

Secure Websites

Information security is provided on computers and over the Internet by a variety of methods.

- The simplest method is to keep important data on removable storage. Using CDs or floppies to keep the data will not allow a hacker access.
- **The most popular form of security is called encryption.** Encryption is the process of encoding information in such a way that only the computer with the key can open it.

Encryption is performed at many levels. Government facilities and other high security companies use the highest level of encryption available. New types of encryption methods are being invented all the time.

Encryption Activity #1:

1. You are going to create your own version of encryption!
2. On the top half of a piece of paper, write out the alphabet.
3. Use letters, numbers, or symbols to create your “code.” Put a different letter, a symbol or a number beside each letter of the alphabet to create your own “code.”
4. On the bottom half of the paper, write a message to another person in your class.
5. Switch papers with another classmate and decode the message.
6. Turn the papers in to your teacher when you are done.

Encryption Activity #2:

1. Using your word processor, key a short, one-paragraph message to a friend using Arial as the font.
2. After you have completed your message, select the entire paragraph and change the font to Wingdings or Dingbats and print the paragraph. Give the printout to a classmate and ask them to read it.
3. Save the file to your USB flash drive as “xxxHide” (substitute your three initials for the xxx).
4. Let one of your classmates open the file. When it is apparent they can’t read it, have them change the font to Arial. This activity demonstrates the basics of how encryption works.