

Key Term	Definition
E-safety	Internet safety or online safety is trying to be safe on the internet
Cyber bullying	Is the use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature.
Virus	A virus is a type of malware that spreads through normal programs. Once your device has a virus it may spread easily and quickly. A virus might just slow down your device - or it might be so severe you lose all your applications and documents!
Social networking	Social networking is the use of internet-based social media programs to make connections with friends, family, classmates, customers and clients.
Worm	Worms can spread from device to device, but unlike a virus they don't need to attach themselves to other programs. Worms can copy themselves hundreds of times, so they can very quickly harm your device and other devices. A worm might copy itself onto your email account and then send a copy to all of your email contacts!
Trojan	A trojan horse (or just a trojan) pretends it will be a useful and safe program, when actually it will try to attack your device.
Key Logging	A keylogger records all of the keys that you press on your computer system. Keyloggers can be installed by viruses or trojan horses. This is a major security risk as you will be typing a lot of personal information: Usernames, Passwords, Credit card numbers and Email addresses. The 'log' created by the keylogger can be sent to the programmer, used by them or even sold to a third party.
Spam	Nearly everyone has an email address. Email is a useful tool at home and in work but spam and junk mail can be a problem. Spam emails offer all kinds of things like money, prizes and very low prices for products that are normally very expensive. They can contain malware too.
Phishing	This is an attempt by someone to get you to send them personal information, such as usernames, passwords, email addresses and bank account details. Often an email will be sent that asks you to update your details, contribute to charities or claim cash prizes. The website that the email asks users to access will often be a replica of a similar legitimate site.
File	An object on a computer that stores data, information, settings, or commands used with a computer program.
Folder	A way to organise computer files. A folder is a storage space that many files can be placed into to group them together and organise the computer.
Email	Electronic mail - a method of exchanging messages between people using electronics and email addresses.
Domain	The group to which an email address belongs.
Carbon Copy	(CC) used to add more than one recipient to an email.
Blind Carbon Copy	(BCC) used to hide recipients from one another.

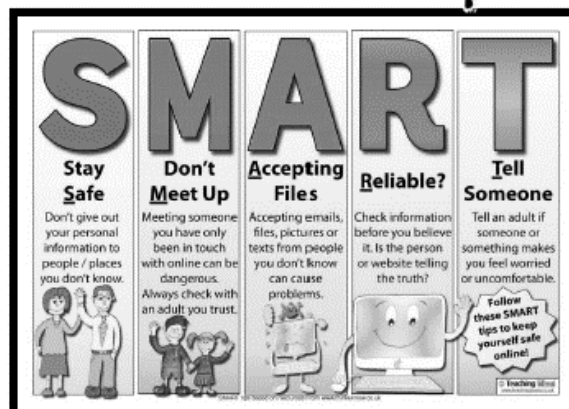
Cyber bullying means to try to hurt someone's feelings by using technology such as the internet, email, chatrooms and texting.

Dealing with cyber bullying:

- Don't give out personal information in chatrooms, social websites, blogs, etc.
- Don't tell anyone, even your best friends, your passwords. They might be your best friend now, but what if you have an argument. They might log into your account and post really mean things and make it look like it was you.
- Don't respond - If you receive any mean or threatening messages in the chatroom, text or email, don't ever respond. You might be tempted to delete the message but don't. Save it and show an adult - you might need the message to use as evidence against the person who sent it.
- Contact the website - If you find mean things have been said about you on a website, for example, Facebook, you can ask to have the comments removed. The same is true if you find out that photographs or videos have been posted without your permission.
- Tell someone
- Don't suffer in silence. If you are being bullied then tell your parents. If you don't feel that you can talk to them then tell a teacher or an adult that you trust. You mustn't keep it to yourself because if you do, the bully has got exactly what they want.



ESafety



E-safety Rules

- Never give out your password – this doesn't matter who asks!
- Don't give out your contact details
- Don't download any software without permissions!
- Respect people's privacy
- Copying and pasting could be breaking the copyright law – make sure you always reference where you got that information from!

Chatrooms: The main reason that your parents and teachers worry about you using chatrooms is because you can't always tell who you are talking to. Most of the time, someone you chat to will be genuine. You can have a conversation with them, have a laugh, tell each other about things and over time build up a real friendship. But, you do need to be aware that not everyone in a chatroom is really who they say they are.

Saying safe in chatrooms:

- Tell your parents if you are planning to use a chatroom.
- Use a nickname, so your real identity remains protected.
- Never give out personal details!
- Never send your picture to anyone!
- Always stay in the public chatroom
- Don't meet up in real life – if you do really want to arrange to meet someone always take a responsible adult.
- This shouldn't be a problem because you won't give anyone your email address, will you? But, if for some reason you did give it out and you find someone is sending you emails with mean or rude pictures, don't open them and tell your parents immediately



Key term	Description
Worksheet	A worksheet is a single sheet (page) of rows and columns in a workbook. A worksheet consists of all of the cells on that single sheet.
Workbooks	A workbook is a collection of worksheets which are stored together in a single file and given a single name
Row	A row is the range of cells that go across (horizontal) the spreadsheet/worksheet.
Column	A column is a range of cells that go down (vertical) in a spreadsheet/worksheet.
Cell	A cell is an individual box within a worksheet.
Spreadsheet	Software application used to list, analyse, and perform calculations on data
Formula	Mathematical expression, such as adding or averaging, that performs calculations on data in a spreadsheet
Function	Predefined formula in a spreadsheet
Equal sign	Identifies the cell as containing a formula that the computer needs to calculate

Year 7 Spreadsheet knowledge organiser

Function	Description
=SUM(A1:A7)	This would add up the cells from A1 to A7
=AVERAGE(A1:A7)	This would work out the average of cells A1 to A7
=MIN(A1:A7)	This would find the lowest value from cells A1 to A7
=MAX(A1:A7)	This would find the highest value from cells A1 to A7

Comparison Operator	Description
>	Greater than
<	Less than
=	Equal to
>=	More than or equal to
<=	Less than or equal to
<>	Not equal to

Operator	What does it do?
+	Addition
-	Subtraction
*	Multiply
/	Division
All formula must start with =	

Key Words

CPU	Central Processing Unit – the brain of the computer.
RAM	Random Access Memory – where programs are loaded when they are in use.
I/O Devices	The input devices send data to the CPU, the output devices receive information from the CPU.
Hard Drive	The computer's long term storage for programs and files
Hard Drive (Hard Disk)	This is the long term storage for programs and files.
Output device	A device which receives information from the CPU (e.g. monitor, speakers etc)
Input Device	A device which sends data to the CPU (e.g. mouse, keyboard etc)
Motherboard	Main circuit board – components are connected to this
Process	Decisions and Calculations made by a computer

Assessment topics – what you need to know

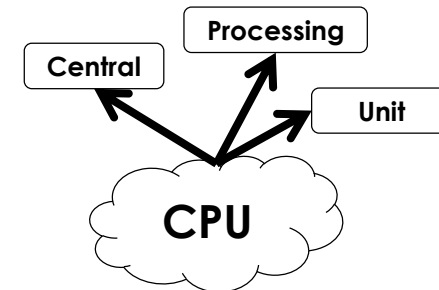
Explain what a computer is	Explain what clock speed is and explain the clock speed of a modern day CPU.
Explain what an input and output device is and give examples of them.	Explain what a CPU is.
Explain how the CPU works	Identify a range of components of a PC, e.g. motherboard, RAM, hard drive, etc. Explain their purpose.
Explain how input devices, CPU, hard drive, RAM and output devices work together.	Explain what happens during the process of opening a program – Fetch, decode and execute.

A computer is a type of machine. It doesn't have a brain like us and it can't think or have ideas, but it can follow stored instructions and do lots of useful things.

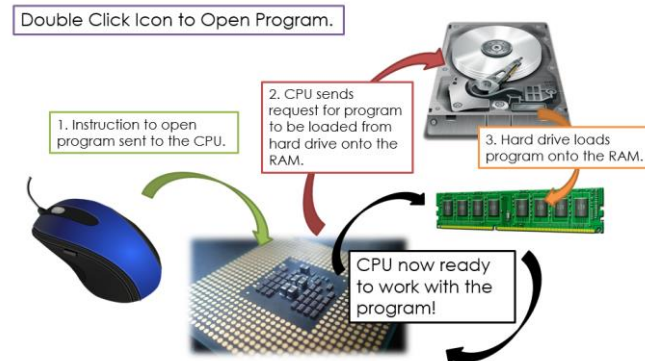
A general purpose computer is a computer that is designed to be able to carry out many different tasks. A PC is an example of a general purpose computer.

The CPU is the most important hardware component in a computer. It has two main functions:

- to process data and instructions
- to control the rest of the computer system

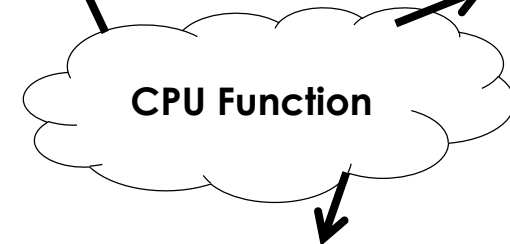


The CPU, RAM and I/O Devices



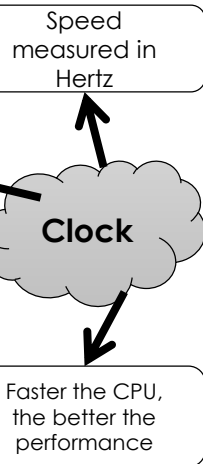
Fetch - The CPU will FETCH program instructions from the RAM

Decode -The CPU DECODE the instructions - will then make sense of instructions



Execute - The CPU will then EXECUTE (perform) difficult calculations or move data from one memory place to another

CPUs currently run at about 3 Gigahertz - that means 3 Billion Fetch-Decode-Execute cycles per second



Instructions Processed per second = Cycles per Second -

