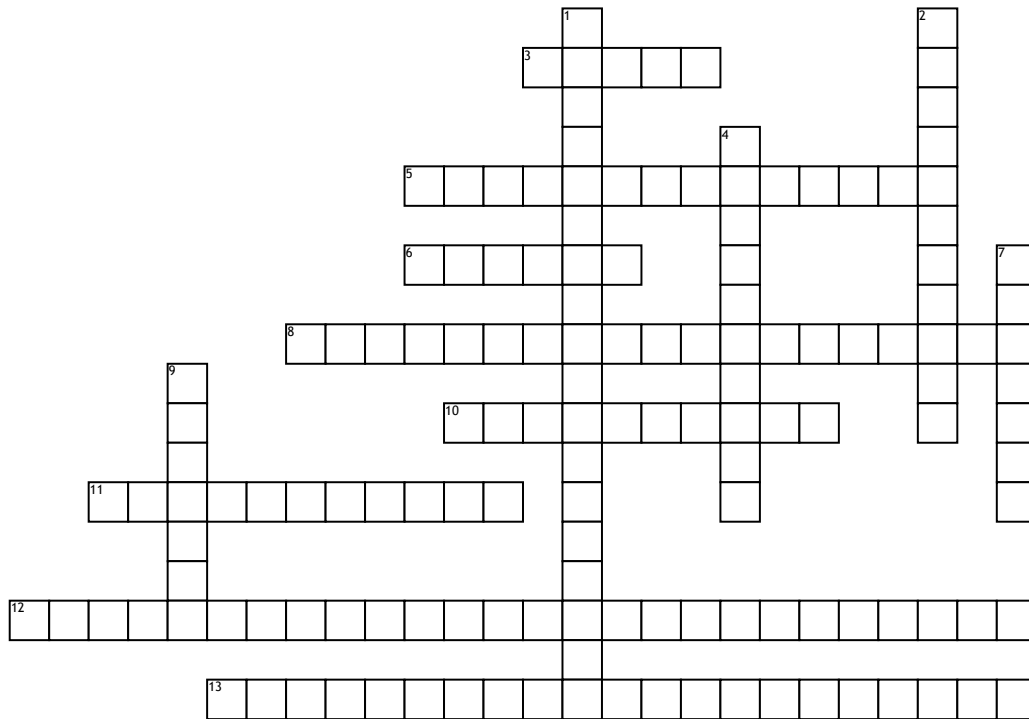


# Von Neumann Architecture



## Across

- 3.** Part of the CPU cycle that retrieves data from memory.  
**5.** Holds the memory address of the next instruction to be fetched from primary memory  
**6.** Part of the CPU cycle that interprets an instruction.  
**8.** CPU Component that performs arithmetic and logic calculations.  
**10.** Carries memory addresses from the processor to other components. e.g. primary memory

## Word Bank

Address bus  
 program counter  
 memory address register  
 execute  
 accumulator

- 11.** Holds the data being processed and the results of processing  
**12.** Holds the instruction that is currently being decoded and executed  
**13.** holds the address of the current instruction that is to be fetched from memory, or the address in memory to which data is to be transferred

arithmetic logic unit  
 decode  
 fetch  
 memory data register

## Down

- 1.** Holds the contents found at the address held in the MAR, or data which is to be transferred to primary memory  
**2.** CPU Component that manages instructions.  
**4.** Carries control signals from the processor to other components.  
**7.** Carries data between the processor and other components.  
**9.** Part of the CPU cycle that carries out an instruction.

control unit  
 current instruction register  
 Data bus  
 Control bus