

Kilo-, Mega-, Giga-....?

1 bit = 1 **binary digit** (0 or 1)

1 byte = 8 bits (2^3 bits)

1 kilobit (1Kb*) = 1,024 bits (2^{10} bits)

Kilo = Thousand

1 **Kilobyte** (1KB*) = 1,024 bytes

Mega = Million

1 **Megabyte** (1MB) = 1,024 KB

Giga = Billion

1 **Gigabyte** (1GB) = 1,024 MB

Tera = Trillion

1 **Terabyte** (1TB) = 1,024 GB

Peta = Quadrillion

1 **Petabyte** (1PB) = 1,024 TB

Exa = Quintillion

1 **Exabyte** (1EB) = 1,024 PB

Zetta = Sextillion

1 **Zettabyte** (1ZB) = 1,024 EB

Yotta = Septillion

1 **Yottabyte** (1YB) = 1, 024 ZB

* “b” = bit; “B” = Byte

- One hour of non-HDTV video at 2.2 Mbit/s is approximately 1 GB.
- Seven minutes of HDTV video at 19.39 Mbit/s is approximately 1 GB.
- 114 minutes of uncompressed CD-quality audio at 1.4 Mbit/s is approximately 1 GB.
- A DVD-R can hold about 4.7 GB.
- A dual-layered Blu-ray disc can hold about 50 GB.
- 5 Exabytes equals every human word ever spoken