Saving and backup alternatives
A quick overview

Hard Disk Drive
Your computer saves your work to its HDD unless you tell it not to (UWS directs all your saved work to the centralised computer) HDD have Drive and Disk as one sealed unit.

Portable Hard Disk Drive
You can backup your work to these drives which work the same way as your computers HDD but are located outside the computer itself and generally use a USB connection.

Floppy Disk Drives
Floppy drives have been around for about two decades. Floppy drives are mostly built into the computer. The Floppy disks have a maximum capacity of 1.44meg.

Removable storage
The Removable storage drives became popular because of their capacity and ease of use. Iomega has a “Zip” drive and a “REV” drive. Both these drives are similar in style to a Floppy disk and use both a disk and drive with a USB connection*. The Zip disks are rated as 100Mb, 250Mb & 750Mb. The REV has 35Mb capacity.

CD ROM
CD is one of the “Optical Disc Storage” family. **CD** stands for Compact Disk and **ROM** is Read Only Memory and they are referred to as simply CDs. CDs have been around for over a decade and have become a very cheap storage alternative. The CDs hold the information and are read by a reader/player, generally built in. Capacity of a CD ranges from 600Mb to 750Mb. There are 2 other versions of a CD that require a writer (or “Burner”). The CDs you buy, like a music CD, are simply one that is made from the factory. It is pressed from a glass mould. CD writers use a laser to burned the information to the disk.

- **CD-R** (CD-Recordable) work just like standard CDs and can be used with a standard CD player. You can record once but you can't reuse a disc.
- **CD-RW** (CD-Rewritable) allows you to erase discs and reuse them but be careful, the CD-RW media doesn't work in all players.

CD-Rewritable drives are able to write both CD-R and CD-RW discs. All CD writers can read CDs, just like a standard CD drive. There is some debate about how long the information burned into a CD will last and latest reports suggest it could be a short as 2 years.
**DVD**

**DVD** doesn't actually stand for anything. “Digital Video Disc” was the original explanation proposed by some of DVD's creators who then later came up with “Digital Versatile Disc”

DVD is aimed at the Video market but these notes only refer to DVDs in Computers.

DVD is the new generation of optical disc storage technology which is basically faster and larger (in capacity) than a CD. DVD discs that can hold 4.7GB of data.

The DVD industry is involved in a war of standards that as yet has not been resolved.

You can buy DVDs that are pre-recorded or writable.

With the writable DVDs, there are two main competing standards.

The **DVD-R** and **DVD-RW** is the standard backed by Pioneer. (Note the minus “-“ in the name).

The **DVD+R** and **DVD+RW** is the standard backed by HP and Sony. (Note the plus "+" in the name)

Both standards can read commercial DVD movies.

Both DVD-R and DVD+R let you write a single time to a DVD

Both DVD-RW and DVD+RW technologies let you write and re-write to a DVD.

**DVD-RAM** is a third DVD rewritable standard but is not compatible with the rest.

The only real use for DVD-RAM is as a high-capacity network backup medium as they hold between 2.6 GB and 9.4 GB.

There are differences between manufacturers of different DVD drives but generally DVD-R and DVD-RW media, as well as DVD+R and DVD+RW media, are generally compatible with most DVD-ROM drives on computers and DVD movie players.

If you want to record to a DVD then you have to install a DVD burner and the simple rule of thumb is, follow the manufacturer's instructions of which disks to buy.

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**Flash memory drives**

Flash memory drives are easy to use, compact, fast and reliable. The USB Flash Drive simply plugs into a USB port. Currently the capacity ranges from 128Kb to 2Gig with 256 & 512 being the most common.

Flash memory drives are also called USB Flash Disk, Thumb Drive, Pen Drive, Memory Key, Micro Vault, Pocket Drive, KeyChain, Pico Drive, i-disk etc.

USB Flash Drives do not require software (at least on the latest version of Windows). The device automatically becomes visible as a new drive (and takes the next available drive letter) when it is plugged in.