

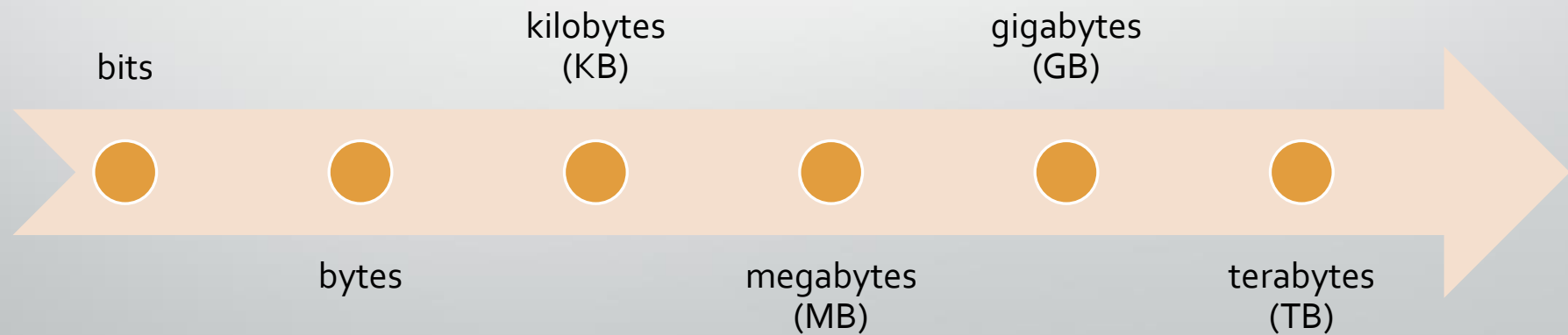
# Basic Units of Computers Memory

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The fundamental units of memory, from smallest to largest are;

bits ➡ bytes ➡ kilobytes (KB) ➡ megabytes (MB) ➡ gigabytes (GB) ➡ and terabytes (TB)



- **Bit:** The smallest unit of digital information, representing a 0 or 1.

**Nibble:** Is just a greater version of Bit. It is a combination of 4 bits of binary digits or half of an Octet.

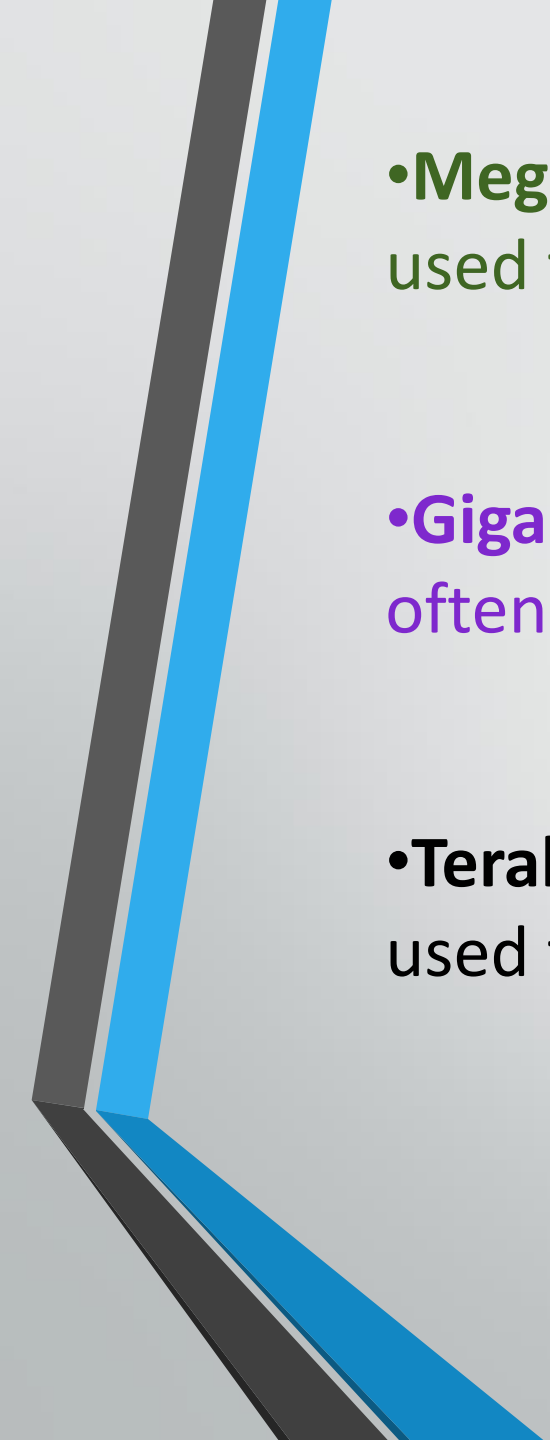
4 Bits = 1 Nibble

- **Byte:** A group of 8 bits, commonly used to represent a single character or other small units of information.

8 Bits = 1 Bytes

- **Kilobyte (KB):** 1024 bytes, often used to describe the size of small files or documents.

1024 Bytes = 1 KB



- **Megabyte (MB):** 1024 kilobytes, or 1,048,576 bytes, commonly used for larger files, images, or music.

$$1024 \text{ KB} = 1 \text{ MB}$$

- **Gigabyte (GB):** 1024 megabytes, or approximately 1 billion bytes, often used to describe hard drive capacity and RAM size.

$$1024 \text{ MB} = 1 \text{ GB}$$

- **Terabyte (TB):** 1024 gigabytes, or about 1 trillion bytes, typically used to measure the capacity of large-scale storage devices.

$$1024 \text{ GB} = 1 \text{ TB}$$