

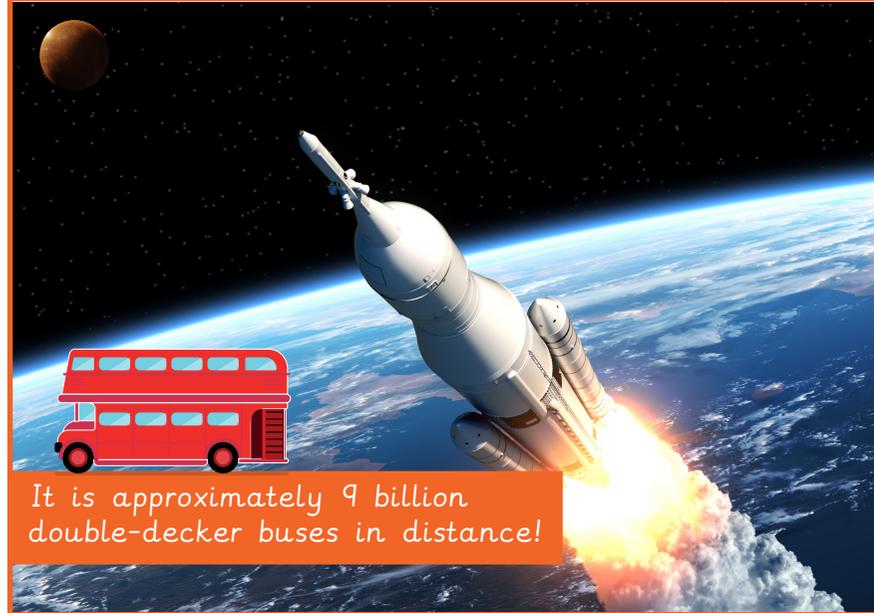
Mars Rover 1

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|---------------------|---|
| Binary code | A code used in computers, based around the binary values of 0 and 1. |
| Data | Information used for a specific purpose or investigation. |
| Data transmission | The movement of information from one or more points to another. |
| Discovery | When something is intentionally or unintentionally found. |
| Distance | The amount of space between two places or objects. |
| Input | Information sent to a computer by an input device such as a keyboard or mouse for processing. |
| Mars Rover | A robotic vehicle, that explores, investigates and returns data about the terrain on Mars. |
| Moon | Orbits round planet Earth and is Earth's only natural satellite. |
| Numerical data | Information that is based on numbers and digits. |
| Output | Information or data that is sent by the computer to an output device such as a printer or speakers. |
| Planet | A large natural object that orbits around a star. |
| Radio signal | A radio wave that is sent or received to somewhere. |
| Scientist | A person who studies within the fields of Science, such as Physics, Biology and Chemistry. |
| Sequence | A set order or pattern for something to follow. |
| Signal | A voltage, current or electromagnetic wave that is either sent or obtained. |
| Computer simulation | Computer generated imitation of something such as a program test or product prototype. |
| Space (astronomy) | A vast area around and beyond planet Earth, which is not inhabited. |



Key facts

The Mars Rover had to travel 350 million miles (approx) to get to Mars, it took eight and a half months.



It is approximately 9 billion double-decker buses in distance!

Binary:

When a robot thinks independently, it needs to be able to calculate a range of data. All decisions carried out by a robot, or any computer, are done in binary - including the Mars Rover.

| Binary value | Decimal value |
|--------------|---------------|
| 0 0 0 0 | 0 zero |
| 0 0 0 1 | 1 one |
| 0 0 1 0 | 2 two |
| 0 0 1 1 | 3 three |
| 0 1 0 0 | 4 four |
| 0 1 0 1 | 5 five |
| 0 1 1 0 | 6 six |
| 0 1 1 1 | 7 seven |
| 1 0 0 0 | 8 eight |
| 1 0 0 1 | 9 nine |
| 1 0 1 0 | 10 ten |

