

# Y7 Computing – Autumn 1 – Introduction to computing

## Section A: Key vocabulary

<b>Attachment</b>	A computer file sent along with an email message.
<b>Browser</b>	A computer program used to navigate the world wide web.
<b>Email</b>	Messages sent electronically over a computer network.
<b>Network</b>	Two or more computers connected together to share resources.
<b>Username</b>	A unique name or code used to log onto an account usually linked to your name or email.
<b>Folder</b>	A virtual location where programs, files and other folders can be located.
<b>Password</b>	A secret string of letters, numbers and symbols used to protect an account.
<b>File</b>	A specific piece of data held on a computer.
<b>Organise</b>	To put your files in suitable locations with suitable names, in order that you can find them again easily.
<b>Acceptable Use Policy</b>	A set of rules that all users must agree to follow, in order to use a computer network.
<b>Formatting</b>	The way document appearance is changed. We use a range of tools to do this.
<b>Search engine</b>	A computer program that is used to look for information on the Internet.

## Section B: Logging on

You will have a username and password for accessing your account in school and a school email address, which uses the same password as your school account.

Example for Joe Bloggs:

**Username:** 27joeblo

**Password:** Password123

**Email:** 27joeblo@leesbrook.co.uk

Passwords need to be strong to stop other people guessing it. To make a password strong you need to make sure you use a combination of **lowercase letters, uppercase letters, numbers and symbols**. You should also use a **minimum length of 8 characters**. You should **not use your name** or other words.

Examples of passwords:

Password	Weakest
Harryiscool	↓
H4rr915c@@!	
gH6U@889KI	

You should also not use the same password for all your accounts because if someone manages to get your password they can get into all of your accounts. You should not write passwords down in case some one finds it.

## Section C: Shortcuts and keys

<b>Open file explorer</b>	Windows + e
<b>Show desktop</b>	Windows + d
<b>Save current file</b>	Ctrl + s
<b>Copy</b>	Ctrl + c
<b>Paste</b>	Ctrl + v
<b>Cut</b>	Ctrl + x
<b>Undo</b>	Ctrl + z
<b>Redo</b>	Ctrl + y
<b>Select all</b>	Ctrl + a
<b>Switch between programs</b>	Windows + Tab
<b>Refresh the page</b>	F5
Key	Name
	Windows key
	Control
	Tab
	F5 (function 5)
	Shift

# Y7 Computing – Autumn 2 – E-safety and Algorithms

## Section A: Key vocabulary

<b>CEOP</b>	Child Exploitation and online protection command – Cyber Police.
<b>Copyright</b>	Legislation that protects peoples work from being copied without the authors permission.
<b>Plagiarism</b>	Taking somebody else’s work and saying it is yours.
<b>Netiquette</b>	The manners that you should use when online or using digital devices.
<b>Personal information</b>	Any information that is about you or that could be used to identify you.
<b>Online identity</b>	How you are seen online from social media and digital posts that you have been involved in.
<b>Algorithm</b>	A list of instructions that will do something when started.
<b>Selection</b>	A structure in programming that enables you to do different things depending on if a condition is met or not.
<b>Iteration</b>	A structure in programming that enables you to repeat something.
<b>Variable</b>	A location that is given an identifier that stores data. The data can be changed.
<b>Assignment</b>	The process of giving data to a variable.
<b>Decomposition</b>	Breaking a problem down into smaller parts so that you can create a solution.

## Section B: E-Safety

It is important that you are aware of the dangers and measures that you can carryout to protect yourself. Some of the areas that you need to consider when trying to be safe online include:

- Cyber bullying
- Using the internet – inappropriate content
- Your online identity
- Sharing personal information or falsifying it
- Unknown communications
- Copyright and plagiarism
- Netiquette

If you or your parents have a worry about activities online there are organisations that can help:

<https://www.ceop.police.uk/Safety-Centre/>



<https://www.childline.org.uk/>



## Section C: Drawing shapes with Python

You are going to do some text based programming with Python to make algorithms to draw shapes.

To access python at home visit this website and download it:

<https://www.python.org/downloads/>

We will be using a module turtle to draw the shapes with see the example of code. You will also need to know the angles of shapes.

### Internal angles

Triangle 3 60° angles

Square 4 90° angles

Pentagon 5 108° angles

Hexagon 6 120° angles

```
from turtle import *
forward (100)
right (90)
forward (100)
right (90)
forward (100)
right (90)
forward (100)
right (90)
right (90)
```

Here are some other commands that you can try with turtle to improve drawings.

```
goto()
setx()
sety()
home()
circle(50)
dot()
speed(0)
pendown()
penup()
pensize()
pencolor("blue")
fillcolor("red")
```

Another way of doing the code above.

```
from turtle import *
for x in range (0,4):
    forward (100)
    right (90)
```