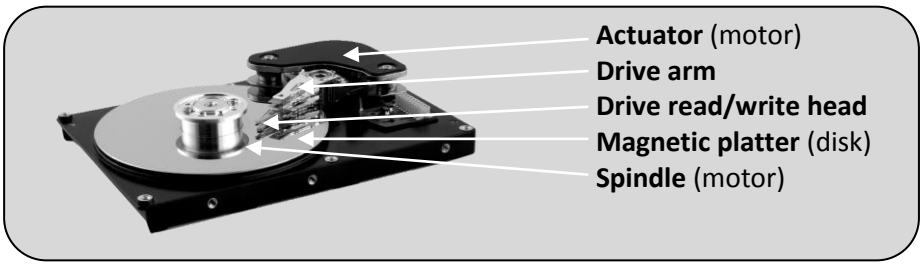
Storage Technologies & Media - Reading

A magnetic hard disk drive (Magnetic storage device)

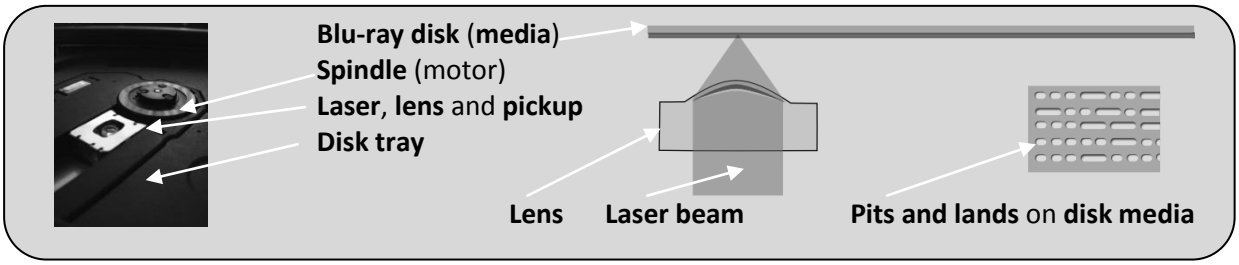


A **magnetic hard disk** stores data using **magnetism** on the **platter**. The platter spins and an **actuator** moves the **drive head** to the correct track with the data on it. North and South magnetic fields on the platter are able to store zeros and ones in binary.

These drives are used in desktop computers, and most laptop computers. They are gradually being replaced by **solid state hard disks**, which are faster.

Typical size and price of magnetic hard disk drive (2016):1TB, £40.00 (4p per GB)

A Blu-ray player (Optical storage device)

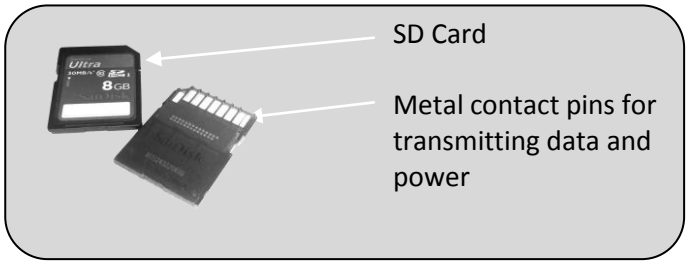


A **Blu-ray player** focuses a blue laser onto the **Blu-ray disk** (**media**). The disk has **lands and pits** which change how the laser is reflected. These can represent the zeros and ones in binary.

These are used in some desktop computers and laptops along with home entertainment systems.

Typical size and price of blank Blu-ray writeable media (2016): 25GB, £0.40 per disk (1.6p per GB)

Secure Digital (SD) memory card (Solid state storage media)



Solid state storage is the fastest of the three types of storage. It is used in more expensive **solid state drives** (**SSD**), **USB removable media** and **memory cards**. Information can be accessed far faster than the other types of technology as the drive doesn't need to wait for a disk to spin to the correct location of the data. Solid State Storage uses electrical circuits to persistently store data.

Typical size and price (2016): 16GB, £6 per card (38p per GB)