



Climbing Higher

|                    |                         |
|--------------------|-------------------------|
| <b>Year Group:</b> | <u>Y7</u>               |
| <b>Term:</b>       | <u>Autumn 1</u>         |
| <b>Subject:</b>    | <u>Computer Science</u> |
| <b>Topic:</b>      | <u>Digital Literacy</u> |

|                                                 |                                                      |
|-------------------------------------------------|------------------------------------------------------|
| <b>Name:</b> _____                              | <b>Form:</b> _____                                   |
| <b>Subject Teacher:</b> _____                   | <b>Group (If known):</b> _____                       |
| <b>Date given:</b> 2 <sup>nd</sup> October 2017 | <b>Date to hand in:</b> 9 <sup>th</sup> October 2017 |

| Level achieved in this Home Learning Booklet: | Effort in this Home Learning Booklet:<br>A= Excellent effort<br>D= Poor effort | Achievement Points this Home Learning Booklet: |
|-----------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|
|                                               | <b>A</b>                                                                       | <b>A for Effort = 3</b> Achievement Points     |
|                                               | <b>B</b>                                                                       | <b>B for Effort = 2</b> Achievement Points     |
|                                               | <b>C</b>                                                                       | <b>C for Effort = 1</b> Achievement Points     |
|                                               | <b>D</b>                                                                       | <b>D for Effort = 0</b> Achievement Points     |

|                                                                                                                                                  |                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Teacher feedback: Teachers will tick the appropriate boxes and highlight the appropriate terms when giving feedback on the work completed</b> |                                                                                                                   |
| <b>WWW (what went well)</b>                                                                                                                      | <b>EBI (even better if)</b>                                                                                       |
| <input type="checkbox"/> You understand How to choose an effective password.                                                                     | <input type="checkbox"/> You understand what made a strong password.                                              |
| <input type="checkbox"/> You understand about malware and the various types .                                                                    | <input type="checkbox"/> You understood what the various types of malware were.                                   |
| <input type="checkbox"/> You understand the responsibility of the different components of a computer system.                                     | <input type="checkbox"/> You knew what the various components of a computer system did and how they worked.       |
| <input type="checkbox"/> You can create a flowchart using the correct symbols.                                                                   | <input type="checkbox"/> You understood what the main symbols of a flowchart were and when to use them correctly. |
| <b>Other Feedback:</b>                                                                                                                           |                                                                                                                   |
| <b>Student response:</b>                                                                                                                         |                                                                                                                   |
| <b>Accuracy of punctuation, spelling and grammar</b>                                                                                             |                                                                                                                   |

**Digital Literacy**

**TASK 1:** Using the word search below, find the 20 Computer Science key terms.

A G P S K A F M D F M L E O V I L C  
P A N R O R P O F T E A S K L P I S  
P N L I O F O P Q F M P U M G R C M  
L G P X M C T W L V O T O L C R O M  
I F G I L M E W T E R O M U E N T N  
C U P S C F A S A E Y P I E I F W E  
A D B U Y R L R S R N T N T O A R Q  
T W K W H R V F G O E L O S A A P T  
I D R A O B Y E K O R R O G W T U B  
O T E N R E T N I S R R R D A P A A  
N W N T Q U Q A M Q C P R G N M X D  
S T U P T U O D Q I M A X I C X E J  
T R G F R U O X M E H W V M C B M S

APPLICATIONS  
DATA  
INPUT  
LAPTOP  
MONITOR  
OUTPUT  
SCREEN

APPLE  
GAMES  
INTERNET  
MEMORY  
MOUSE  
PROCESSOR  
SOFTWARE

CIRCUIT  
HARDWARE  
KEYBOARD  
MICROSOFT  
NETWORK  
PROGRAMMING

**TASK 2:** When choosing a password which 5 criteria is the most important?

|                                                    |  |
|----------------------------------------------------|--|
| It must be difficult to guess                      |  |
| It must not be your name                           |  |
| It must include upper and lower case letters       |  |
| It must include symbols such as #                  |  |
| It should be no longer than 4 characters long      |  |
| The word 'password' is a good password             |  |
| It should be 7 characters or above in length       |  |
| You should tell your friends in case you forget it |  |
| You should write it down in case you forget it     |  |
| You should not change it regularly.                |  |

**TASK 3:** For each of the statements about Copyright below, state whether it is True or False.

|                                                                            |  |
|----------------------------------------------------------------------------|--|
| The copyright law was created in 1988                                      |  |
| Copyright is a legal concept enacted by governments                        |  |
| Copyright protects creative or artistic works                              |  |
| The term of protection is usually the life of the author plus 70 years     |  |
| You do not have to ask for permission before you use the work of an artist |  |

**TASK 4:** Match the key E-Safety key terms with the correct definitions.

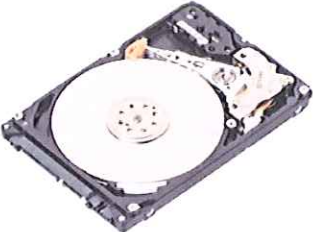

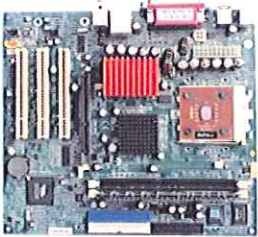



|                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------|
| Programs that can attack computers, tablets, phones and other digital devices.                                                      |
| Emails that trick you into giving away your personal information such as your username and password.                                |
| The bullying of another person using the internet (social media, text messages or emails), mobile phones and other digital devices. |
| People who visit other people's social media accounts and leave distasteful messages.                                               |
| Software that protects a computer from malware.                                                                                     |
| A piece of hardware or software that monitors communications coming in from and going out to the internet                           |

|               |
|---------------|
| Malware       |
| Phishing      |
| Cyber Bullies |
| Trolling      |
| Anti-virus    |
| Firewall      |

**TASK 5:** For each question there is one correct answer. Place a tick next to the correct answer.

1. If you receive an email from a well-known company, but its name is misspelt in the sender's address, you should:
  - (a) click on the link in the email to check if it's genuine
  - (b) reply, pointing out the error
  - (c) report it as a possible phishing scam
  - (d) forward the email to a friend to check
  
2. A phishing email is one which:
  - (a) requests a payment for goods you have not received
  - (b) offers you products in which you may have no interest
  - (c) encourages you to click on a link to a fraudulent website
  - (d) contains abusive and threatening language
  
3. Hacking is illegal under:
  - (a) The Data Protection Act
  - (b) The Computer Misuse Act
  - (c) Copyright Law
  - (d) Health and Safety Law
  
4. You can protect yourself against spam or fraudulent emails by:
  - (a) using a spam filter
  - (b) never clicking on links that you are suspicious of
  - (c) being aware of different types of fraudulent email
  - (d) all of the above
  
5. You can protect your files from unauthorised access by:
  - (a) only allowing your friends and family to know your passwords
  - (b) making frequent backups
  - (c) choosing a strong password and changing it regularly
  - (d) never using computers in a public place such as a library
  
6. To avoid your computer being infected by malware, you should not:
  - (a) Download music or software from illegal sites
  - (b) open emails from people you don't know
  - (c) open email attachments
  - (d) post personal details on social networking sites
  
7. When choosing a password you should:
  - (a) use something easy to remember like your pet's name
  - (b) use a combination of letters and numbers that mean something to you but no one else
  - (c) save all your passwords in a file on your computer in case you forget one
  - (d) use a foreign word that will not be in an English dictionary

**TASK 6:** For each of the parts of a computer system describe what the component is responsible for doing.

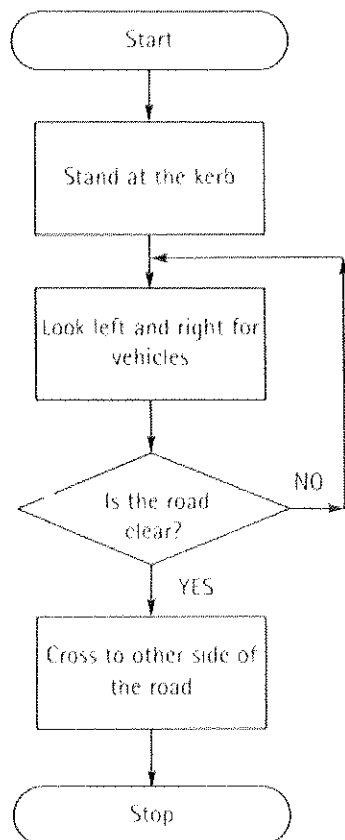
|                         |                                                                                     |  |
|-------------------------|-------------------------------------------------------------------------------------|--|
| Hard Disk               |    |  |
| Central Processing Unit |    |  |
| Motherboard             |   |  |
| RAM                     |  |  |
| Graphics Card           |  |  |
| Power Supply            |  |  |

**TASK 7:** Every computer-controlled system needs a sequence of instructions called a program. Flowcharts are diagrams that use special symbols to describe the steps needed in a program and the order in which they must be carried out.

Create a flowchart for getting up for school. The steps you might include are as follows:

**Leave the house, Get out of bed, Has the alarm gone off? Get washed, Get dressed, Go back to sleep, Pack school bag.**

Example of getting up in a morning.

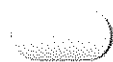


**ANSWER**

**Symbol**

**Name**

**Function**



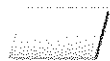
**Start/end**

An oval represents a start or end point.



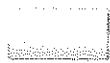
**Arrows**

A line is a connector that shows relationships between the representative shapes.



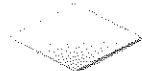
**Input/Output**

A parallelogram represents input or output.



**Process**

A rectangle represents a process.



**Decision**

A diamond indicates a decision.