

### Analogue and digital data

- Analogue and digital data differences between digital and analogue
- Why digital
- Data in a pc
- Converting whole numbers into binary numbers

128	64	32	16	8	4	2	1	
0	0	0	0	0	1	0	1	=5
0	0	0	0	0	1	1	1	=7

Computers can only store its information or data ether as a 1 or 0 1 bit can only store ether one or zero there 8 bit to one byte this is called binary or bass 2

Binary format (ASCII) The American Standard Code for Information Interchange

### Analogue data

Is natural data

- Sound , colour ,tempritcher .E.C.T

E.G in the real world there is not a jump step in the tempritcher

### Why digital

Modern computers are digital devices

Digital data can be stored, communicated and processed by other computers

Digital data can be used without any quality loss

Modern computers cannot be used.

## Data in computers

A byte has 256 different combinations of 1s and 0s

Everything in a computer has millions of places which can be one or two states

- RAM (electricity or no electricity)
- HDD ( magnetised north or south)
- DVD (reflect laser or no reflect)

## Characters in binary format

Characters such as numbers, Letters, cymbals and spaces are gnarly converted into a common format called ASCII. For example ASCII 65 = A and ASCII 97 = a

		128	64	32	16	8	4	2	1
	15					1	1	1	1

	128	64	32	16	8	4	2	1
8	0	0	0	0	1	0	0	0
3	0	0	0	0	0	0	1	1
7	0	0	0	0	0	0	0	1
9	0	0	0	0	1	1	0	1
2	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0

	128	64	32	16	8	4	2	1
40	0	0	1	0	1	0	0	0
11	0	0	0	0	1	0	1	0
2	0	0	0	0	0	0	1	1
3	0	0	1	0	0	1	0	0
38	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0
10	0	0	0	0	1	0	1	0