**MORSE CODE**

**(... --- -.-. .. .- .-.. / ... - ..- -.. .. . ... / .. ... / .- / ... .- -.. / . -..- -.-. ..- ... . / ..-. --- .-. / .- / ... ..- -... .--- . -.-. -)**

2)

1. What problem was Morse code intended to solve?

Source: Way back in 1836, Samuel F. B. Morse, along with Joseph Henry and Alfred Vail, invented an electrical telegraph system. Before telephones were invented, it could send messages over long distances by using pulses of electricity to signal a machine to make marks on a moving paper tape.

A code was necessary to help translate the marks on the paper tape into readable text messages. Morse developed the first version of this code.

In 1836 Samuel Morse, Joseph Henry and Alfred vail teamed up to create a device known as a telegraph. It was a form of long distance communication that would send pulses of electricity to the person you want to send it to, then their machine would mark a moving paper tape each time it received a pulse of electricity. However, this machine could not yet be sophisticated enough to print out letters, all it could do is print dots and lines, so a code had to be created so people could translate the electric pulses into readable text. Samuel Morse got tasked with creating this and thus, Morse code was created.

1. How was Morse code made?

Source: If you wonder how they decided which combination of signals was assigned to each letter, they studied how often each letter in the English language was used.

The most used letters were given the shorter sequences of dots and dashes. For example, the most commonly used letter in the English language — E — is represented by a single dot.

Firstly, He needed to substitute letters and numbers for specific combinations of dots and dashes. Samuel tried to make morse code as fast to enter as possible by looking at how commonly different letters appeared and making the most common letters have the shortest string of dots and dashes, which is why T and the most commonly used letter, E, both only use one dash and one dot respectively. Next, he had to decide timing and pauses, otherwise you wouldn’t know whether:

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Meant AXN or PP. Dots were made the unit of time for Morse code as it is the shortest signal that could be made.