# Activity sheet 3.21: Using a firewall and anti-virus software

*Learning outcome B: Cyber security*

*B2: Prevention and management of threats to data*

1. Your friend has recently started a business, working from home as a graphic designer.   
   Your friend’s computer has a firewall and anti-virus software installed.
   1. Describe the difference between a firewall and anti-virus software.

* 1. Describe to your friend how a firewall should prevent unauthorised files from being downloaded onto their computer.

1. The firewall program recently gave the following message:

‘A remote computer is attempting to communicate with an application running on this computer.   
Do you wish to allow this communication?’

* 1. Explain what your friend should do in response to this message.

* 1. Explain how the use of specific programs can be controlled using the firewall’s access control list (ACL).

1. Your friend is concerned that the fee that needs to be paid each year to run the anti-virus program is too expensive. Your friend is thinking of deleting the program.

Explain to your friend why it is important to have an anti-virus program operating on a computer.

1. The anti-virus program contains a library of code that is known to exist inside malware. This is then compared with the user’s files to determine if any are themselves malware.
   1. Explain why it is important to keep the anti-virus library up to date.

* 1. Explain one other drawback of using an anti-virus program.

**Take it further**

Produce a short guide to explain, in non-technical terms, how both anti-virus software and firewalls work.