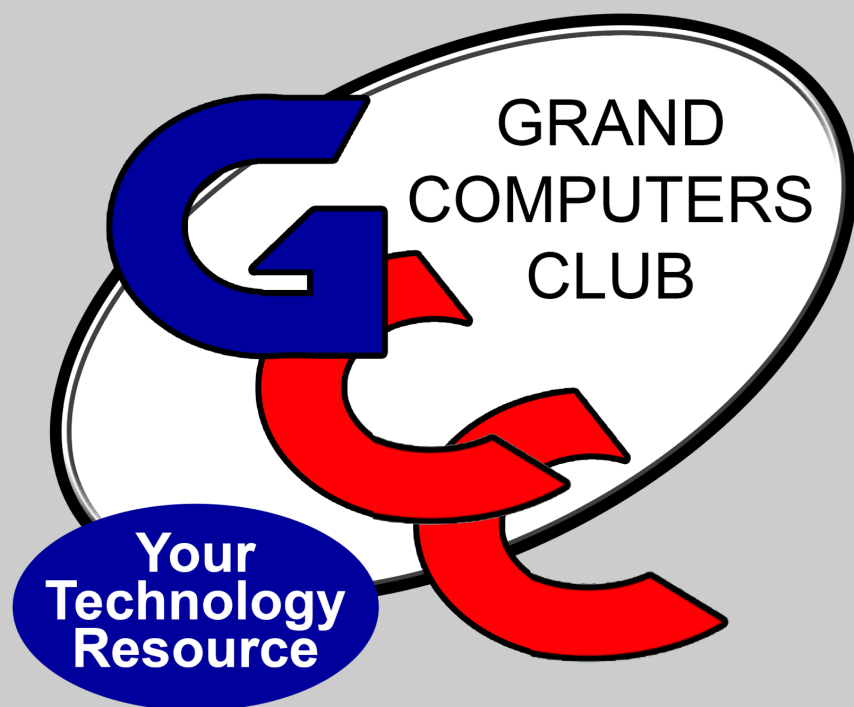
Active Membership January 2022

Members	New	PayPal	Cash/Check
New Members	59	31	28
Renewed Members	140	68	72
Total Active Members	1057	571	486



Active Meeting Participation

	Dec	Jan		Dec	Jan
Apple SIG	45	0	General Meeting	33	43
Board Meeting	0	12	Graphics SIG	0	7
Coffee Chat	38	25	Ham Radio SIG	0	0
Compose Yourself SIG	22	0	New Member Orientation	0	20
Dan & Friends	29	24	New to Computers	0	0
Devices SIG	0	0	New Technology SIG	18	0
Digital Scrapbooking	0	8	Publicity Meeting	0	3
Education Classes	51	0	Tech Help	123	22
Financial Ed/Investing SIG	118	0	Website Committee	0	13
Flight SIG	0	11	Zoom Training	6	0
Genealogy SIG	10	27			
			Totals thru 1/24/2022	493	215



Education Report *Marie Frasca*



Education Report

February 2, 2022 - General Meeting

2022 WINTER SESSION

Things to know when taking an Online class:

1. Download the Free Zoom Application
 2. Make sure you are signed into the free Zoom App
 3. Check for updates of the Zoom App
 4. Save the e-mail from **Zoom**,
Suggest to create a new label in your e-mail
account for Zoom meetings.
-

Registering for a Class

- Begin by registering for classes using a computer with internet service.
- This will guarantee you a seat for the class upon payment of the invoice.
- (Completing a green envelope before registration for a class does not guarantee your seat for a class)
- An invoice must be created before paying for the class.



Paying the Invoice

Two ways to pay the class registration fee


Pay using a credit/debit card

- On the invoice – Click **Pay using Credit/Debit Card**
- To complete transaction- Click **Return to Merchant**

NOTE: If you do not receive a receipt from PayPal the transaction was not completed.

Paying the Invoice

Pay using Cash or Check

- Print the invoice – information is needed
 - The invoice number
 - Registration fee
 - Name of the class
 - Ask monitor for a green envelope to fill out
 - Return the completed green envelope to the monitor to receive a receipt for payment of the class.
 - At the monitor's desk swipe your cam card and an invoice amount will appear on the monitor's computer.
 - The monitor will mark the invoice paid.
- 
-

CLASSROOM COMPUTERS UPDATED

- PC Computers – updated to Windows 11
 - Mac Computers – updated to Monterey
 - The application classes, (Excel, Word, Publisher, Photoshop Elements, Shutter, Twitter) are not effected by the Windows 11 and Monterey updates.
-

Register for classes

- **NEW: Window 11 Classes:**

- If you purchased a new PC with Windows 11 and trying to find your favorite functions or thinking of upgrading your Windows 10 to Windows 11 some of these classes might hold the answer to your questions.

'OTHER'

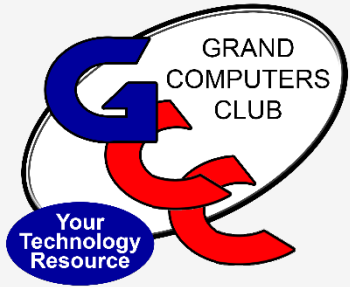
- Photoshop Elements
- Android Smartphone classes
- Chromebook Workshop
- Home Entertainment Cutting the Cord

PC classes

- Genealogy
- Mind Stimulating PC Games for Senior
- PC Basic Beginning Email
- PC Basic Beginning Internet Skills
- Pc Basic Beginning Word
- Publisher

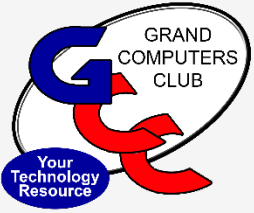
Mac classes:

- Numbers
- Mail for Mac
- Calendar for Mac
- Contacts for Mac
- Utilizing the finder
- Customize your Mac



VOLUNTEERS NEEDED INSTRUCTORS

- We are always looking for new instructors
 - If you are interested in teaching,
 - Contact the Education Director at education@grandcomputers.org
-



VOLUNTEERS NEEDED CLASSROOM ASSISTANTS

- If you are unsure of your abilities, consider assisting in the class.
- You might be surprised by your abilities. If you are interested in assisting contact the instructor or education director.

Marie Frasca
Education Director
education@grandcomputers.org
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Upcoming Meetings

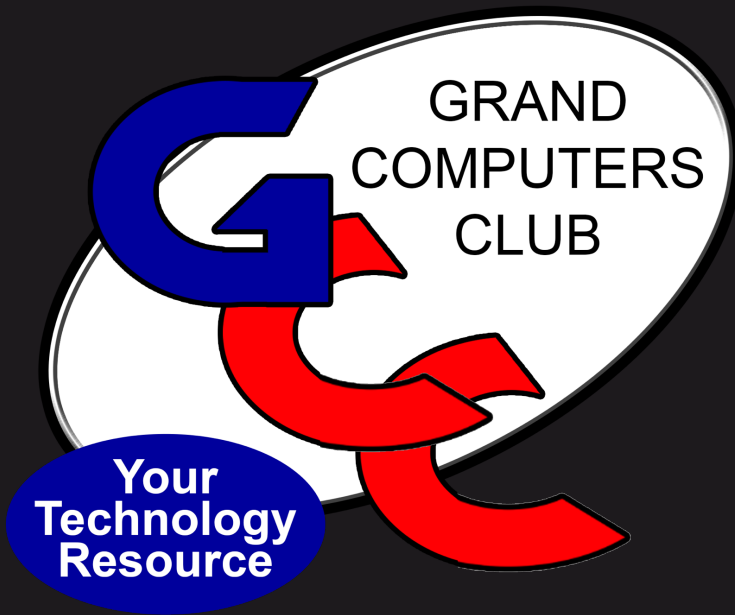
General Meeting – March 2 at 2 pm

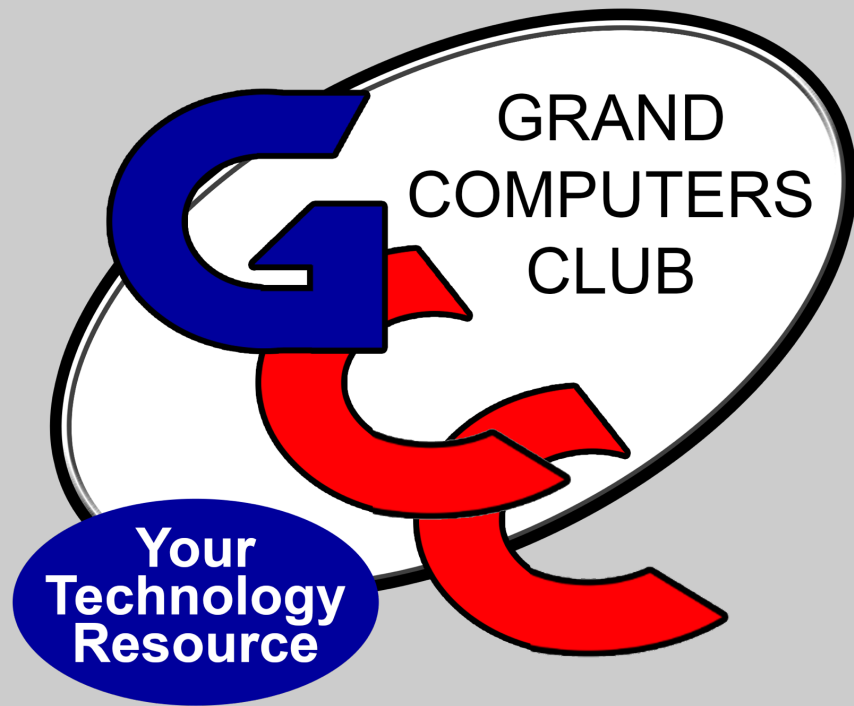
Hybrid Meeting via Zoom AND In-person

Topic: To be Determined

All other Club Meetings:

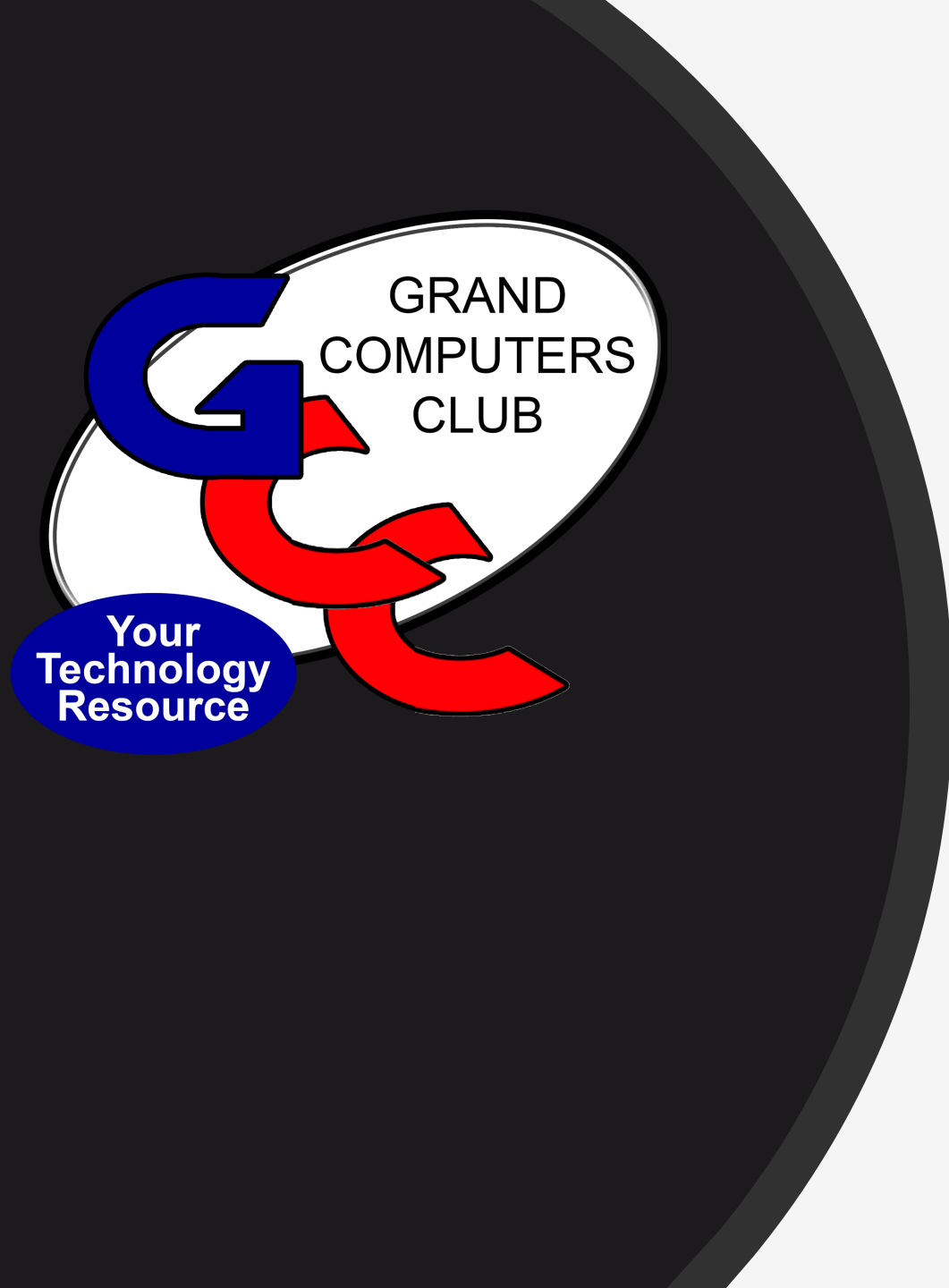
Check the calendar for all Special Interest Group Meetings for locations, time, topic.





Feature Presentation

“Considering buying a
computer? Laptop?
Desktop? Mini? Mac? PC?
Key considerations.”



*Questions about
Club reports
before moving
on?*



CONSIDERING BUYING A COMPUTER?

THINGS TO CONSIDER

**Presented by Barb Vivian
Q & A Joe Parla**





PLEASE HOLD QUESTIONS UNTIL THE END OF THE PRESENTATION

- **ZOOMERS PLACE YOUR QUESTIONS IN THE CHAT**
- **IN PERSON – JOT THEM DOWN SO YOU REMEMBER THEM**



DISCLAIMER

- I AM NOT AN EXPERT RE: ALL COMPUTERS AVAILABLE BUT WILL PROVIDE AN OVERVIEW OF WHAT TO CONSIDER
- I AM AN APPLE USER BUT HAVE WINDOWS EXPERIENCE IN PAST LIVES AND CURRENTLY USE MICROSOFT APPLICATIONS

KEY CONSIDERATIONS WHEN DECIDING

- **WHY DO YOU USE A COMPUTER?**
- **WHERE WILL YOU USE IT?**
- **HOW MUCH ARE YOU WILLING TO SPEND?**

KEY CONSIDERATIONS WHEN DECIDING

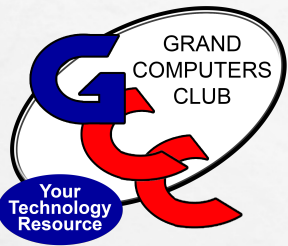
- **WHY DO YOU USE A COMPUTER?**
- **WHERE WILL YOU USE IT?**
- **HOW MUCH ARE YOU WILLING TO SPEND?**



WHY DO YOU USE A COMPUTER?

- **EMAIL – READING, WRITING, SENDING**
- **BROWSING THE INTERNET**
 - RECIPES, PINTEREST, WEATHER, INFORMATION, LOCATING PEOPLE,
- **PURCHASING – AMAZON ETC.**
- **SOCIAL MEDIA – FACEBOOK, TWITTER, INSTAGRAM, ETC.**
- **LOOKING AT PHOTOS**
- **WATCHING VIDEOS – YOUTUBE/ PERSONAL VIDEOS ETC.**
- **STREAMING MOVIES**
- **EDITING PHOTOS, DIGITAL SCRAPBOOKING**
- **CREATING AND EDITING DOCUMENTS – CARDS, NEWSLETTERS, GIFTS**
- **CREATING VIDEOS FOR FRIENDS, FAMILIES, WORK, VOLUNTEERING**
- **GAMING – BASIC TO INTENSIVE**

Basic to Advanced



WHAT ARE MY OPTIONS?

More to Less Robust

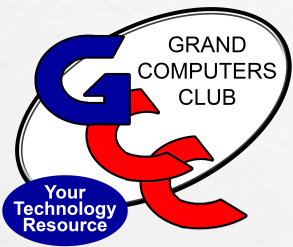
- DESKTOP COMPUTER
- “ALL IN ONE” DESKTOP COMPUTER
- MINI
- LAPTOP COMPUTER
- TABLET “COMPUTER”
- SMARTPHONE



WHAT DO I NEED? BASIC LEVEL

BASIC LEVEL USAGE : CONSUMING VERSUS CREATING

- EMAIL
- INTERNET BROWSING
- PHOTO VIEWING
- WATCHING VIDEOS



WHAT DO I NEED? MODERATE LEVEL

MODERATE LEVEL USAGE : CONSUMING, SOME CREATING

- **ALL BASIC ACTIVITIES**
- **PHOTO AND VIDEO EDITING**
- **DOCUMENT CREATION – WORD, EXCEL, POWER POINT, PUBLISHER**

WHAT DO I NEED? POWER LEVEL

POWER LEVEL USAGE : **CONSUMING, CREATING, GAMING**

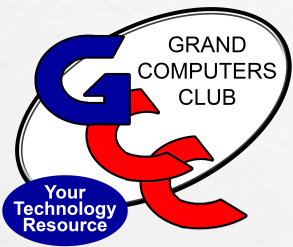
- ALL BASIC ACTIVITIES
- ALL MODERATE ACTIVITIES
- VIDEO CREATION AND PUBLICATION
- GAMING – MODERATE TO ROBUST (VIRTUAL REALITY/AUGMENTED REALITY)
- ETC





IS A TABLET OK FOR BASIC LEVEL USE?

- **A TABLET IS BEST USED FOR CONSUMING INFORMATION — WATCHING VIDEOS, BROWSING THE INTERNET, READING E-MAILS, ETC.**
- **IT'S PORTABLE**
- **IT IS MORE FUNCTIONAL THAN A SMARTPHONE BUT NOT AS GOOD AS LAPTOP**
- **DISPLAY ON PAR WITH SMALL LAPTOPS**
- **VIRTUAL KEYBOARD USES UP REAL ESTATE**
- **BETTER BATTERY LIFE**
- **ARTISTIC OPTIONS WITH TOOLS ADDED**



THINK YOU NEED A COMPUTER?

- WHAT TO ALL THOSE ACRONYMS MEAN AND HOW DO THEY TRANSLATE TO MY CHOICE OF COMPUTER?

macOS Big Sur

Version 11.6.2

MacBook Pro (Retina, 15-inch, Late 2013)

Processor 2 GHz Quad-Core Intel Core i7

Memory 8 GB 1600 MHz DDR3

Startup Disk Macintosh HD

Graphics Intel Iris Pro 1536 MB

“OS”

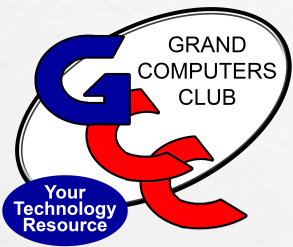
**OPERATING
SYSTEM**

- **THE OPERATING SYSTEM COMES PRE-INSTALLED ON MOST COMPUTERS**
- **IT'S A TYPE OF SOFTWARE THAT ALLOWS YOUR COMPUTER'S HARDWARE TO WORK WITH THE SOFTWARE ON YOUR COMPUTER.**
- **THE OPERATING SYSTEM MANAGES ALL THE PROGRAMS INSTALLED ON YOUR COMPUTER, SO THEY GET THE PROCESSING POWER NEEDED TO FUNCTION.**
- **IT LIVES IN THE MACHINE'S MAIN HARD DRIVE.**



“OS” CONTINUED

- **MAC OS – USED BY APPLE COMPUTERS EXCLUSIVELY**
- **WINDOWS OS – USED BY MULTIPLE MANUFACTURERS OF COMPUTERS (“PC”)**
- **CHROME OS – EXCLUSIVE FOR CHROMEBOOKS – SEVERAL MANUFACTURERS MAKE CHROMEBOOK COMPUTERS**
- **LINUX OS – OPEN-SOURCE OPERATING SYSTEM – NEED COMPUTER THAT SUPPORTS IT AND NEEDS TECH SKILLS**



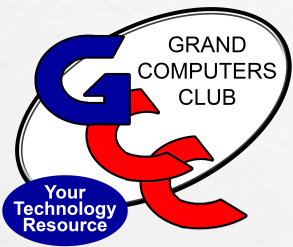
MAC OS

- **MAC OS ONLY RUNS ON COMPUTERS MANUFACTURED BY APPLE**
- **MAC COMPUTERS CAN RUN WINDOWS OS BUT WINDOWS PC COMPUTERS CAN'T RUN ON MACS**



WINDOWS OS

- **WINDOWS PCS RUN MICROSOFT WINDOWS (MOST RECENT WINDOWS 11) THE DOMINANT OPERATING SYSTEM FOR TRADITIONAL PCS FOR MORE THAN 25 YEARS.**
- **WINDOWS OPERATING SYSTEM RUNS WINDOWS APPLICATIONS, FROM MICROSOFT TITLES TO A RAFT OF THIRD-PARTY SOFTWARE.**
- **WINDOWS PCS ARE AVAILABLE IN DESKTOP AND LAPTOP FORMS**
- **CAN BE CONFIGURED IN INFINITE WAYS TO ACCOMMODATE NEEDS FROM BASIC PRODUCTIVITY TO RESOURCE-INTENSIVE WORKSTATIONS.**
- **MANY COMPANIES MANUFACTURE COMPUTERS WITH WINDOWS OS**



CHROME OS

- **CHROME OS RUNS ON CHROMEBOOKS**
- **MANY COMPANIES SELL CHROMEBOOKS – NOT JUST GOOGLE**
- **CHROMEBOOKS ARE ESSENTIALLY A CHROME WEB BROWSER VEHICLE**

**“SSD”
OR “HDD”**

**SOLID STATE DRIVE
OR HARD DISK
DRIVE**

- **SSD STORES ALL DATA IN INTEGRATED CIRCUITS**
 - MUCH SMALLER SIZE AND FASTER
 - MORE EXPENSIVE ALTHOUGH DROPPING.
- **HDD LIVES INSIDE THE COMPUTERS WITH SPINNING DISKS WHERE DATA IS STORED MAGNETICALLY.**
 - DATA IS STORED BY “HEADS” THAT READ AND WRITE DATA ON THE DISK
 - LEGACY TECHNOLOGY – BEEN AROUND A LONG TIME AND LOWER IN COST

“CPU”

**CENTRAL
PROCESSING UNIT
(MICROPROCESSOR)**

- **THE BRAIN & HEART OF ALL DIGITAL SYSTEMS.**
 - RESPONSIBLE FOR HANDLING THE PROCESSING OF LOGICAL AND MATHEMATICAL OPERATIONS AND EXECUTING INSTRUCTIONS.
- **DECODES, EXECUTES AND STORES INSTRUCTIONS**
 - MILLIONS OF TIMES PER SECOND
 - WOW!!!

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Version 11.6.2

MacBook Pro (Retina, 15-inch, Late 2013)

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“CPU”

**CENTRAL
PROCESSING UNIT**

- **INTEL**

- BASIC AND POWER LEVEL
- i3 PROVIDES ADEQUATE PERFORMANCE FOR BASIC TASKS
- i5 PROVIDES GOOD PERFORMANCE FOR MOST TASKS
- i7 PROVIDES GREAT PERFORMANCE FOR MOST DEMANDING TASKS
- i9 Just launched

- **AMD**

- BASIC THROUGH POWER LEVEL
- POWER LEVEL FOR GAMING COMPUTERS

- **APPLE M1 PRO AND M1MAX**

- NEW 2021 –MOVED FROM INTEL
 - FASTER, MORE EFFICIENT

“RAM”

**RANDOM - ACCESS
MEMORY**

- YOUR COMPUTER'S SHORT-TERM MEMORY
- TEMPORARILY REMEMBERS EVERYTHING YOUR COMPUTER NEEDS RIGHT NOW & IMMINENTLY
- LIKE A HIGHWAY – JAMS UP WHEN THERE IS TOO MUCH TRAFFIC – TOO MANY APPS OPEN, TOO MUCH REQUIRED FOR A PARTICULAR TASK (GAME) MULTI-LANE HIGHWAY – FASTER SPEED. MORE RAM – FASTER PROCESSING
- RAM MEMORY FORGETS EVERYTHING ONCE POWER IS LOST (HHD OR SSD KEEPS IT ALL IN LONG TERM MEMORY)

**Solid State Drive or
Hard Disk Drive
STORAGE – long term memory**

**RAM
Short term
memory**

**What
matters**

macOS Big Sur

Version 11.6.2

MacBook Pro (Retina, 15-inch, Late 2013)

Processor 2 GHz Quad-Core Intel Core i7

Memory 8 GB 1600 MHz DDR3

Startup Disk Macintosh HD

Graphics Intel Iris Pro 1536 MB



“RAM”

**RANDOM - ACCESS
MEMORY**

- REQUIREMENTS LISTED IN GIGABYTES (GB) 8GB, 16GB, 32GB
- RAM HAS SPEED RATING THAT CONTROLS HOW MUCH DATA IT CAN HANDLE PER SECOND
- YOU’LL SEE RATES IN MEGAHERTZ (MHZ)
- BASIC & MODERATE = 8GB OR 16GB
- HIGH INTENSITY POWER USER = 32GB

CONSIDERATION 2

- Why do you use a computer?
- **Where will you use it?**
- How much are you willing to spend?

PORTABLE OR STAY PUT?

- WILL IT STAY IN ONE PLACE MOST OF THE TIME?
- WILL I NEED TO MOVE IT FREQUENTLY?
- WILL I NEED TO BRING IT ALONG WITH ME WHEN I TRAVEL?
- WILL I NEED TO BRING IT ALONG WITH ME WHEN I AM WORKING/PLAYING?
- HOW MUCH WEIGHT AM I WILLING TO CARRY?

Desktop

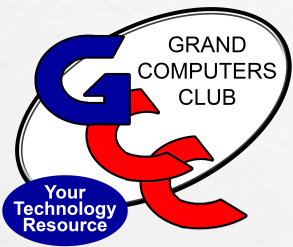
Laptop

Tablet



DESKTOP CONSIDERATIONS





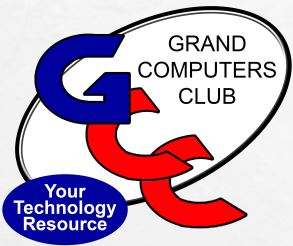
DESKTOPS

- **TEND TO LAST LONGER**
- **MORE EXPANSION SPACE IF YOU WANT TO ADD RAM ETC.**
- **MUST ADD A KEYBOARD, MOUSE AND MONITOR**
 - **UNLESS IT IS AN "ALL IN ONE" – PC OR MAC**
 - **MAC PROVIDES KEYBOARD AND MOUSE**
- **AESTHETICALLY PLEASING**
- **LARGER DISPLAY EASIER FOR VIEWING**
- **MANY CHOICES AND PRICE POINTS**
- **NOT EASILY TRANSPORTED**

ALL-IN-ONE DESKTOP

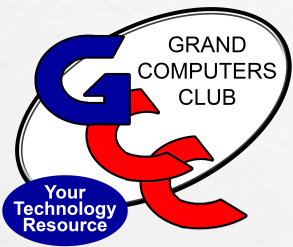
- ALL COMPONENTS ARE IN THE DISPLAY
- WIRELESS KEYBOARD AND MICE INCLUDED – NO WIRES
- SPACE-SAVING - NO “TOWER” TO DEAL WITH





LAPTOPS

- **WORK/PLAY ANYWHERE**
 - INDOORS OR OUTDOORS, IN THE CAR, AT THE POOL ETC.
- **MANY CHOICES AND PRICE POINTS**
- **LIGHTWEIGHT**
- **SNOWBIRDS - EASY TO BRING BACK AND FORTH**



MAKE YOUR LAPTOP A DESKTOP

- **ADD MONITOR, KEYBOARD, MOUSE TO CREATE A DESKTOP FUNCTION**
- **FLEXIBLE – UNPLUG AND GO**
- **BETTER VISIBILITY**
- **LARGER DISPLAY EASIER FOR VIEWING**
- **MORE EXPENSIVE**
 - LAPTOPS TEND TO BE HIGHER PRICED PLUS ADDITIONAL EQUIPMENT COSTS



LAPTOP TO TABLET



MAKE YOUR LAPTOP A TABLET HYBRID/CONVERTIBLE LAPTOPS

- 2-IN-ONE LAPTOPS
- TOUCHSCREEN DISPLAY
- “FOLDABLE”, DETACHABLE KEYBOARDS ETC
- CONVERTS FROM TOUCHSCREEN LAPTOP TO TABLET
- SAME BENEFITS OF A LAPTOP
- SURFACE PRO MOST WELL-KNOWN

The Rundown

Best Overall: [Microsoft Surface Pro 7 at Amazon \(\\$1,029\)](#)

When it comes to 2-in-1 laptop tablets, it doesn't get much better than the Microsoft Surface Pro 7.

Best Portable: [Microsoft Surface Go 2 at Amazon \(\\$390\)](#)

The compact 2-in-1 laptop tablet sports a 10.5-inch "PixelSense" display with a resolution of 1920x1280 pixels.

Best for Buisness: [Lenovo ThinkPad X12 Detachable at Lenovo \(See Price\)](#)

The X12 is an excellent detachable 2-in-1 geared toward business travelers.

Best Splurge: [Microsoft Surface Book 3 at Amazon \(\\$2,949\)](#)

The Microsoft's Surface Book 3 is every bit worth its sky-high asking price.

Most Versatile: [Lenovo Thinkpad X1 Fold at Best Buy \(See Price\)](#)

The X1 Fold is the first Windows-powered folding screen laptop giving it an incredibly degree of flexibility.

Best Value: [Lenovo Yoga C740 at Amazon \(\\$664\)](#)

Offering great performance at a price that's just right, Lenovo's Yoga C740 is the perfect choice for anyone who's looking for a value-for-money machine.

Best Chrome OS: [Google Pixelbook at Amazon \(\\$1,497\)](#)

The Google Pixelbook has far more power than the average Chromebook, which makes it the most robust and premium 2-in-1 running Chrome OS today.

Best ThinkPad: [Lenovo 20QA000EUS at Lenovo \(See Price\)](#)

For fans of Lenovo's ThinkPad line, the Titanium Yoga brings a lot to the table in design and performance.

Source: Lifewire

“BEST OF” LAPTOPS

Source: Lifewire

The Rundown

Best Windows: [Dell XPS 13 at Amazon \(\\$1,801\)](#)

Dell's XPS laptops consistently beat the competition.

Best Ultraportable, Apple: [Apple MacBook Air at Amazon \(\\$949\)](#)

The M1 processor can stand toe-to-toe with just about any other processor on the market today.

Best for College Students: [Microsoft Surface Laptop 4 at Amazon \(\\$895\)](#)

The Surface Laptop 4 offers college students plenty of working space because of its taller screen.

Best for Power: [Acer Predator Triton 300 SE at Acer.com \(See Price\)](#)

This great-looking laptop offers impressive power for home gaming or video editing.

Best for Gaming: [Razer Blade 15 at Amazon \(\\$2,930\)](#)

The Blade 15 is a great choice if you want a powerful laptop with all the features gamers love.

Best Ultraportable, Windows: [Microsoft Surface Laptop Go at Amazon \(\\$700\)](#)

If you enjoy the freedom of a highly portable laptop, the Surface Laptop Go is a great machine to carry.

Best Design: [ASUS ROG Zephyrus G14 \(2021 model\) at Amazon \(\\$1,779\)](#)

This laptop excels both in appearance and performance.

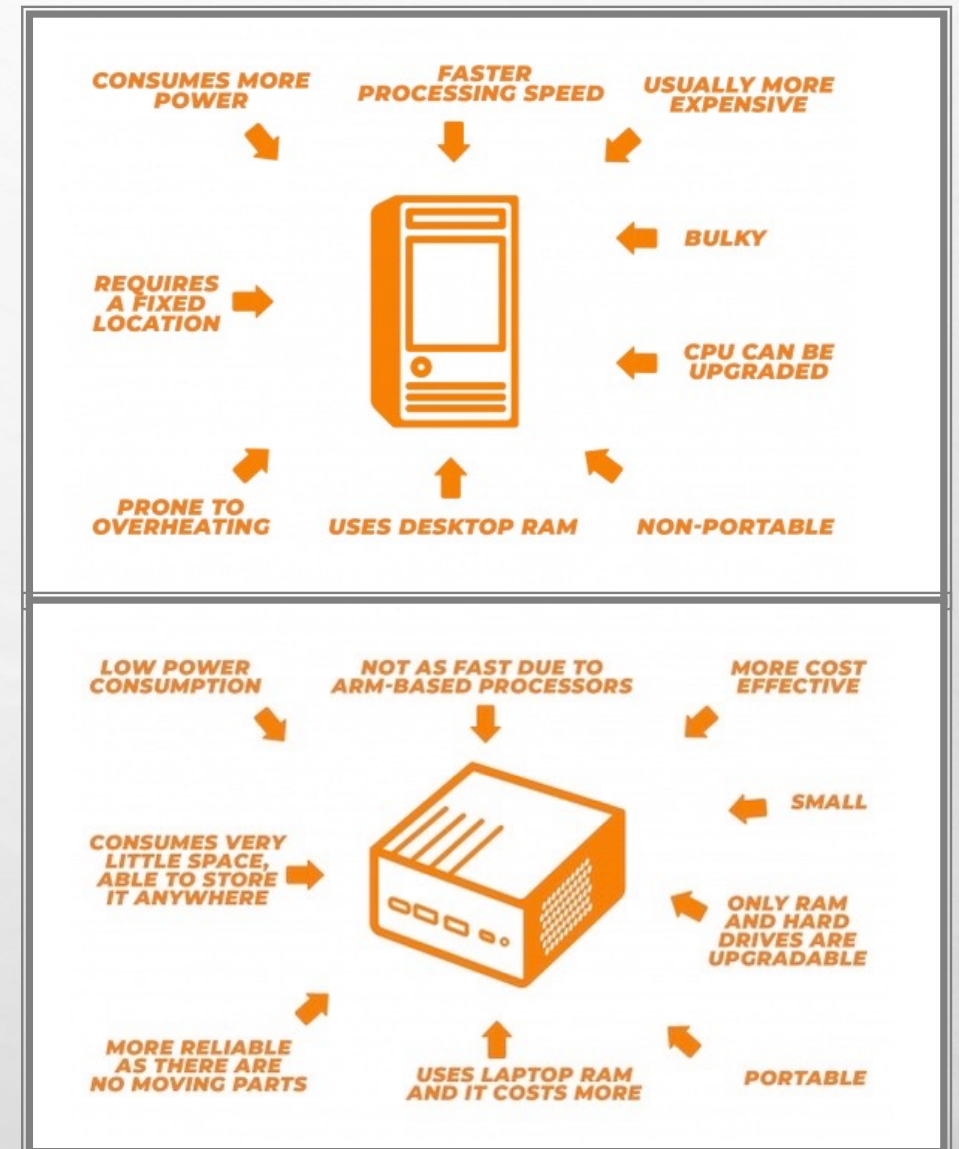
Best Budget: [Lenovo IdeaPad 1 at Amazon \(\\$275\)](#)

A very cheap, barebones device that will get the job done for basic tasks.

Source: Lifewire

MINI-COMPUTERS (IN THE CLUB CLASSROOM)

- MINI PC OR MAC MINI
- ULTRA-PORTABLE
 - SNOWBIRDS CAN TRANSPORT BACK & FORTH
- ADD MONITOR, KEYBOARD AND MOUSE
- LESS EXPENSIVE



MAC MINI VS MAC DESKTOP

\$699 vs. \$1299

	iMac (2021)	Mac mini (2020)
Price	From \$1,299	From \$699
Display sizes	24-inch 4.5K Retina display	None
Apple silicon?	Yes	Yes
Processor	Apple M1 SoC	Apple M1 SoC
Storage	Starts at 256GB SSD, configurable up to 2TB SSD storage	Starts at 256GB SSD, configurable up to 2TB SSD storage
Memory	8GB or 16GB unified	8GB or 16GB unified
Core	8-core CPU with 4 performance cores and 4 efficiency cores	8-core CPU with 4 performance cores and 4 efficiency cores
GPU	7- or 8-core	8-core
Ports	Two Thunderbolt / USB 4 ports Two USB 3 ports (some models) Gigabit Ethernet (some models) 3.5 mm headphone jack	Four Thunderbolt 3 (USB-C) Two USB-A ports 3.5 mm headphone jack

Source: Lifewire

BEST MINI COMPUTERS

The Rundown

Best Overall: [Apple Mac mini at Best Buy \(\\$700\)](#)

The latest Mac mini has tons of power in a tiny footprint so it can go anywhere with you.

Best for Business: [HP ProDesk 400 G5 at Amazon \(\\$880\)](#)

If you're looking for a mini PC that comes in a small form factor but is still upgradable, the HP ProDesk 400 G5 is a great choice.

Best Kit: [Intel NUC 9 Extreme NUC9i9QNX at Amazon \(See Price\)](#)

This is a computer designed for people that want to build their own custom PC in a small package.

Best for Gaming: [MSI 10SF-862US at Amazon \(See Price\)](#)

This is a powerful PC in a smaller form factor that you can use to play any game or even power a VR headset.

Best Raspberry Pi: [Raspberry Pi 400 at Amazon \(\\$160\)](#)

All the components you need for a PC are built within the keyboard. Just plug in a mouse and a monitor and you're off to the races.

Best Compact: [ZOTAC ZBOX CI622 at Amazon \(\\$421\)](#)

This is an easily customizable machine that fits into a lot of budgets, and easily slides into a bag when you want to move it.

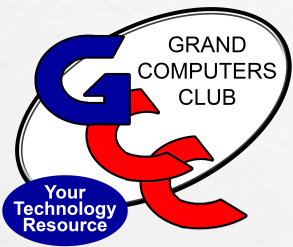
Best Chromebox: [Acer Chromebox CXI3 at Amazon \(See Price\)](#)

Acer has long been a champion of ChromeOS and that includes mini PCs like the Chromebox CXI3.

CONSIDERATION 3

- WHY DO YOU USE A COMPUTER?
- WHERE WILL YOU USE IT?
- HOW MUCH ARE YOU WILLING TO SPEND?





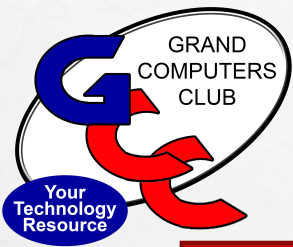
NEW OR USED?

- **RESEARCH USED MACHINES AND FORMER MODELS**
 - CONSUMER REPORTS
 - TOPTENREVIEWS.COM
 - CHECK PRICES ON INTERNET AT MANUFACTURER'S SITE
 - EX APPLE HAS REFURBISHED MODELS
- **LAST YEARS MODELS ON SALE AT RETAIL STORES**

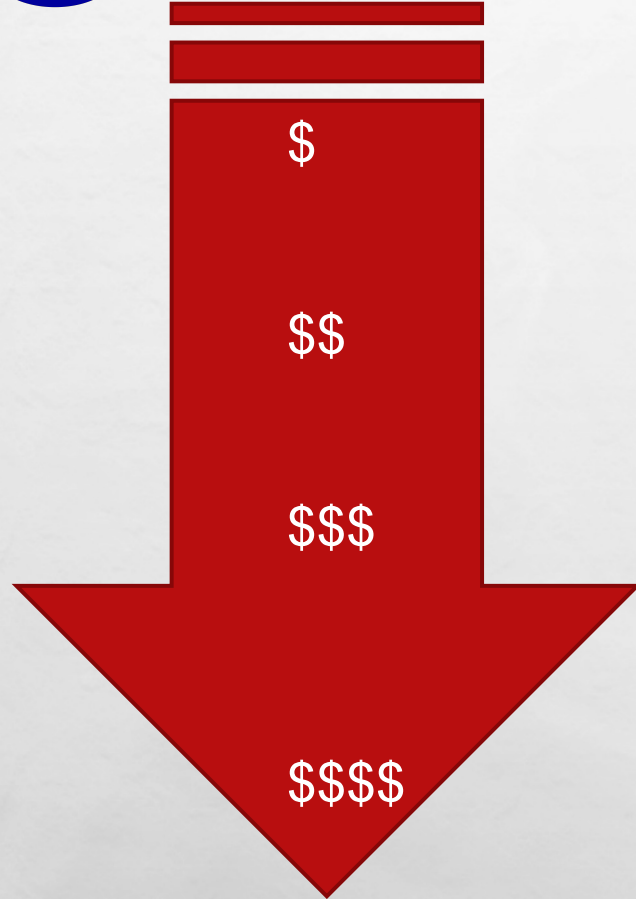


TOSS OR UPGRADE?

- **HAVE YOU MOVED FROM A “BASIC” USER TO A “POWER” USER?**
- **HAVE YOU CHANGED HOW YOU TRANSPORT YOUR COMPUTER?**
- **CAN YOUR COMPUTER BE UPGRADED (MORE RAM ETC.)?**
- **DO YOU WANT MORE FEATURES (SSD, BLUETOOTH ETC.)?**
- **DOES YOUR COMPUTER ACCEPT SECURITY UPDATES AND NEW OPERATING SYSTEM?**
- **CAN YOU STILL USE THE PERIPHERALS YOU HAVE (KEYBOARD, MONITOR, MOUSE ETC.)?**
- **IS IT JUST SLOW? MAYBE IT NEEDS A CLEANING**



REVIEW: WHY DO YOU USE A COMPUTER?



- EMAIL – READING, WRITING, SENDING
- BROWSING THE INTERNET
 - RECIPES, PINTEREST, WEATHER, INFORMATION, LOCATING PEOPLE,
- PURCHASING – AMAZON ETC.
- SOCIAL MEDIA – FACEBOOK, TWITTER, INSTAGRAM, ETC.
- LOOKING AT PHOTOS
- WATCHING VIDEOS – YOUTUBE/ PERSONAL VIDEOS ETC.
- STREAMING MOVIES
- EDITING PHOTOS, DIGITAL SCRAPBOOKING
- CREATING AND EDITING DOCUMENTS – CARDS, NEWSLETTERS, GIFTS
- CREATING VIDEOS FOR FRIENDS, FAMILIES, WORK, VOLUNTEERING
- GAMING – BASIC TO INTENSIVE

83

RECOMMENDED

FULL-SIZE DESKTOPS

HP Envy TE01-1254

Price: \$949.99

Shop

81

RECOMMENDED

FULL-SIZE DESKTOPS

Dell XPS 8930-7339BLK

Price: \$1,500.00

Shop

75

BEST BUY

FULL-SIZE DESKTOPS

Dell Inspiron 3880-5876BLK

Price: \$790.00

Shop

74

BEST BUY

COMPACT DESKTOPS

Acer Aspire XC-1660G-UW93

Price: \$569.00

Shop

81

RECOMMENDED

ALL-IN-ONE DESKTOPS

Apple 27-inch iMac (256GB, Core i5, 2020)

Price: \$1,679.99 - \$1,799.99

Shop

\$569++

\$599 ++

57

RECOMMENDED

10- TO 11-INCH LAPTOPS

Microsoft Surface Go 3 (Pentium)

Price: \$599.99 - \$629.99

Shop

82

RECOMMENDED

12- TO 13-INCH LAPTOPS

Samsung Galaxy Book Pro 360 (13-inch)

Price: \$1,399.99

Shop

81

RECOMMENDED

12- TO 13-INCH LAPTOPS

Apple MacBook Pro 13-Inch (2020, M1)

Price: \$1,279.00 - \$1,299.99

Shop

81

BEST BUY

12- TO 13-INCH LAPTOPS

Apple MacBook Air 13-Inch (2020, M1)

Price: \$999.00 - \$1,019.00

Shop

73

RECOMMENDED

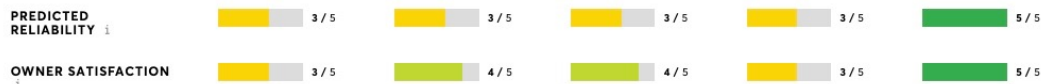
12- TO 13-INCH LAPTOPS

Dell XPS 13 (2021)

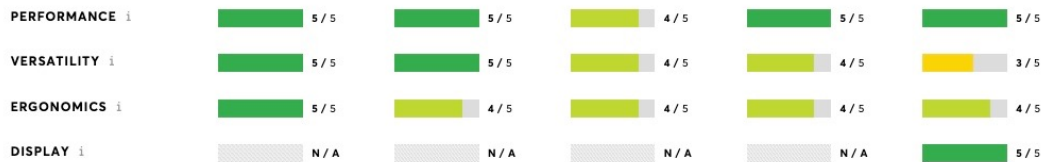
Price: \$1,600.00

Shop

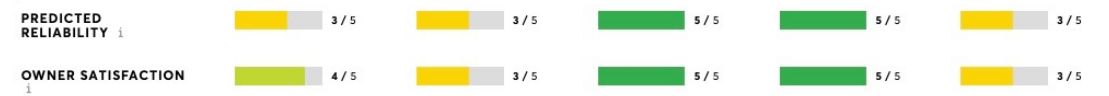
Survey Results



Test Results



Survey Results



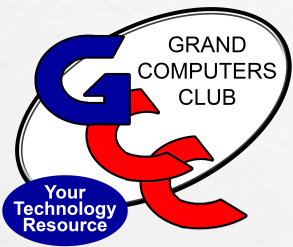
Test Results



PRICE RANGES –DESKTOPS & LAPTOPS

(CONSUMER REPORTS COMPARISONS)





PRICE RANGES CHROMEBOOKS (CONSUMER REPORTS COMPARISONS)

\$254++

<div><div>87</div><div></div></div> <div>RECOMMENDED CHROMEBOOKS</div> <div>Acer Chromebook Spin CP713-2W-79H3</div> <div>Price: \$973.19</div> <div>Shop</div>	<div><div>84</div><div></div></div> <div>RECOMMENDED CHROMEBOOKS</div> <div>Google Pixelbook Go (Core m3)</div> <div>Price: \$449.99 - \$718.99</div> <div>Shop</div>	<div><div>79</div><div></div></div> <div>BEST BUY CHROMEBOOKS</div> <div>HP Chromebook 14B-NA0010WM</div> <div>Price: \$429.00</div> <div>Shop</div>	<div><div>72</div><div></div></div> <div>BEST BUY CHROMEBOOKS</div> <div>HP Chromebook 14A-NA0020NR</div> <div>Price: \$254.99</div> <div>Shop</div>	<div><div>73</div><div></div></div> <div>RECOMMENDED CHROMEBOOKS</div> <div>Lenovo Chromebook Flex 5</div> <div>Price: \$429.99</div> <div>Shop</div>
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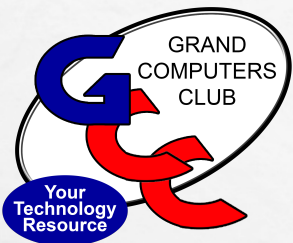
WHAT TO DO WITH AN OLD COMPUTER

- **GIVE TO THE GRANDKIDS/FAMILY MEMBERS**
- **DONATE TO THE CLUB FOR REUSE**
- **USE FOR SPARE PARTS**
- **SELL IT**
 - MACS HAVE THE BEST RESALE VALUE
- **RECYCLE IT – DO YOU HAVE A HAMMER?**
- **ERASE ALL OF THE DATA**



RESOURCES

- **TECH HELP ON TUESDAYS 12:30 – 2:30!!**
- **CONSUMER REPORTS – 2022 BUYING GUIDE**
- **TOPTENREVIEWS.COM**
- **PC - MANUFACTURER WEBSITES**
- **RETAILERS – BEST BUY, COSTCO ETC.**
- **APPLE PRODUCTS**
 - RETAIL STORE
 - WEBSITE - NEW AND REFURBISHED
 - MAC MEDIA IN SURPRISE



QUESTIONS?