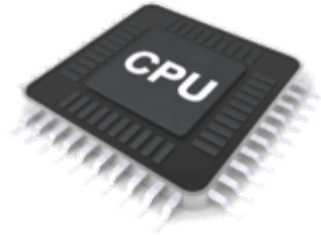


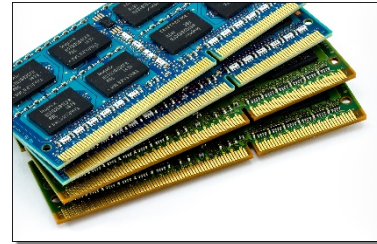
# The Three Components of a PC



## Processor

Does all the computing.

Speed measured in gigahertz  
2 GHz = .5 nanoseconds



## Memory

Holds **active** programs and data for use by the Processor.

Size is measured in gigabytes,  
Takes about 10 nanoseconds to get something to the processor.



## Storage

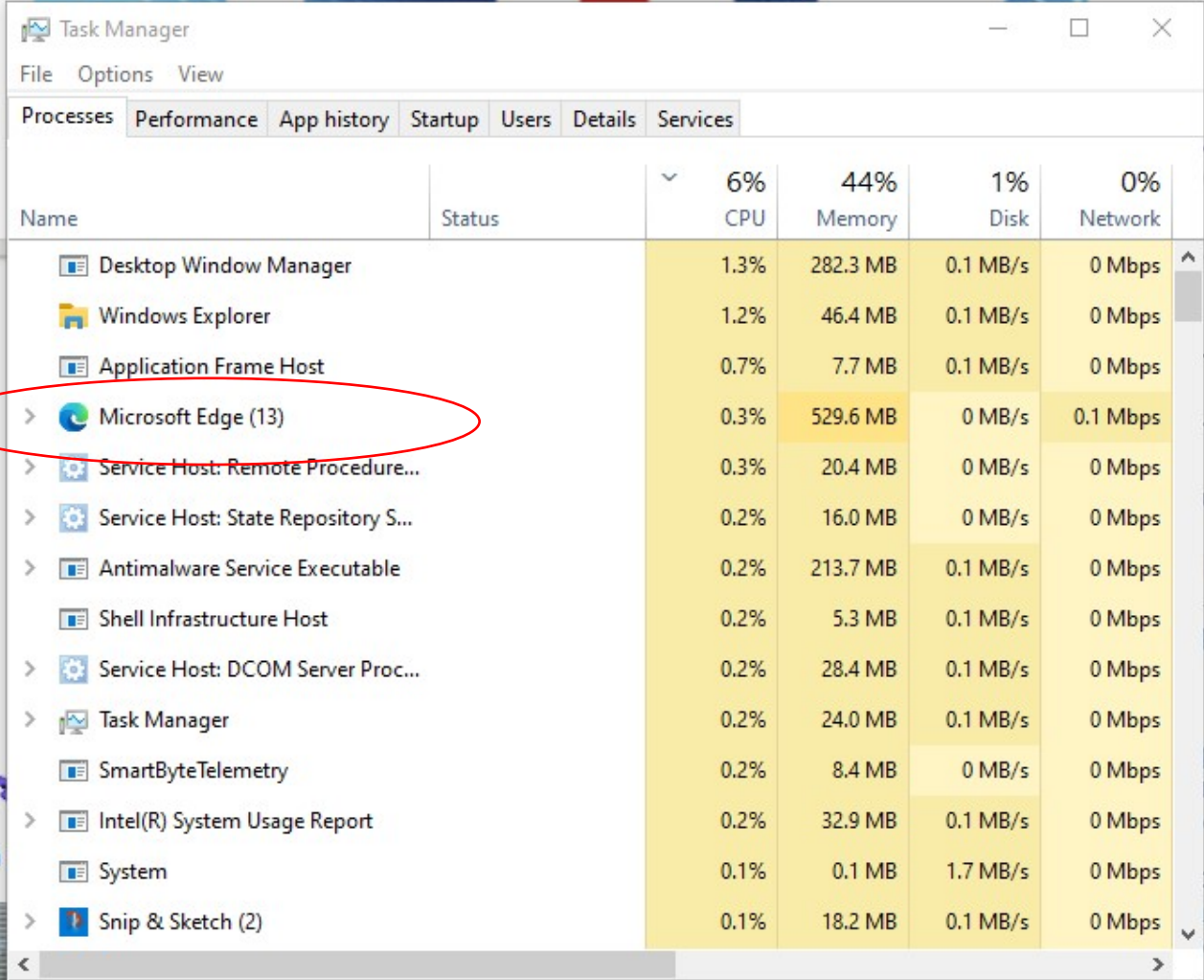

The permanent home of all your programs and data.

HD takes about 10,000 nanoseconds to get something to the memory.  
SSD takes about 100 nanoseconds

**Task Manager tells you what is physically going on:**

- 1. What program is using most of the CPU cycles**
- 2. What program is taking up most of the memory and how much memory is available**
- 3. How much information is coming from the disks and the network**

# Hilton Head Island Computer Club

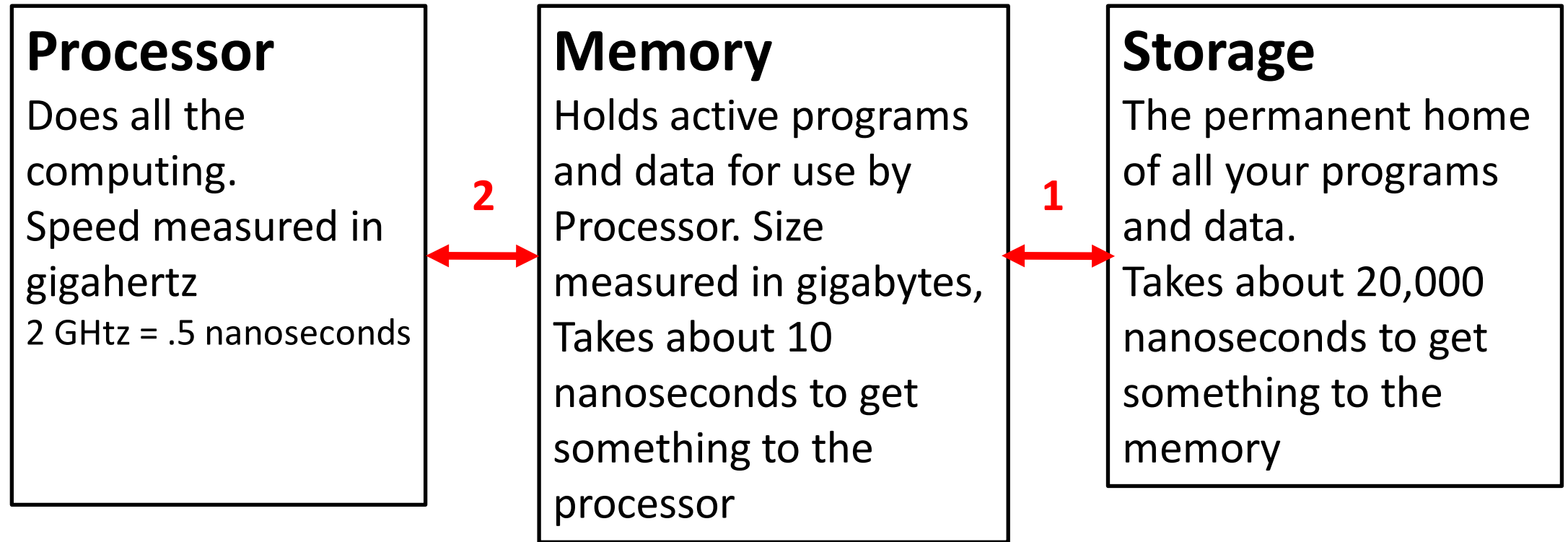


Name	Status	6% CPU	44% Memory	1% Disk	0% Network
Desktop Window Manager		1.3%	282.3 MB	0.1 MB/s	0 Mbps
Windows Explorer		1.2%	46.4 MB	0.1 MB/s	0 Mbps
Application Frame Host		0.7%	7.7 MB	0.1 MB/s	0 Mbps
> Microsoft Edge (13)		0.3%	529.6 MB	0 MB/s	0.1 Mbps
> Service Host: Remote Procedure...		0.3%	20.4 MB	0 MB/s	0 Mbps
> Service Host: State Repository S...		0.2%	16.0 MB	0 MB/s	0 Mbps
> Antimalware Service Executable		0.2%	213.7 MB	0.1 MB/s	0 Mbps
Shell Infrastructure Host		0.2%	5.3 MB	0.1 MB/s	0 Mbps
> Service Host: DCOM Server Proc...		0.2%	28.4 MB	0.1 MB/s	0 Mbps
> Task Manager		0.2%	24.0 MB	0.1 MB/s	0 Mbps
SmartByteTelemetry		0.2%	8.4 MB	0 MB/s	0 Mbps
> Intel(R) System Usage Report		0.2%	32.9 MB	0.1 MB/s	0 Mbps
System		0.1%	0.1 MB	1.7 MB/s	0 Mbps
> Snip & Sketch (2)		0.1%	18.2 MB	0.1 MB/s	0 Mbps

Task Manager window with tabs: Processes, Performance, App history, Startup, Users, Details, Services. A red circle highlights the Microsoft Edge (13) entry in the Performance tab table.

Buttons: Fewer details, End task

# Largest Effects on PC Speed



1. How often Storage is accessed (Size of Memory, # of active programs)
2. How often Memory is accessed (Size of processor cache, # of active programs)

# The Most Important Specs for PC Speed

## #3 - Number and Cache size

### Processor

Does all the  
computing.

Speed measured in  
gigahertz

2 GHz = .5 nanoseconds

## #2 - More than 4GB

### Memory

Holds **active** programs  
and data for use by the  
Processor.

Size is measured in  
gigabytes,  
Takes about 10  
nanoseconds to get  
something to the  
processor.

## #1 - SSD

### Storage

The permanent home  
of all your programs  
and data.

HD takes about 10,000  
nanoseconds to get  
something to the  
memory.

SSD takes about 100  
nanoseconds to get  
something to memory.

# New PC Spec Guidelines

**Light User: email plus web plus some documents**

*Processor = Intel I3 or Ryzen 5, Memory = 8 GB, Hard Drive 500 GB*

**Economy User: email plus web plus watching videos plus home office work plus video conference (Zoom)**

*Processor = Intel I5 or Ryzen 5 or 7, Memory = 8 or 12 GB, SSD 256 GB*

**Heavy User: multiple email accounts, heavy office work, photo or video processing**

*Processor = Intel I7 I9 or Ryzen 7 or 9, Memory = 16 GB, SSD 500 GB*

# Laptops

“Clam Shell”



2 in 1



**Screens : size 10 to 17 inch , touch or non touch**

**Weight : 2 to 5 ½ lbs.**

**Battery Life : 2 to 10 hours**



# Desktops

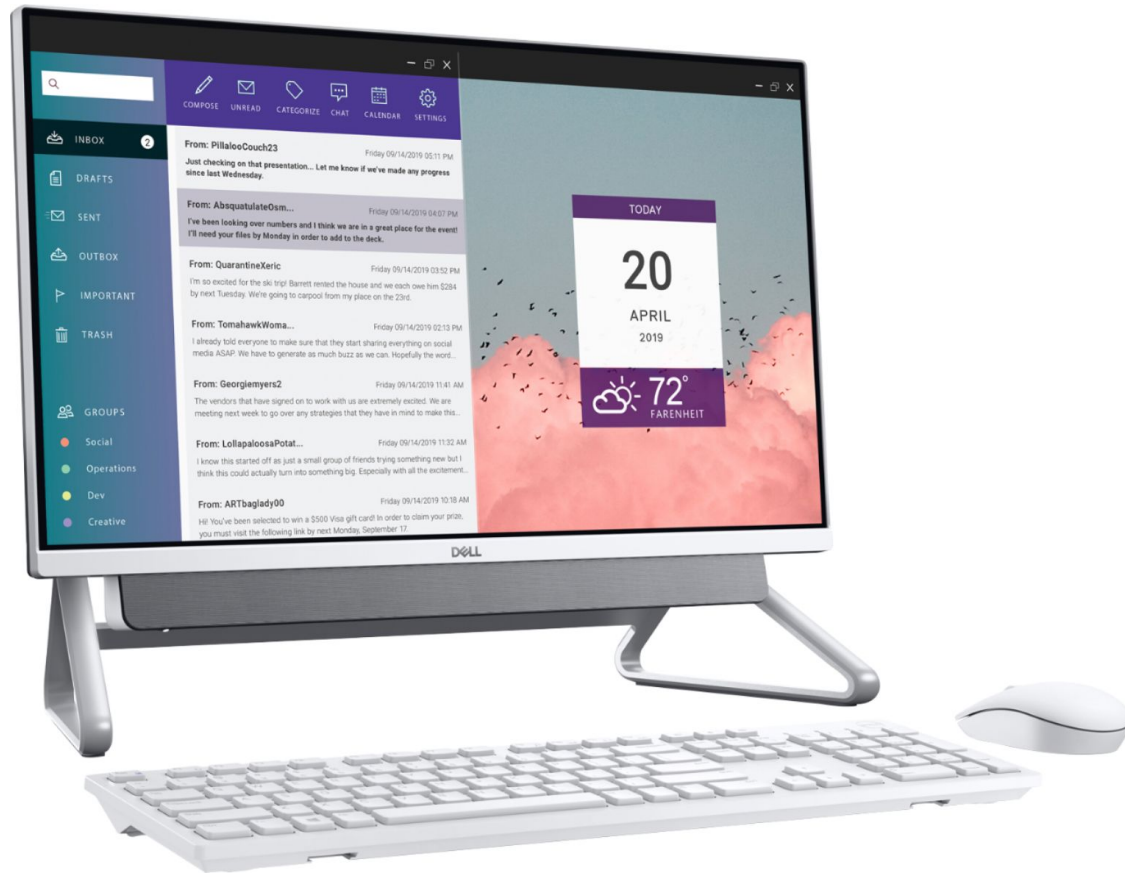


**Size and Connections**  
**Separate purchase for**  
**Webcam**  
**Speakers**  
**Monitor**

**Best Specs for the price**  
**Easiest to upgrade**  
**Most desktops sell with**  
**mouse & keyboard**



# All In Ones



**Includes:**

**Webcam  
Speakers  
Monitor**

**Gets rid of a lot of cables.**

**Touch and non touch screens**

**Prices have dropped due to  
micro technology in laptops.**



# Light User: email plus web plus some documents



Lenovo - IdeaPad 3 15" Laptop - Intel Core i3-1005G1 - 8GB Memory  
256GB SSD - Platinum Grey

Model: 81WE011UUS SKU: 6426707

★★★★★ (336)

Get it today

 **Pickup:** Ready in 1 hour at Bluffton  
[See all pickup locations](#)

Compare  Save



\$299 was \$449  
“Clam Shell”  
15 “ Screen  
No Touch Screen




Dell - Inspiron 23.8" Touch-Screen All-In-One - Intel Core i3 - 8GB  
Memory - 256GB SSD - Black

Model: I5490-3930BLK-PUS SKU: 6398974

★★★★★ (289)

Get it today nearby

 **Pickup:** Order now for pickup on Mon, Nov 16 at Bluffton  
Available today at a location 22 miles away  
[See all pickup locations](#)

 **FREE Shipping:** Get it by Sat, Nov 14  
[Estimates for 29926](#)

Compare  Save

\$679  
23.9” Touch Screen  
256 GB SSD  
Includes camera  
and mic

# Economy User: email plus web plus watching videos plus home office work plus video conference (Zoom)



[See More Options](#)


**Amazon Alexa built in**


HP - Pavilion x360 2-in-1 14" Touch-Screen Laptop - Intel Core i5 - 8GB Memory - 256GB SSD - Warm Gold

Model: 14m-dw1023dx SKU: 6428666

★★★★★ (1,748)

**Get it today**

 **Pickup:** Ready in 1 hour at Bluffton  
[See all pickup locations](#)

 **FREE Shipping:** Get it by Sat, Nov 14  
[See all shipping options for 29926](#)

Compare  Save




HP - Pavilion 24" Touch-Screen All-In-One - Intel Core i5 - 12GB Memory - 256GB SSD - Sparkling Black

Model: 24-k0024 SKU: 6428088

★★★★★ (32)

**Get it today**

 **Pickup:** Ready in 1 hour at Bluffton  
[See all pickup locations](#)

 **FREE Shipping:** Get it by Sat, Nov 14  
[Estimates for 29926](#)

Compare  Save

\$749

2 in 1

14 " Touch Screen

I5, 8 GB, 256 GB SSD

\$999

24 " Touch Screen

I5, 12 GB, 256 GB SSD

# Heavy User: multiple email accounts, heavy office work, photo or video processing



[See More Options](#)

Amazon Alexa built in

Dell - Inspiron 14 7000 2-in-1 - 14" Touch-Screen Laptop - AMD Ryzen 7 - 16GB Memory - 512GB SSD - Sandstorm

Model: I7405-A371TUP-PUS SKU: 6409066

★★★★★ (145)

Get it today nearby

**Pickup:** Order now for pickup on Wed, Nov 18 at Bluffton  
Available today at a location 22 miles away  
[See all pickup locations](#)

**FREE Shipping:** Get it by Sat, Nov 14  
Estimates for 29926

Compare  Save



HP - Pavilion 27" Touch-Screen All-In-One - Intel Core i7 - 16GB Memory - 512GB SSD - Sparkling Black

Model: 27-d0014 SKU: 6428089

★★★★★ (29)

Get it today nearby

**Pickup:** Order now for pickup on Wed, Nov 18 at Bluffton  
Available today at a location 22 miles away  
[See all pickup locations](#)

**FREE Shipping:** Get it by Sat, Nov 14  
Estimates for 29926

Compare  Save

\$929

14" Touchscreen

2 in 1

16 GB Memory

512 GB SSD

AMD Ryzen 7

\$1,299

27" Touchscreen

16 GB Memory

512 GB SSD

Intel I7