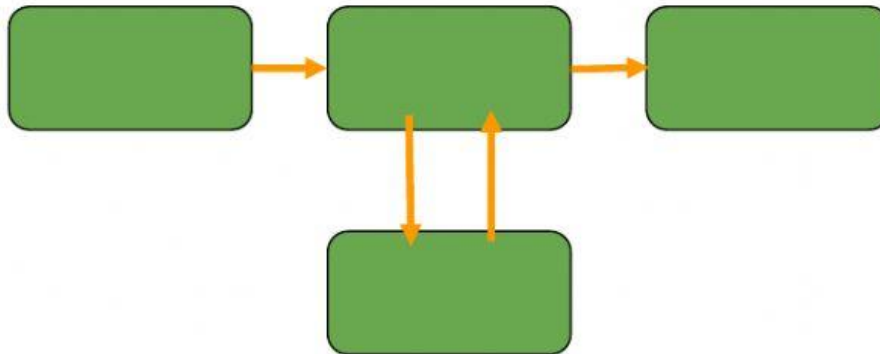


Computer Architectures

The four main components of a computer system are shown in the diagram below. Use the drop down arrow to select the correct option and complete the diagram.



Identify if each statement is true or false

Statement	True	False
CPU stands for Central Programming Unit		
The CPU carries out arithmetic and logical instructions		
Registers are a type of super-fast on-chip memory		
The data bus carries control and command signals		
The Von Neumann architecture only holds data in memory		

Use the words to complete the sentences.

1. In the "Fetch" part of the Fetch-Execute cycle, the processor sends the address of the next instruction to memory. Which bus does it use?

2. The instruction at that location in memory is sent to the _____ along the _____ bus.
3. The data bus and the address bus connect several components together within the CPU but only one component can transmit at any one time.
The _____ bus carries signals that show if the data bus and address bus are already in use.

Match the correct functions to each term by drawing an arrow

ALU	Manages execution of instructions
	Carries out arithmetic operations such as addition and multiplication
	Fetches each instruction in turn
Control unit	Stores program in current use
	Carries out bit shifting operations
	Stores boot-strap loader
RAM	Carries out operations such as AND, OR, NOT
	Issues timing signals
ROM	Stores part of operating system in current use
	Stores data in current use