Inside a Computer Knowledge Organiser

❓ What are we learning about inside a computer?

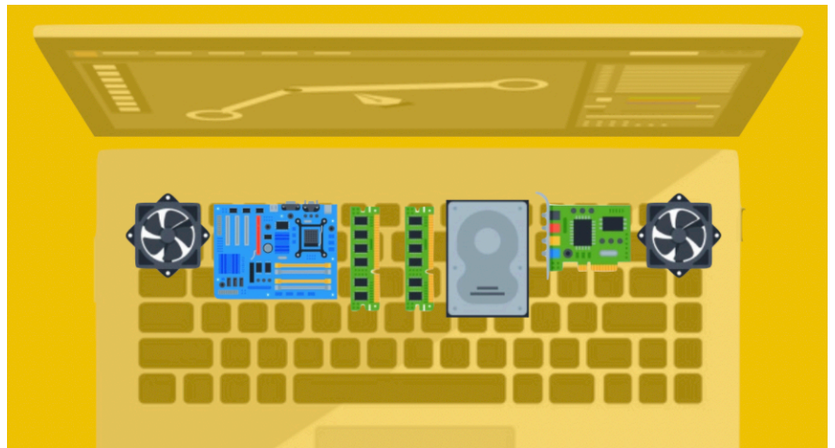
When we use computers we do not think much about the different parts inside them and what each part does. It is important to understand what certain parts inside a computer do, firstly because if we are purchasing a new computer then we need to make sure we buying the correct specification for our needs. For example, if we want to store many files on the computer then we need enough memory on the hard drive. Also, if the computer breaks then it is good to understand which part may need repairing.

National Curriculum Content

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

📖 Key knowledge

1. Understand what important parts of inside a computer or mobile device do to help with the performance (CPU, Fan, Hard Drive, RAM, Graphics Card).
2. Understand that memory is measured in bytes and gigabytes.
3. Use search filters on websites to find suitable information.



🔤 Important Vocabulary

Core Processing Unit (CPU)	The brain of the computer, turns the commands we put into the computer, such as mouse clicks or typing and turns them into the outputs we see on the screen. The better the CPU the faster the computer performs the instructions we ask of it and also turns on, ready to use.
Fan	When the CPU is performing an intense task, such as a game with lots of graphics, then it will get warm and needs cooling down. This is why lots of computers have fans inside to push the hot air out of the computer.
Hard drive	The memory of computer where we store the software and files we want to use. Memory is measured in *bytes* and most computers have billions of bytes (1 billion bytes= 1 gigabyte).
Random Access Memory (RAM)	This is memory that we cannot save files to. It is used to help the computer run faster. For example, if we have lots of programs open at once the RAM will temporarily store data from the open software, helping us switch between tasks without the software restarting. If there is not enough RAM then the computer will slow down as we move between different software.
Graphics card	Converts the data in the computer into the images, video and graphics you see on screen so the better the graphics card the smoother and better the images, videos and graphics will look. It also frees up the CPU to do other tasks.