

# Unit 1 Review

## Definitions

1. RAM	Memory where open files are stored.
2. ROM	Memory that stores the boot instructions for the computer.
3. Harddrive	Storage to hold saved files.
4. Fan	Cools the computer.
5. Powersource	Plug that provides electricity to the computer.
6. Motherboard	Green circuit board that connects the important pieces of a computer.
7. CPU	The brain of the computer.
8. Housekeeping	Keeping your computer in good working order.
9. Keyboard shortcuts	A quick way of entering commands to the computer.
10. Backups	Making a second copy of your file in case of hardware failure.
11. Virus Scanner	Software that checks your computer for viruses.
12. CLI	An older interface that is compact because it is text based.
13. MDI	A simple interface that provides all options through a series of menus.
14. GUI	An interface that is made of widgets. It is very easy to use.
15. Operating System	Software that hosts the other programs on the computer.
16. Windows	An OS by Microsoft.
17. Input	Receiving instruction from the user. Prompts in AppLab.
18. Processing	Completing a task. Math functions in AppLab.
19. Output	Showing the results of a task to the user. SetText or mutators in AppLab.
20. Variable	A piece of RAM that is used to store information for a program.
21. Type	A kind of variable. This determines the functions of the variable AND the amount of RAM it receives.
22. Mutator	A type of block that allows you to SET properties of the widget. It allows output.
23. Widget	GUI elements that can be manipulated by the user. Label or image in AppLab.
24. Label	A widget that holds text.
25. Image	A widget that holds a picture.
26. Button	A widget that can be clicked to call an onEvent block.
27. onEvent	A block that is called by a button. It holds other blocks.
28. Constructor	A block that creates a new widget.
29. Accessor	A block that GETS a property stored in a widget.
30. ID	The name of a widget. It is used in the blocks editor to specify which block was clicked.
31. Facilitator	A type of block that doesn't fit in the categories of mutator, accessor or constructor.
32. Moore	Wrote that computing power doubles every 18 months.
33. Kurzweil	Wrote that the singularity is coming in 2045.
34. Vinge	Wrote about four different paths to creating superhumans.
35. Superhuman	A being or computer whose performance exceeds a regular human by a significant amount..

36.AI	Computers that think for themselves. Non-human intelligence.
37.Singularity	The point at which a desktop computer is more intelligent than all of humanity.
38.DeepBlue	The first computer to out strategize humans at chess.
39.Watson	The first computer to process human language and answer questions. It won at Jeopardy.
40.Stanley	The first car to drive itself.
41.AlphaGo	The first computer to teach itself to play Go.
42.StockMarketAI	Over 70% of trades on the stock market are done by this.
43.CochlearImplant	Deaf people can attach these to their auditory nerve to hear.

### Importance

1. Why is RAM important?	It is close to the CPU. It holds open files that the CPU can easily refer to.
2. Why is the Hard drive important?	It is permanent storages so it can save files. Then we can open them again later.
3. Why is Housekeeping important?	It keeps your computer running smoothly and virus-free. It also organizes your files so you can find them.
4. Why are Keyboard shortcuts useful?	They are quicker than using a mouse or menu options – they are a time saving input device.
5. Why are Backups important?	A second copy of your files are useful if the originals are damaged or lost.
6. Why are Variables useful?	They store values until they are needed again. They store the answers to calculations and allow for program customization.
7. Why are Mutators useful?	They allow the programmer to make changes to the screen when the program is running. This means the program can respond to the user.
8. Why are Widgets useful?	These GUI elements allow the user to click and interact with the program.
9. Why is a widget ID useful?	This word uniquely identifies the widget so that it cannot be confused with another in the blocks editor.
10. Why is Deep Blue important?	It was the first machine to out-strategize humans in a complex task. It is an important task to AI.
11. Why is AlphaGo important?	It was the first machine to teach itself how to do a complex task. This is an important step to superhuman AI.
12. Why is a cochlear implant important?	This computer attaches to a human's auditory nerve to allow a deaf person to hear. This is an important step in the creation of cyborgs.
13. Why are types useful?	Classifying variables is useful because you can determine different amounts of RAM needed by each. It also allows you to determine which functions will be used by the variable.
14. Why is an onEvent block useful?	This block holds the code to respond to a user's click. This makes the program interactive.