

## What is a MAC address?

A **Media Access Control (MAC)** address is a number consisting of six groups of two hexadecimal digits, separated by hyphens (-) or colons (:).

Our common decimal number system is written to **base 10** and consists of ten digits (0, 1, 2, 3, 4, 5, 6, 7, 8, 9). Hexadecimal numbers are written to **base 16** so six more characters have to be introduced to complete the number system. These characters are the letters A, B, C, D, E and F (they can also be written in lower case) which give the character set 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F.

### Comparison:

Decimal system:            0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Hexadecimal system:      0 1 2 3 4 5 6 7 8 9 A B C D E F

MAC addresses are easily recognised by the presence of some of these letters of the alphabet.

**Example:** 08-00-27-01-4B-AF or 08:00:27:01:4B:AF which, if written to base 10, would look like (0)(8)-(0)(0)-(2)(7)-(0)(1)-(4)(11)-(10)(15).

The first six digits identify the manufacturer of the interface, so all devices made by that manufacturer will have these same digits.

A unique MAC address is assigned to a device's network interface to allow it to connect to a network. Your device's MAC address is similar in concept to your email address in that it allows information to be addressed specifically to your device only. No other device on the planet has the same MAC address as your device, otherwise information intended for you could be addressed to the other device. Since the network interface of most mobile devices is soldered onto the motherboard, you can think of your device's MAC address as being like its identity number (ID) in the same way that the ID number on your birth certificate uniquely identifies you.

## How to find a MAC address

To find an Android device's MAC address, go to:

**Settings** → **WiFi** (turn WiFi to ON) → **Menu** → **Advanced**.

To find an Apple device's MAC address, go to:

**Settings** → **General** → **About**.

The WiFi Address is the MAC address you need to register on the school network.

### Please note:

Most mobile devices have a Bluetooth network interface with its own unique MAC address too. Do not confuse the Bluetooth MAC address with the MAC address of the WiFi interface! The one you need to register with us to connect to the school's WiFi network is the WiFi interface's address.