**Introduction to the processor and the Three box model**

What is the difference between RAM and ROM?

*RAM is volatile and loses data when powered off; ROM can’t be written to, and keeps its data without a power source.*

What does RAM stand for?

*Random Access Memory.*

What is meant by Volatile memory?

*Storage that loses its data when power is not provided.*

EEPROM stands for Electronically Erasable Programmable Read-Only Memory. Give an example of this:

How many bits are there is a byte?

How many bytes are there in a kilobyte?

How many kilobytes in a megabyte?

Draw the three box model:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Input | 🡺 | Process | 🡺 | Output |

Give 2 examples of a peripheral:

Which part of the three box model controls the use of peripherals?

Name the three buses that connect the elements of the three box model:

What is the Clock signal and what does it control?

Give an example of what is transported along the data bus:

Give an example of what is transported along the address bus:

What is the role of the ‘Clock’ in a CPU?