Responsible use of computers

# Introduction

Society (and your behaviour) is governed by a set of rules that determine what is wrong and right. In the same way, there are ‘rules’ that govern the way we (should) use computers – and ideally, just like we do in all other aspects of life, we should try to follow these rules by not doing anything regarded as illegal or anti-social.

We are not going to cover all aspects of these rules, but we will take a quick look at three aspects of computing that you are sure to encounter – and in each case you will have to make a choice about how you will behave and react to the situation.

# Software piracy

Without software the hardware of a computer is practically worthless. The creation of software (of any sort) requires a significant investment of time, money, research effort, hard work and creativity. Unfortunately, the high price of some software and the fact that computers make it easy to copy software – makes software piracy a widespread problem.

Copying software is illegal and occurs in different forms – three of which are:

* Businesses that sell computers pre-installed illegal software onto the computer and ‘include’ it in the price without paying for the software. (They do this to make their computers more attractive – more value for money.)
* Large-scale piracy involves the duplication and sale of software as if it were the ‘real’ thing (at a lower-than-normal price).
* ‘Borrowing’ a game or an office suite from a friend and installing it on your computer.

When you buy a piece of software you are only buying the right (license) to use the program on a specified number of computers only (usually one computer only).. Copying a program like a game for someone else is therefore also software piracy.

Software pirates do not only steal from the companies that develop the software but, because less money and resources will be available for further development, their actions really affect all users. One of the reasons behind the high price of software is the fact that the companies build an allowance for piracy into the price when they calculate it (in other words those who buy software are almost subsidising the pirates).

This is how YOU can make a positive contribution to the whole issue of software piracy:

* Buy all the programs that you need.
* Don’t lend the copies of the programs you have bought to anyone.
* Don’t buy software from questionable sources (there are many of these online)!
* Encourage others to do the same.

# Computer viruses

A virus is a program designed mainly to ‘reproduce’ – to copy itself from computer to computer and file to file without the user’s knowledge or approval. They sometimes have ‘payloads’ which cause them to do various things ranging from trashing the hard drive to stealing private information.

Even without a ‘payload’ a virus affects your computer simply by using up space on the hard drive. Some of the more dangerous payloads do things like clogging up a mail server, deleting the entire contents of a hard drive, etc. Most of these payloads are triggered by things like the date or just by simply opening the infected file.

**How do computers get infected by viruses?**

Viruses are spread in the following ways:

* By infected portable storage devices as USB flash drives, external hard drives – or any other removable media that you attach to your system.
* Through downloads from the internet, especially freebies, such as free software trials or even free virus protection, or when you download illegal software like music and games in peer-to-peer format.
* Through infected e-mail attachments.

**What can I do to stop my computer from being infected with a virus?**

* Use a good anti-virus program (remember use only one program and it needs to be updated frequently to be effective).
* Scan external storage media for viruses before using.
* Don’t open e-mail attachments unless you know who they come from (and then rather save them to disk and scan them before opening them).
* Only download software and content from legitimate trusted sites on the internet.

# Computers and practical economising

## Internet access

Remember, people must pay to use the internet (even if it is only your parents or your school). It always costs money to download information.

The following are tips to help you save time and money when doing research on the internet:

* Plan! Set a reasonable time limit for yourself to find the information you need.
* To prevent being overwhelmed by too many ‘hits’ you need to plan your search terms and criteria.
* Think before you download! Do not go over your data limit as it may become more expensive if you use more data than your data bundle allows.

## Switching off the computer

To switch off or not to switch off, that is the question!

Periodically switching your computer off can save money and electricity. However, most modern computers are ‘eco-friendly’ in the sense that they can ‘power down’ after a while. Practically the computer uses almost no electricity at all – the hard drive, CPU, screen – all working parts go to sleep.

Switching off your computer when you are not going to use it for some time, also has other advantages. It can

* prevent cumulative errors in memory – and therefore a ‘crash’
* prevent security risks such as unauthorised access to your computer
* prevent power cuts or electrical storms from damaging your computer (though remember that lightning can still cause damage even if your computer is switched off but still plugged in).

## Computer equipment and other media

Treat all computer equipment as if it is your own – as if you have paid for it yourself! Don’t do anything to any computer that you would not do to your own.

* Avoid eating and drinking near a computer.
* Keep your keyboard and mouse clean.
* Use a dust cover if your computer is standing unused for a while.
* Switch off or switch to “standby mode” or “hibernate mode” when the computer will not be used for long periods of time.
* Only allow knowledgeable people (qualified technicians) to work on your computer.
* When you buy a computer ensure that the RAM, etc. are upgradeable so that you do not have to buy a new computer every time you want to improve performance.

Paper and ink cost money!

* Ensure your document is correct before you print it! Proofread on the screen as best you can – and to prevent those layout errors use the print preview option to check what the printed page will look like.
* Recycle your waste paper by placing it in waste paper bins.

*Be patient with people who know less than you. Assist them rather than being blasé about their mistakes and lack of knowledge. Remember, it doesn’t matter how much you know today, in the future you may have to rely on others to pass their knowledge on to you.*