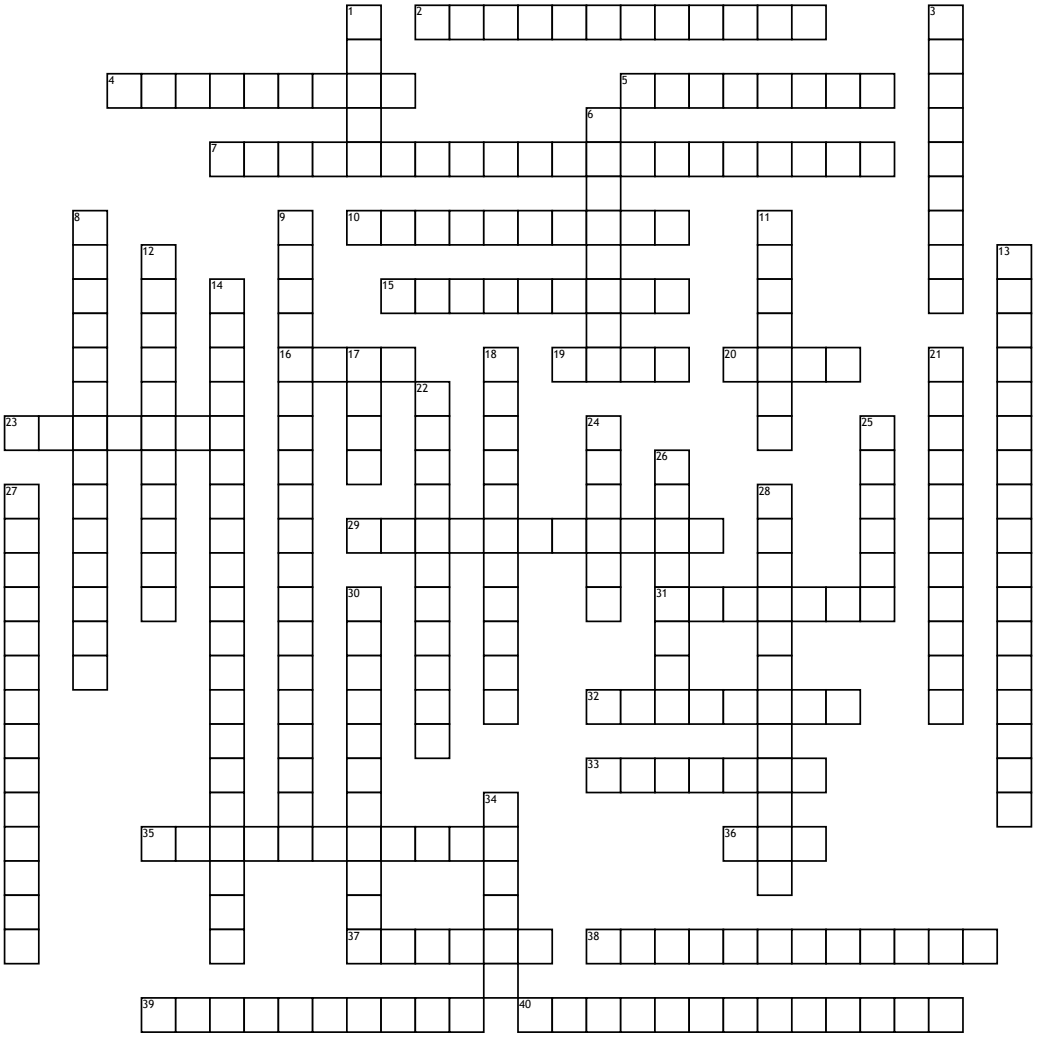
Name: _____ Date: _____ Period: _____

EC_Chpt 2a_CWP



Across

2. Circuitry that connects the CPU & RAM

4. _____ is the maximum available communication rate

5. Directs specifically where you are to jump within a program is called _____ addressing

7. Machine Instruction types that perform operations on bit patterns to compute new bit patterns

10. _____ is the actual data communication rate achieved

15. Every 18-24 months processing power doubles and relative cost decreases

16. Machine language philosophy with few, simple, fixed-length instructions

19. Memory that needs to be constantly refreshed to maintain a charge

20. Machine language philosophy with many, powerful, variable-length instructions

23. The 3rd step of the machine cycle, as we defined it

29. Co-founder of Intel

31. This special type of memory is always located on the processor

32. Directs how far you are to jump within a program is called _____ addressing

33. In our 2-byte machine instruction, this gives more detailed information based on the first 4 bits

35. Holds data / instructions that have recently been used or will be needed

36. Circuitry that carries data between computer components

37. Signals are transferred one after the other over a single "line" is called _____ communication

38. Special memory area located on the processor that holds data/instructions currently being used

39. An interface between the computer and the peripheral devices

40. Machine instruction types that direct the execution of the program

Down

1. The 1st step of the machine cycle, as we defined it

3. Contains the circuitry for performing comparison, testings, etc.

6. Converts all of your source code into object code at once

8. Contains the circuitry for performing arithmetic operations

9. A collection of primitives, along with a collection of rules, stating how the primitives can be combined to represent more complex ideas

11. A means of isolating particular bits within a bit pattern

12. The special purpose register that holds the instruction currently being executed _____ register

13. Machine instruction types that copies data from one location to another

14. Attributed to John von Neumann

17. Memory that maintains it charge (i.e., does not need to be refreshed)

18. Coordinates the computer's activities

21. The process of coordinating the transfer of data between the computer and the peripheral devices

22. Converts your source code into object code as that line is executed

24. The 2nd step of the machine cycle, as we defined it

25. In our 2-byte machine instruction, this specifies which operation to execute

26. Several signals transferred at the same time each on a separate "line" is called _____ communication

27. The special purpose register that holes the address of the next instruction

28. Connects the peripherals to the motherboard

30. Connects the CPU to cache

34. The rules governing how a programming statements are implemented

Word Bank

BackSideBus	ArithmeticLogicGroup	OpCode	Parallel	Absolute	GordonMoore
Instruction	StoredProgramConcept	Compiler	Bus	Relative	Decode
ControlGroups	Masking	Throughput	CISC	Control Unit	Serial
ArithmeticUnit	L1Cache	CacheMemory	DataTransferGroup	SRAM	Operand
DRAM	RegisterUnit	FrontSideBus	ProgramCounter	Controller	LogicUnit
RISC	ProgrammingLanguage	Fetch	Bandwidth	MooresLaw	Handshaking
Syntax	Interpreter	ExpansionBus	Execute		